



# Strategic Asset Management Plan: Fleet

2022-27

Working together for a safer Scotland







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# Abbreviations

ARC	Asset Resource Centre
AS	Audit Scotland
AVLS	Automatic Vehicle Location System
CFOA	Chief Fire Officer's Association
CPD	Continuous Professional Development
DVSA	Driver and Vehicle Standards Agency
FDO	Flexi Duty Officer
FTA	Freight Transport Association
HMFSI	Her Majesty's Fire Service Inspectorate
HS	Health and Safety
ICE	Internal Combustion Engine
ICT	Information and Communications Technology
ISO	International Organization for Standardisation
LGV	Large Goods Vehicle
LEZ	Low Emission Zones
LOLER	Lifting Operations and Lifting Equipment Regulations
MTA	Marauding Terrorist Attack
PPE	Personal protective equipment
PS	Police Scotland
PUWER	Provision and Use of Work Equipment Regulations 1998
R&D	Research and Development
RNLI	Royal National Lifeboat Association
SAS	Scottish Ambulance Service
SFRS	Scottish Fire and Rescue Service
SAMP	Strategic Asset Management Plan
SLT	Strategic Leadership Team
TIN	Technical Information Note
UIG	User Information Group
ULEV	Ultra-Low Emission Vehicle
VCA	Vehicle Certification Agency

I am delighted to introduce this Strategic Asset Management Plan (SAMP) for Fleet which sets out how we design and implement an efficient, reliable, resilient and fit for purpose fleet solution that supports effective delivery of services across the whole organisation.

We must invest in vehicles and associated specialist equipment that are fit for purpose and support staff in undertaking their operational duties.

The 2020-21 Programme for Government established an ambitious aim to phase out fossil-fuelled cars by 2025 and all other fossil-fuelled vehicles within the public sector by 2030 and reinforces the aim to decarbonise public sector fleet. This SAMP sets out the fundamental shift from Internal Combustion Engine (ICE) vehicles to Ultra-Low Emission Vehicle (ULEV)\*.

The aim is to transition 50% of the 732 light fleet of cars and vans, 2.5 tonnes or less, to ULEVs by 2025, increasing to all of the light fleet by 2030, a change which can remove 60% of our light fleet vehicles' CO2 emissions, and shows how we will embark on the journey to becoming more sustainable.

As this SAMP will make clear, significant additional investment in our fleet infrastructure is required to enable this transition.

\*Ultra-Low Emission Vehicles (ULEV) is a low emission car or van that emits 75g/KM CO2 or less. ULEVs include pure electric vehicles, electric range extender vehicles and plug-in hybrid vehicles

## Foreword by Acting Director Asset Management

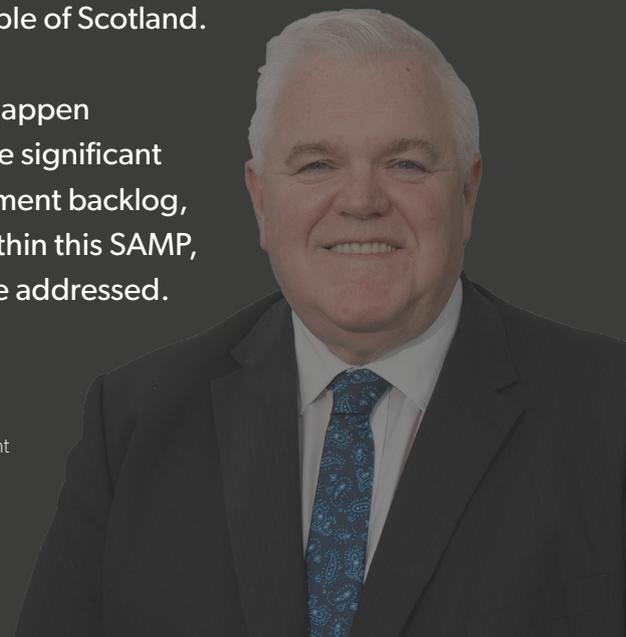
We know that working in collaboration with partners is the best way to maximise resources and serve the public, for this reason, we want to develop strong strategic partnerships with blue light services in Scotland to support the transition to a ULEV fleet, and to service and maintain vehicles and associated specialist equipment. This will provide an integrated and effective pool of resources, allowing for innovation and collaborative working across public services.

We are committed to working with the Scottish Government and partners, ensuring that we are contributing to the climate change policy in Scotland. The SFRS Carbon Management Plan sets out in detail how we will approach carbon reduction over the next five years, as we work towards the Scottish Government's ambitious target of net zero by 2045.

Embracing this change will bring savings, enable public resource to go further and deliver enhanced outcomes for the people of Scotland.

For this to happen however the significant fleet investment backlog, detailed within this SAMP, must first be addressed.

Iain Morris,  
Acting Director  
Asset Management



## 2 Executive Summary

### 2.1 Background

As recognised in 2019 by Her Majesty’s Fire Service Inspectorate (HMFSI) inspection of the Fleet Management Function, the migration of eight service centres into four has brought significant challenges in respect of managing a large diverse fleet of varying age and condition and varying staff terms and conditions. This has been accompanied by a reduction in staff numbers and loss of expertise in some locations.

Similarly Audit Scotland (AS) published a report in May 2018 titled “*Scottish Fire and Rescue Service – An Update*”. Within this report AS noted that SFRS had inherited a backlog of £389 million needed to maintain and invest in its property, vehicles and equipment.

AS further noted that “*this backlog is insurmountable without transforming the SFRS current model for delivering services and additional investment.*” AS warned that if funding was not significantly increased then the risk of asset failures, such as vehicle breakdowns would increase.

Currently there is a fleet investment backlog of £70 million, appendix 1, at current funding levels this investment backlog is forecast to increase to over £170 million in the next 10 years. Our 1,632 vehicles make us one of the largest blue light fleets in the United Kingdom.

In this regard we recognise that the world is changing, and climate change is a principal catalyst for the Scottish Government’s commitment to phase out the need for all petrol or diesel cars in the public-sector fleet by 2025, as outlined in their Programme for Government.

Currently only 22% of the SFRS light fleet is ULEV, the investment required to achieve 100% of light fleet being ULEV by 2030 is £18 million.

### 2.2 Context

This SAMP sets out how we will manage, maintain and develop our fleet assets. Later this year we will commence work on the Strategic Asset Management Plans for Property and Equipment. The SAMPs for Fleet, Property and Equipment will all be combined in the future into an overarching Asset Management SAMP with an ambition for this to be accredited to the International Organization for Standardisation (ISO) 55001 Asset Management Standard.

The benefits of this include a focus on a risk-based approach to asset management which has shown to be effective for asset-intensive systems, not necessarily by reducing risk, but by using risk to balance the operational performance of the assets against the asset life-cycle cost. A risk-based asset management SAMP couples risk management, health and safety, standard work, and condition-based maintenance to properly apply resources based on process criticality.

This ensures that proper controls are put in place and reliability analysis is used to ensure continuous improvement. Appendix 3 details the Asset Management risk matrix and links this to the SFRS strategic risk register.



2024	Overarching SAMP
2023	SAMP Equipment
2022	SAMP Property
2022	SAMP Fleet



## 2.3 Introduction

This SAMP has been developed to provide a focus on the fleet investment requirements needed for SFRS to continue to meet its commitments to the delivery of a first-class fire and rescue service for all the people of Scotland.

We want to be at the forefront of technological advances relating to ULEV and are committed to decarbonising our fleet.

The SAMP will further set out how, from a fleet perspective, we will adapt to the changing nature of risks facing communities across the country, for example new fleet vehicles are being procured to help combat an increase in wildfires.

We will continue to promote collaboration with National Fire Chiefs Council (NFCC) colleagues, and we will continue to work closely with our blue light colleagues, Scottish Ambulance Service (SAS) and Police Scotland (PS), to identify opportunities where effective and practical collaboration will bring benefits to us all, in order to reduce costs and to develop and exchange best practice, reliable benchmarking and improvements in fleet asset management.

Safety and the operational capability of our people remains paramount in our decisions. Operability, the ability of our vehicles to effectively support operational firefighters and staff in their duties, charging infrastructure, battery range, cost and network capacity are all factors that will be carefully considered and we will continue to engage with our workforce to review the rollout of ULEV.

We will ensure that our fleet staff are trained and equipped with new skills and qualifications in ULEV engineering and maintenance.

The transition will follow a phased approach and align closely with Scotland's nationwide infrastructure development, supporting the Scottish Government commitment to a low carbon public-sector fleet.

Replacing vehicles is not a panacea to combating the climate and ecological emergency, we must also:

- Where possible reduce the number of journeys we make;
- Ensure our Drivers are trained to drive in a fuel-efficient manner;
- Ensure our vehicles are the correct size for the task;
- Reduce the number of vehicles we have in the fleet;
- Ensure light fleet replacement vehicles are ULEV.

Change naturally brings some concerns and to better understand wider needs and expectations we have engaged with our people and multiple key stakeholders to develop this SAMP.

Our focus groups and internal survey results have ensured that we have taken the views of our people into account when developing this SAMP, with details being set out in Appendix 2.

We will continue to pro-actively engage as we further develop and execute our implementation plan.



## 2.4 COVID-19

The Covid19 pandemic has changed our lives on a dramatic scale. The direct and indirect impacts of the pandemic have been devastating for individuals and communities across the whole of Scotland.

This SAMP cannot be presented without acknowledging the challenging and unprecedented times that have resulted from the Covid-19 pandemic.

During the first lockdown in March 2020 for operational reasons the fleet workshops remained open to ensure that levels of service for frontline firefighter activities was maintained.

The Fleet Services Management team responded quickly to the pandemic by linking groups of staff into “bubbles” thereby ensuring that none of the four vehicles workshops had to close and, other than the enhanced cleaning regime and mask wearing, work continued as normal.

Whilst there were Government exemptions for MOT servicing, the Fleet team did not use this exemption and ensured that all testing, Driver and Vehicle Standards Agency (DVSA) and Lifting Operations and Lifting Equipment Regulations (LOLER) for example, went ahead as planned pre-pandemic.

## 2.5 Global Fleet issues - 2022

There are a number of issues that are affecting the global supply chain with regards to fleet, particularly the war in Ukraine, which we envisage will continue to have an impact over the next few years.

### Ongoing Microchip Shortages:

- Shortages now exacerbated as neon gas needed in production is mainly sourced from Russia and Ukraine
- China experiencing a two year high in Covid cases which is leading to quarantines and factory closures in manufacturing hubs
- Global transportation of goods still affected by Covid pandemic

### Parts:

- Sanctions impacting on all manufacturers
- Ukraine parts disruptions – particularly wire harnesses used in vehicle wiring systems
- Russia produces 40% of the world’s mined palladium. Around two thirds of palladium use are in vehicles, where it is the active element in catalytic converters for exhaust after treatment and also plating of microchips

### Impact on Car Prices:

- The crisis in Ukraine is also threatening to push up the price of cars, as raw materials become scarcer and more expensive.
- The price of metals has jumped on the invasion: aluminium and palladium for catalytic converters are more expensive

### Impact on Electric Vehicles:

- Russia supplies nearly half of the world’s palladium and roughly 10% of the market’s supply of nickel, as well as large quantities of aluminium and copper — key ingredients in EV batteries



## 2.6 SFRS Long-Term Vision

We want to be regarded as among the best fire and rescue services in the world, focused on the safety of our staff whilst meeting the changing needs of our communities.

For the activities of the Fleet, in support of the wider organisational strategic goals, and to provide a framework to help ensure a legally compliant and fit for purpose fleet, our vision is to operate and maintain a class leading, future proof, and sustainable ULEV light fleet that is technologically advanced and will meet operational requirements.

### OUTCOME 1 - PREVENTION

Our collaborative and targeted prevention and protection activities improve community safety and wellbeing, and support sustainable economic growth.

### OUTCOME 2 - RESPONSE

Our flexible operational model provides an effective emergency response to meet diverse community risks across Scotland.

### OUTCOME 3 - PEOPLE

We are a great place to work where our people are safe, supported and empowered to deliver high performing innovative services.

### OUTCOME 4 - PUBLIC VALUE

We are fully accountable and maximise our public value by delivering a high quality, sustainable fire and rescue service for Scotland.

This SAMP covers a five-year period from 2022 to 2027 and has been developed in accordance with the values and principles of The Scottish Fire and Rescue Service (SFRS) and is supportive of the promotion of the following outcomes:

Underpinning our vision are values for developing our fleet model include:

- Ensuring our fleet allows our people to work safely and supports their wellbeing
- Making changes to our light fleet so that we contribute to national climate change policy and carbon reduction / ULEV targets
- Continue to promote collaboration with National Fire Chiefs Council (NFCC) colleagues and other agencies, to reduce costs, to develop and exchange best practice, undertake reliable benchmarking and share knowledge on improvements in fleet asset management
- Using our resources efficiently and effectively to deliver the SAMP and provide best value
- Seek continuous improvement to the services provided to end users and stakeholders by adopting and applying current industry best practice to the provision, management, maintenance and disposal of all fleet assets

Key performance indicators (KPI's) have been developed from business as usual (BAU) activities and form part of the ongoing performance measurement of Fleet Services activities.

For those activities which are considered outside of BAU, annual business improvement plans in line with these objectives, will be developed to monitor the performance of the application of this SAMP over the period covered by this document.



## 2.7 Rationale

The rationale for this SAMP is driven externally and internally across four key areas:

- Her Majesty's Fire Service Inspectorate (HMFSI)
- Operational change
- Government action on climate change
- Technology

### 2.7.1 Her Majesty's Fire Service Inspectorate

HMSFI undertook an inspection of the Scottish Fire and Rescue Service's Management of its Fleet Function in 2018 and recommended that *"In order to meet the challenges of Service Transformation and ensure the provision of a robust, modernising fleet that is fit for purpose in a fiscally uncertain future, The SFRS needs to provide a long-term strategic vision."*

### 2.7.2 Operational change

There are many organisational strategies and transformation programmes underway to enhance how we respond and deliver an effective fire service.

These Include the:

- Wildland Fire Project
- Operational Strategy
- Low Carbon Appliance Project
- Service Delivery Model Programme
- Height Appliances Replacement Programme
- Medium Rescue Pump Deployment Programme
- Digital Strategy

Modernising our fleet is a component of the overall strategic development of Scottish Fire and Rescue and is an integral part of our new operating models and overall strategic vision of being a first-class fire and rescue service for all the people of Scotland.

### 2.7.3 Government action on climate change

The Scottish Government has set a legally binding target of net zero greenhouse gas emissions by 2045.

To do this, the Programme for Government outlines the next steps and aligning our vision to supporting this is a key component and driver for change.

### 2.7.4 Technology

It is vital that we get the best value from our fleet and prioritise investment accordingly to ensure our assets are fit for purpose and technologically advanced whilst meeting the demands of a modern fire service, which means they have the performance and range necessary for their operational purpose, whether daily use, high performance or specialised vehicles.

Our aim is to be at the forefront of the advances in the ULEV market and integrate these vehicles into our operational environment.



## 2.8 Fleet Strategic Objectives

The focus on these five key objectives will lead to a number of improvements, including:

- An increase in Capital Investment for fleet will help to reduce the overall age of the fleet, improve the condition of the fleet and consequentially improve our reserve fleet to provide suitable replacement vehicles
- Greater communication and involvement at all stages of the vehicle procurement process so as to make best use of stakeholder feedback
- Replacing our light fleet with ULEVs over eight years and building the appropriate infrastructure to support this
- Making more use of the Automatic Vehicle Location System (AVLS) technology and the fleet asset system, Tranman, to manage the fleet more efficiently and effectively
- Working collectively with our blue light colleagues to identify opportunities where effective and practical collaboration will bring benefits across all blue light services
- Continue to ensure our fleet is fit for purpose
- Modernise our current fleet with equipment which meets service requirements and minimises risk
- Make changes to our fleet so that we contribute to national climate change policy and carbon reduction / ULEV targets
- Delivering in partnership with internal and external bodies to ensure greater collaboration, knowledge sharing and delivery of efficiencies
- Use of technology to ensure our resources efficiently and effectively deliver the SAMP and provide best value to Scottish Fire and Rescue Service
- We are committed in ensuring that health and safety is at the forefront of everything we do



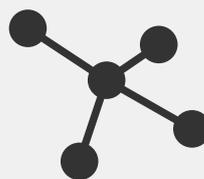
- 1 Fit for purpose**  
Vehicles which are safe and well equipped



- 2 Modernising**  
Improving the current fleet



- 3 ULEV**  
Ultra low emissions vehicles by 2030



- 4 Technology**  
Use technology to maximise fleet usage



- 5 Collaboration**  
Collaborate with blue light and local authority partners



## 2.9 Funding

As previously stated significant additional investment will be necessary to achieve the objectives of the SAMP. Since 2016 the size of the SFRS fleet has increased from 1,277 to 1632 vehicles, this represents an increase of over 28%.

Appendix 1 details the number and type of each vehicle currently held by SFRS; the unit cost of each vehicle as at 2021 prices, as well as the CFOA NFCC recommended replacement cycle.

In the current year 618 vehicles are older than the stated vehicle replacement cycle, representing an investment backlog of over £70 million. Over the next 5 years as vehicles require replacement this will increase by approximately £50 million.

This means that to “stand still” SFRS require to allocate £10 million per annum in capital investment to fleet, the capital allocation in the 2021/22 financial year was £8.65 million.

Decarbonising operational fire vehicles is more of a challenge, due to the size and weight but also due to the length of time currently required to charge the vehicle.

The Service is continually monitoring and assessing new technology as it emerges, and has recently completed a procurement exercise with the aid of a £500,000 grant from Transport Scotland to implement the world’s first fully-electric fire appliance.

The SFRS is therefore at the forefront of advances in electric appliance technology, which seek to drive down our carbon emissions.

However as outlined above, and with consideration to the nature of depreciating fleet assets, additional capital investment is required to provide our staff with fit for purpose vehicles to carry out their roles.

The principle of investing in ULEVs and strategic partnerships in this SAMP will ensure that we are reducing ongoing revenue maintenance costs whilst investing in future technology, however this also comes at a significant cost as the cost of replacing an ICE vehicle with an ULEV vehicle is in most instances almost double the cost.

The pace of change therefore will be driven by the ability to secure additional funding for fleet. It should be further noted that the current single year funding model presents challenges, particularly with regards to the increase in lead times for vehicles as a result of global supply chain issues.



## 2.10 Implementation Programme

The implementation programme, setting out how we will deliver and subsequently measure the success of this SAMP, is detailed within sections nine and eleven of this document.

Continued engagement with our people during development and future implementation will be key to successfully delivering this SAMP.

## 2.11 Summary

Our fleet is one of the most recognisable symbols of the SFRS and the fleet is essential to enable our people to do their jobs.

The SAMP clearly demonstrates the investment backlog we face and therefore the associated challenging circumstances within which we maintain and procure vehicles, that operationally support that operationally support SFRS in a sustainable way.

This new SAMP is ambitious but will provide vehicles that operationally support and enable our people to do their jobs to protect the public.

Long term, a ULEV light fleet will bring cost reductions that will enable us to be more efficient in our use of public funding, and the SAMP is predicated on the fullest collaboration with partners across public and private sectors.

The SAMP will, alongside our current capabilities, also enable us to develop our fleet workforce with new skills in ULEV engineering and maintenance.

Finally, it will demonstrate our commitment towards a low carbon footprint, however whilst the ambition by 2030 is to have a ULEV light fleet, the cost of replacing an ICE vehicle with an ULEV vehicle is in most instances nearly double the cost. Additional funding is required if this objective is to be realised.



Scott Roberts  
National Fleet Manager



## 3 Background

### 3.1 SAMP Rationale

Our fleet assets, which are worth £60 million, support the Scottish Fire and Rescue Service strategic outcomes to help achieve our commitment to the delivery of a first-class fire and rescue service for all the people of Scotland.

Our SAMP will aim to provide our people with the right working environment, training, sustainable tools and support to deliver the best service for Scotland's communities.

HMSFI undertook an inspection of the Scottish Fire and Rescue Service's Management of its Fleet Function in 2018 and recommended that:

**“In order to meet the challenges of Service Transformation and ensure the provision of a robust, modernising fleet that is fit for purpose in a fiscally uncertain future, The SFRS needs to provide a long-term strategic vision.”**

Four years on from the HMSFI inspection we require a SAMP to build on the successful progress made to date to ensure we can provide a modern fleet service that meets the current and future needs of Scotland.

The risks we face today as a Fire and Rescue Service are not identical to those we faced a decade ago; our risk profile is constantly evolving and require us to be agile in our approach.

We further recognise the changing landscape of the fleet market, the advancement of technology and the need to move towards a sustainable fleet that is fit for purpose.

The pace of change is such that we need to take account of innovative technologies now to make appropriate investment for the future.

A SAMP is also necessary to ensure that we are constantly monitoring and, where necessary, improving performance and stakeholder satisfaction.

Seeking the views of stakeholders and responding timeously and constructively to feedback received is a key catalyst for this SAMP.



## 3.2 Strategic Alignment

The Fleet Strategy is strategically aligned to the SFRS Strategic Outcomes



The diagram below shows the strategic context of the Fleet Strategy:



This document is set in the context of the long-term Fire and Rescue Framework for Scottish Fire and Rescue. The SAMP covers fleet services and the end-to-end lifecycle of vehicles, including purchasing, maintenance, operations, and disposal.

The SAMP is aligned with the SFRS enabler strategies across the organisation including:

- Asset Management
- Operational
- Environmental
- Property
- Equipment
- Service Delivery Model Programme



### 3.3 Strategic Focus

The progress made to date on fleet has focused on supporting the integration of eight legacy fleet workshop organisations into the Scottish Fire and Rescue Service and the successful completion of the improvement actions raised by the HMFSI Inspection.

Recognising the successful progress made to date, the SAMP will build on the existing foundations by focusing on the undernoted key areas:

- Improving communication on the entire process of acquiring new appliances
- Working up proposals for a new Fleet structure
- Increasing opportunities for stakeholder consultation and feedback
- Investing in staff training and development opportunities
- Further Developing the Fleet Management System, Tranman
- Improving fleet processes through an ISO9001:2015 Quality Management Framework
- Moving further towards vehicle standardisation
- Supporting the Operational Strategy by providing a fit-for-purpose fleet solution
- Moving towards a ULEV fleet that is sustainable and technologically advanced, significantly contributing to climate change policy in Scotland
- Driving strong strategic collaboration partnerships that support the sharing of resources and maximise efficiencies across public sector fleet

### 3.4 Fleet Asset Governance Statement

The Service will ensure a structured approach to Asset Governance is in place for the provision, control, maintenance and renewal of a vehicle fleet which supports the needs of SFRS. The following processes or procedures have been identified as key to ensuring the SAMP is delivered and are central to the safe and effective procurement, operation, replacement and eventual disposal of the fleet assets:

- A governance framework to oversee the management and control of fleet assets
- A structured fleet asset renewal and replacement programme
- Procedures for procuring fleet assets linked to our Strategic Assessment of Risk where vehicle and equipment requirements are concerned.
- Procedures for operating the vehicle fleet linked to national, legal and best practice standards so that the fleet will be operated and maintained safely, effectively and in full compliance with relevant legislation.
- Procedures linked to our Carbon Management plans and environmental statement which lays out information about how we intend to protect the environment, monitor and manage vehicle use
- Procedures for managing vehicle fleet performance to ensure:
  - The effective use of capital and that value for money is achieved
  - Compliance with statutory regulations
  - Use of appropriate fleet monitoring technologies (AVLS)
  - Quality records in respect of vehicle assets within Civica Tranman
  - Procedures for ensuring the cost effective and secure disposal of fleet assets





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FIRE AND RESCUE SERVICE



## 4 Strategic Vision

### 4.1 Introduction

Our long-term fleet vision supports our journey to implement a sustainable operating model that provides staff with the right resources and technology to meet the future demands and achieve our overall strategic outcomes.

- A sustainable fleet that significantly supports and contributes to climate change policy in Scotland
- A fleet that makes use of advanced technology to deliver current and future fire services
- A fleet model that is sustainable and drives partnership working to maximise public sector resources
- An optimum fleet provision that makes efficient and effective use of funding to meet our current and future needs
- A safe, flexible, working environment for firefighters and staff and a high-quality fleet

### 4.2 Values

The core values of SFRS are Safety, Teamwork, Respect and Innovation. The values relating to the SAMP, which also incorporate SFRS's overall values, are detailed below.

Throughout the development of the SAMP and beyond, these will be consistently applied.

- Ensuring we have a fleet that allows our people to work safely
- Creating a working environment where we continually develop our skills, knowledge, qualifications and capabilities to support our people and provide high quality fleet services
- Using our resources efficiently and effectively to deliver the SAMP and provide best value to The Scottish Fire and Rescue Service
- Being innovative in accessing technology to assist with operational service delivery
- Being flexible and adaptable, aligning to our strategic direction and meeting future demands
- Making changes to our fleet so that we contribute to national climate change policy, carbon reduction and ULEV targets
- Delivering in partnership with internal and external bodies to ensure greater collaboration, knowledge sharing and delivery of efficiencies



# 5 SFRS Fleet Services

## 5.1 Introduction

In comparison to other UK Fire and Rescue Services, we operate the largest fire fleet in the UK. SFRS has an extensive fleet, consisting of 1,632 vehicles as at March 2022.

As displayed below, the majority of these are heavy vehicles, cars and vans. Whilst the cars travel the most miles, the heavy vehicles are responsible for over four times the carbon emissions.

Vehicle Type	Total	Overdue for Replacement	Ovedue %
Heavy Appliance	558	218	39%
Specialist	342	191	56%
Light Fleet	732	209	29%
<b>Total</b>	<b>1,632</b>	<b>618</b>	<b>38%</b>

The light vehicle fleet is generally support vans that are used for transferring stock and equipment between stations and stores.

The light vehicles' carbon emissions are high, relative to the number of vehicles. for a wide range of requirements from basic transport to fire appliances.

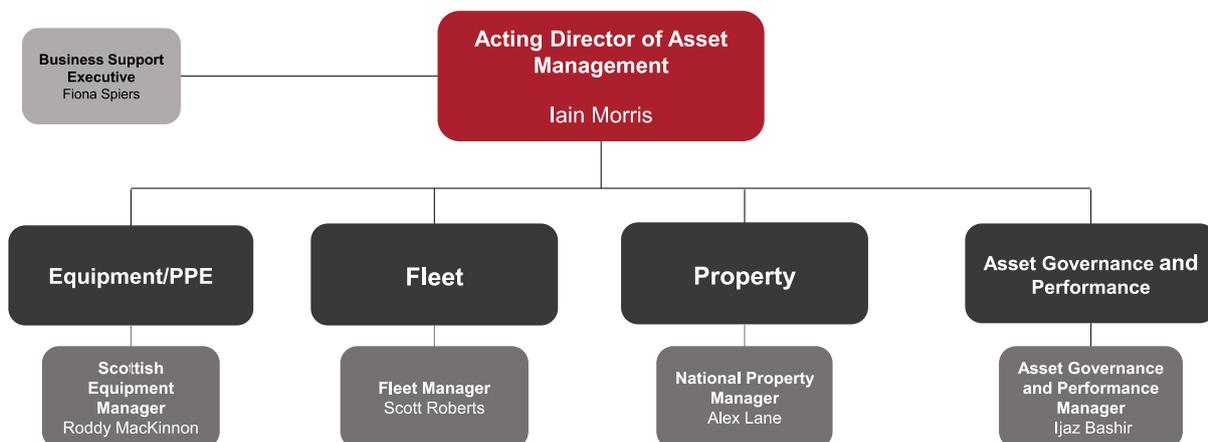
## 5.2 Fleet Structure

The Fleet Services functions sits within the overall Asset Management Directorate, as shown in the diagram below. Currently there are approximately 100 members of staff within the fleet team.

Since 2013 a significant amount of work has been undertaken to successfully amalgamate our legacy fleet departments into one centrally operated fleet function, standardising policies and delivering year-on-year cost savings. This section outlines the current progress across our Fleet Services and the areas where change is required to continue to deliver high quality, agile fleet services.

Fleet services are centrally managed by the Fleet Manager and coordinated with four regional management teams in Inverness, Dundee, Edinburgh and Glasgow. This structure has enabled:

- The centralisation of all vehicle purchases enabling procurement efficiencies to be made;
- Standardisation of the vehicle fleet, livery, equipment, servicing, statutory inspection and examination and replacement;
- Centralisation of fuel management with one supplier providing fuel cards and monitoring refuelling; and
- A single national ICT Fleet Management system (Civica Tranman)



## 5.3 Fleet Staff

The Fleet and Engineering Function operates around-the-clock delivering a 24 hour/365 day per year service, in day to day operations and out of hours on-call capability. Out with core hours there are on-call mechanics deployed by Operations Control on an 'as required' basis.

Each workshop has a manager, deputy manager, supervisors and a team of mechanics and equipment technicians to ensure our fleet remains safe, roadworthy and operational.

Our Fleet Services staff provide a crucial function within the SFRS to support the public and communities in Scotland by ensuring SFRS Fleet is available and operational. It is essential that our staff remain competent and qualified to meet the changing demands of technology, operations and legislation.

Therefore, consideration and annual planning of staff training needs is undertaken to maintain competences and progress new knowledge, skills and qualifications to promote the health and safety of all staff.

## 5.4 Procurement

There are groups set up to discuss operational requirement with respect to fleet consultation before specifications and procurement is done via a User Intelligence Groups (UIG); information on the membership of these groups this will be enhanced going forward based on stakeholder feedback.

As per the SFRS Procurement Strategy, 2021/24, the Procurement team will develop a commodity strategy, this is the purchasing plan for a specific product or service (commodities) that facilitates the management of the supplier base, thereby avoiding and/or proactively solving potential issues.

The Commodity Strategies that are developed will be proportionate to risk, value and strategic importance of the commodity to the SFRS. Consideration will also be given to planning, sustainable procurement, including Fair Work Practices and risk management throughout the development of the Strategy.

A Commodity Strategy will not be progressed unless appropriate financial provisions have been made and the goods/services under consideration have been included in the Procurement work plan as approved by Corporate Procurement Steering Group.



## 5.5 Replacement Schedule

SFRS operate a pre-planned life for all its fleet items as follows:

- All appliances based on commercial vehicle chassis shall be replaced on a maximum 15-year cycle
- All light pumping appliances, based on commercial vehicle chassis having a GVW of no greater than 7.5 tonne shall be replaced on a maximum 12-year cycle
- Combined Aerial Rescue Pumps shall be replaced on a maximum 12-year cycle
- General purpose vans shall be replaced on a maximum 7-year cycle
- General purpose cars shall be replaced on a maximum 4-year cycle for management team allocated cars or a maximum 7-year cycle for pool cars
- All vehicles will have annual mileage and condition assessed over its life to allow for maximum utilisation

With this policy we have a long-term schedule for all fleet replacements. However, this may vary if/when critical operational requirements change within the life of a type of vehicle or statutory events demand.

For example, the introduction of an Ultra-Low Emissions Zone in Glasgow and Edinburgh for which many of our vehicles are non-compliant is necessitating early replacement of some vehicles. The associated decisions are based on whole life costs and value for money.

## 5.6 Maintenance and Servicing

The majority of maintenance work is carried out by the four main SFRS workshops – Inverness, Dundee, Edinburgh and Glasgow. The exception to this are vehicles located on the Islands, which are serviced by local garages. The optimal positioning of the workshops allows us to provide high quality and timely support.

For specialised services, such as body repairs and electric vehicles, these are outsourced to contracted suppliers that service all areas of the country. The current service, maintenance and repair costs per annum is £9.3 million, this includes salaries, fuel costs and external work.

As a minimum, all front-line appliances and specials bearing emergency warning systems over 3,500 kilograms gross vehicle weight (GVW) shall be inspected for roadworthiness at 13-week intervals up to a maximum of 18 weeks, as specified in the Best Practice for the Maintenance of Fire Service Vehicles Document issued by National Fire Chiefs Council (NFCC).

All general-purpose cars and vans shall be inspected on an annual basis, in line with manufacturers' recommendations of time and mileage covered.

Servicing, maintenance and repair of vehicles shall be carried out in compliance with the requirements and standards of the following documents:

- NFCC Best Practice Manual;
- HGV Testers Manual issued by The Driver and Vehicle Standards Agency (DVSA);
- Manufacturers' Guidance and Warranty terms

Each asset type is allocated an appropriate service plan, inspection schedule and statutory inspection and examination scheme dependent on the nature of the asset and how it is used.



This schedule is set up within the Fleet Management system and is such that the closure of one job card of a specific job type will automatically schedule the next due inspection or service according to pre-set plans.

Detailed records of each critical fleet asset history will be retained and managed in line with legal requirements and the quality records procedures of the fleet services Quality Management System (QMS). Although electronic data is sufficient for quality records, hard copies will be retained in some instances.

## 5.7 Vehicle Acquisition

We recognise that the acquisition of an asset is not simply the work of a single group but requires a multidisciplinary team to ensure all needs are met. We address this through the formation of User Intelligence Groups (UIG), co-ordinated by our procurement professionals.

Through each UIG we will develop a detailed statement of requirements (specification) with which to approach the market, that addresses operational and legal requirements, takes account of lessons from similar previous exercises and other organisations, and achieves an appropriate balance between cost and quality.

We will ensure our planning is realistic to achieve the best possible result, allowing all stages in the process to be undertaken effectively.

We will seek to develop the supply markets in which we operate through appropriate communication and engagement, supporting broader economic development through innovation, regeneration, and fair work; and encouraging small/medium and supported businesses, with a view to ensuring our needs can be sustainably met, driving public value.

## 5.8 Vehicle Deployment

We will plan for the deployment of our assets through effective project management and rigorous testing, to ensure disruption is minimised for users and communities.

Standardised procedures and safe systems of work will be available for all assets in use, ensuring a consistent approach throughout the Service, taking account of the diverse range of incidents and settings across Scotland.

Where new assets are being commissioned we will support their introduction through timely and appropriate awareness and training for end-users, technicians and other stakeholders, to ensure they can be confidently and competently used, maximising benefit from the investment.

## 5.9 Reserve Vehicles

Currently there are a number of reserve vehicles, many of which are nearing end-of-life. These are used as spare appliances to go to stations when any appliance is taken away for servicing or as replacement vehicles for officers and staff who have taken a vehicle into a workshop for a service or for scheduled repairs.

Due to the lack of funding available, SFRS is using reserve vehicles that are not like for like in terms of appliances, requiring additional staff familiarisation training, also the vehicles are often old and maybe incompatible with existing rescue equipment used by the station.

This can result in a number of operational issues and can further impacts officers who are required to take a vehicle to a workshop and occasionally may not be supplied with a replacement vehicle. An increase in Capital Investment for fleet will help to reduce the overall age of the fleet, improve the condition of the fleet and consequentially improve our reserve fleet to enable Fleet Services to provide a more suitable replacement vehicle to fire stations.



## 5.10 Civica Tranman

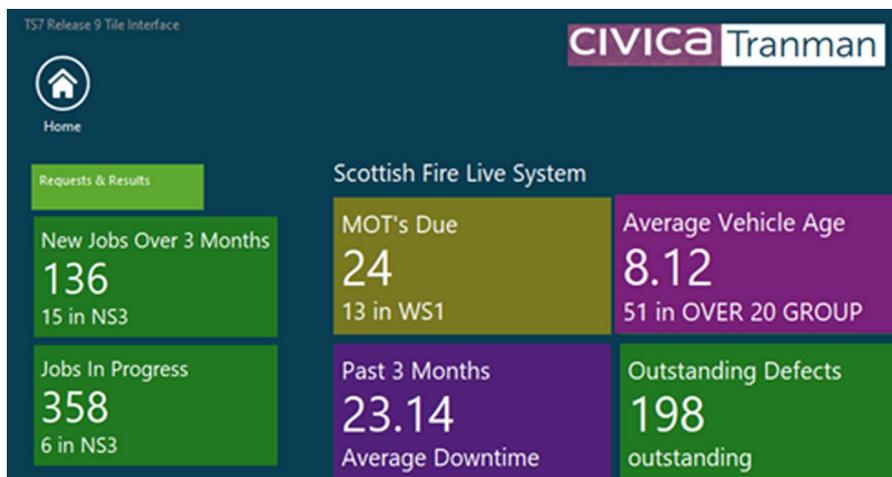
In a modern fleet management operation, the fleet management system is the single most important non-staff resource at our disposal.

We currently use the Civica Tranman system, which is widely used across emergency services in the UK, and is used by all three national blue light fleets across Scotland, and more than 50% of the local authorities in the country.

The functionality of the system includes asset management from cradle to grave including all maintenance histories and costs associated with the running of the vehicles.

This information is crucial to understanding the efficiency of our fleet but also informs us of the whole life cost of a vehicle when looking at future vehicle purchases. This is pivotal to successful future planning.

Our current system provides a web portal which provides all relevant information 24/7 on fleet vehicles for stations. This enables users to report defects and check service details, along with vehicle availability at any time.



## 5.11 Automatic Vehicle Locations System (AVLS)

The AVLS is an in-vehicle fleet management device that is widely used by organisations aiming to obtain best value from their fleet. SFRS currently have telematics installed into approximately 55% of the fleet.

AVLS is primarily used as a fleet management tool to assist SFRS Fleet Services to ensure the right vehicle is being used in the right location at the right time to achieve the best possible, economic, efficient and effective fleet.

The AVLS combines a GPS system with the on-board diagnostics to extract real time and rich data on the vehicle location and performance while delivering a safer and more economical operation of the fleet. Continued investment in telematics will bring benefits in terms of safety, functionality and accountability.

For every asset within the Service, we aim to maximise its availability in operational use, with the minimum of downtime.

As an emergency service, operational response capability must always be maintained and as such

surplus asset capacity is required to cover for essential downtime, particularly in fleet.

We will work to achieve the correct balance between cost and availability.



## 5.12 Decommissioning and Disposal

Disposal and decommissioning of vehicles is carried out in line with SFRS disposal policies to realise maximum capital receipts or by means of donation to a registered humanitarian charity, whilst at the same time ensuring vehicles are purchased by approved organisations or individuals.

The disposal policy is cognisant of the threat of “Trojan use” of assets for terrorist or illegal purposes and will therefore follow a secure sale methodology, by selecting appropriate disposal routes which have been vetted. Vehicles will be decommissioned as specified in the SFRS Decommissioning procedure document.

Asset sale will be recorded within the Fleet management system and notification will be given to the Finance team for amendment of the asset registered in terms of capital assets.

## 5.13 Collaborative Working

We can provide more efficient and effective Fleet Services through greater collaboration with our partners and stakeholders. In line with SFRS’s Long-term Vision we continue to collaborate and co-locate workshops with other emergency services where there is mutual agreement to do so.

Our current partnerships include working with other blue light services to provide space and maintain vehicles in a mutually beneficial way. For example, we have arrangements with both Scottish Ambulance Service (SAS) and Police Scotland. SFRS provide Police Scotland with workshop space at the Asset Resource Centre in Edinburgh.

These partnerships operate successfully and demonstrate the viability of continuing to grow our strategic collaborations to enable our resources to be maximised.



## 5.14 Workshops

During their inspection HMFSI noted that the workshop infrastructure is on the whole good, with good equipment and facilities at all locations.

As mentioned earlier since the formation of SFRS the Fleet Management team have successfully migrated from eight legacy service workshop and stores facilities to four Asset Resource Centres (ARC) encompassing both stores and workshop facilities. These are located in Edinburgh, Dundee, Inverness and Glasgow.

The facilities at Dundee and Edinburgh are relatively modern and fit for purpose; the facility at Inverness had a £2million refurbishment not long after the formation of SFRS.

The Glasgow workshop is the oldest of the four and is in a poor condition and scores very low in terms of suitability. The workshop at Glasgow and an equipment store based in Hamilton will be amalgamated to a new £13 million West ARC which is currently under construction with an estimated completion in Spring 2023.



Proposed West Asset Resource Centre



## 6 Current Fleet Assessment

### 6.1 Introduction

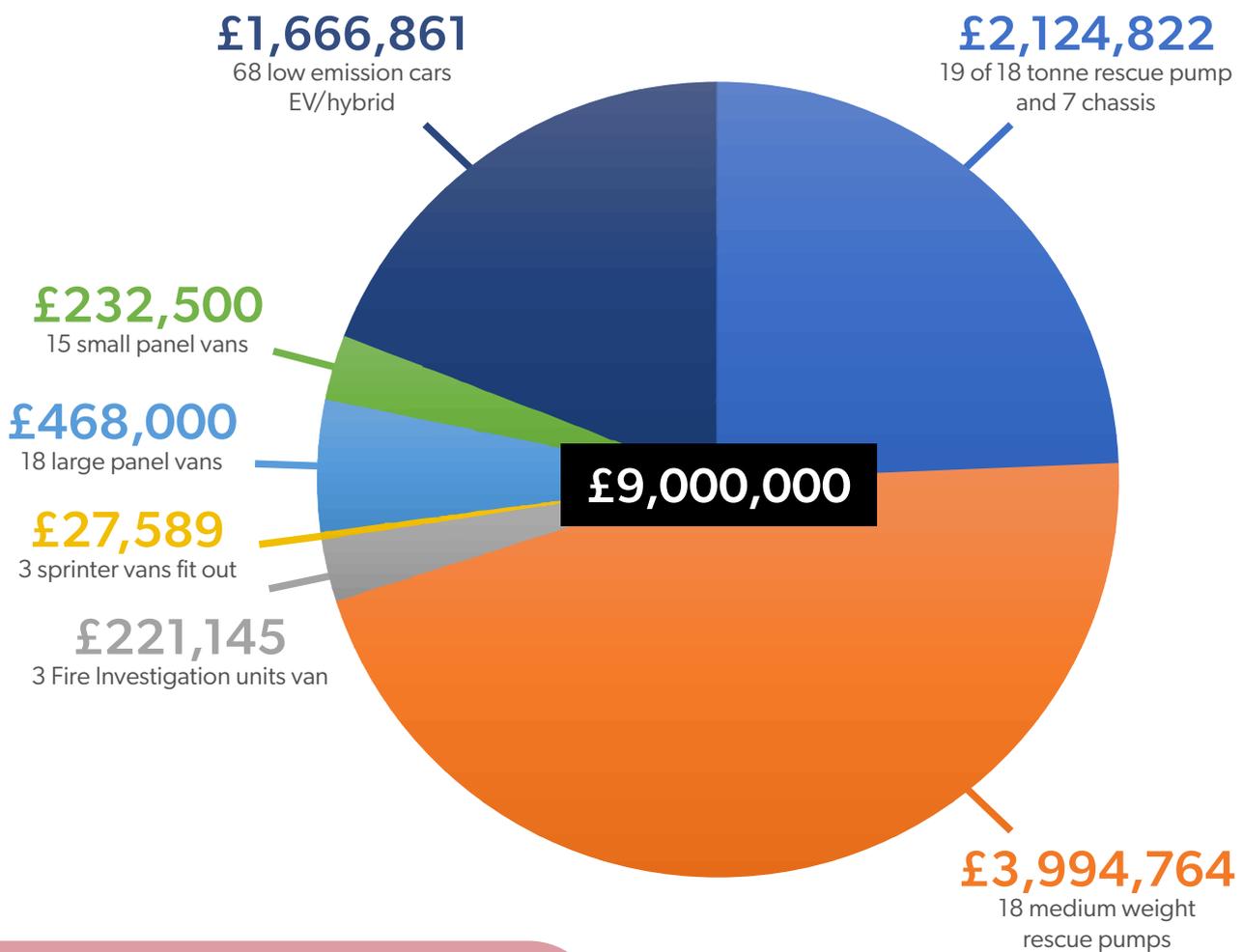
SFRS has 1,632 fleet assets with a combined asset value as at March 2021 of approximately £60 million. The purchasing of fleet vehicles and equipment is made difficult by an enforced year-on-year budget.

The Capital budget allocation for fleet in 2021/2022 was approximately £9 million.

### 6.2 2021/22 Project List

In addition to ensuring the SFRS fleet are safe and operational, Fleet Services are involved in various projects.

Some of the notable projects successfully completed in 2021/22 include the following:



New vehicles purchased 2021/22



## 6.3 Light Fleet

Details of the light fleet vehicles are as shown in the table below.

209 light fleet vehicles are overdue for replacement.

Our vision is to operate and maintain a class leading, future proof, and sustainable ULEV light fleet that is technologically advanced and will meet operational requirements.

Light Fleet	Vehicles Overdue for Replacement	Current Total
RESPONSE CAR	48	340
POOL CAR MANUAL	87	138
POOL CAR AUTOMATIC	1	122
OFFICER PROV CAR	1	10
ALL TERRAIN VEHICLE	1	1
POOL VAN SMALL	59	107
MULTI ROLE VEHICLE	1	1
MUTI ROLE VEH 4 X 4	5	5
SUPPORT VEH HYDRANTS	1	1
SUPPORT VEH OCC HTH	1	1
SUPPORT VEH STORES	0	2
SUPPORT VEH WORKSHOP	4	4
<b>29% overdue for replacement</b>	<b>209</b>	<b>732</b>



This will ensure that SFRS operates a sustainable light fleet that significantly supports and contributes to climate change policy in Scotland, and implements a fleet model that is sustainable and drives partnership working to maximise public sector resources.

Transport Scotland awarded a grant to SFRS for 45 ULEV vehicles in 2019. This was phase one of an ongoing planned transition of the light fleet to ULEV's. It is planned to replace 50% of the light fleet to ULEV's by 2025 and 100% by 2030.

The table below outlines the carbon impact projections of 50% of the light fleet transitioning to ULEV's within this Carbon Management Plan period.

Significant parallel investment is being undertaken to install a large EV charging infrastructure to support this transition.

It is estimated that £12m of investment over the next four years into new EV charging will be required, representing about 400 individual charge points across all SFRS sites.

Year	Number of Replaced Vehicles	Replaced Vehicles Emissions (TCO <sub>2e</sub> /Yr)	New EV's Emissions (TCO <sub>2e</sub> /Yr)	Carbon Reduction (TCO <sub>2e</sub> /Yr)
2021	100	154	47	106
2022	60	139	23	116
2023	60	313	103	209
2024	58	389	39	350
2025	48	157	79	79
<b>Totals</b>	<b>326</b>	<b>1152</b>	<b>291</b>	<b>860</b>



## 6.4 Heavy Fleet

The fire appliance is perhaps the dominant emblem of the Fire Service. Service Delivery depends on a large and varied vehicle fleet and associated specialist equipment.

In 2013 on day 1 of the new fire service the average age of the inherited heavy fleet was 13.5 years, through sustained Capital investment the average is sitting today at just over 9 years. The NFCC Transport Group recommend that the replacement cycle for these vehicles should be 15 years.

Details of the heavy fleet vehicles are as shown in the table below. 218 heavy fleet vehicles are overdue for replacement.

These mobile assets depend on a hydrocarbon fuel, diesel. Fleet fuel emissions accounted for 29% of total SFRS carbon emissions. Our heavy fleet, 5 tonnes and over, consists of 714 vehicles.

The Scottish Government published a draft National Transport Strategy 2 (NTS2) which identifies transport as Scotland's largest contributor of carbon emissions. In order to meet the Scottish Government and SFRS reduction targets, all of these appliances will need to be replaced with zero-emissions vehicles by 2045.

The current average emission standard of these vehicles is an unacceptable Euro 4 emissions standard which is as a result of the £70 million investment backlog.

At a time when legislation is driving the replacement of internal combustion engine vehicles with ULEVs, this presents a challenge to the SFRS in procuring new assets and gaining best value.

This challenge is compounded by the fact that current prototype low emission fire appliances are limited by range and this new technology is still in its early development and unproven within the heavy haulage sector.

However, in 2023 the first ever SFRS Low Carbon Fire Appliance will roll into one of our fire stations. This is as a result of £500,000 of funding from Transport Scotland, a further £250,000 has been provided by SFRS, giving a working capital of £750,000 to make this a reality. Emergency One has received the contract to produce the prototype.

The chosen fire station has not been decided as yet. Suitable locations, that will be able to host the charging infrastructure for the appliance, are being surveyed.

Once developed, firefighters will be trained on how to use the low emission vehicle, which will join our light fleet of more than 100 electric cars. This project showcases our long-term commitment to the environment to reduce carbon emissions.

Heavy Appliances	Vehicles Overdue for Replacement	Current Total
RESCUE PUMP	152	452
AERIAL RESCUE PUMP	13	15
PUMP	47	73
AERIAL LADDER PLAT-	3	9
TURNTABLE LADDER	1	4
HEAVY RESCUE UNIT	2	5
<b>39% overdue for replacement</b>	<b>218</b>	<b>558</b>



## 6.5 Specialist Vehicles

Given the challenges of managing a Fire Service that covers the vast geographical area of Scotland and the extremes of rural and urban settings it will not come as a surprise that SFRS have a range of specialist vehicles.

Details of the specialist fleet vehicles are as shown in the table below. 191 light fleet vehicles are overdue for replacement.

Specialist Vehicles	Vehicles Overdue for Replacement	Current Total
MUTI ROLE VEHICLE 4 X 4	32	49
RAPID RESPONSE UNIT	0	40
VOL.SUPPORT UNIT	30	34
PRIME MOVER	15	24
WATER RESCUE UNIT	8	21
MULTI ROLE VEHICLE	8	15
COMMAND SUPPORT UNIT	4	8
SUPPORT VEHICLE	6	8
INCIDENT SUPP UNIT	4	7
SUPPORT LORRY SMALL	4	6
WATER CARRIER	4	6
DET ID MONITORING	4	4
INVESTIGATION UNIT	2	4
MAJOR INCIDENT UNIT	4	4
SPEC OPS RESP UNIT	0	4
MINIBUS	6	9
CFS INTERACTIVE VEHICLE	3	3
ROPE RESCUE VEHICLE	3	3
ENV PROTECTION UNIT	1	2
FORK LIFT TRUCK	1	2
TRAINING VEHICLE	0	2
TRACTOR	0	1
POOL VAN LARGE	35	45
SUPPORT VEH WORKSHOP	7	18
SUPPORT VEH OCC HTH	1	1
SUPPORT VEH STORES	0	12
SUPPORT VEH HYDRANTS	9	10
<b>56% overdue for replacement</b>	<b>191</b>	<b>342</b>



## 6.5.1 Fire Investigation Unit

### Process of acquiring a new vehicle

Activity Description		Owner	Completed
<b>2021</b>			
<b>1</b>	Complete Commodity Strategy	UIG	18 MAY
<b>2</b>	Quality Review of Commodity Strategy	Procurement Fleet Category Lead	18 MAY
<b>3</b>	Approval of Commodity Strategy	Head of Finance and Procurement	21 MAY
<b>4</b>	Confirm Specification, Evaluation Criteria and Quality/Price	UIG	03 JUN
<b>5</b>	Complete Mini Competition and Evaluation Documents	UIG	02 JUL
<b>6</b>	Quality Review Mini Comp and Evaluation	Procurement Fleet Category Lead	05 JUL
<b>7</b>	Issue Mini Comp	Procurement	06 JUL
<b>8</b>	Deadline for Submissions	PCS	13 AUG
<b>9</b>	Open Tender Documents	Procurement	13 AUG
<b>10</b>	Evaluate Tenders	UIG	25 AUG
<b>11</b>	Moderation Meeting	UIG	25 AUG
<b>12</b>	Draft Tender Recommendation Report	Procurement	26 AUG
<b>13</b>	Quality review of evaluation and recommendation	Procurement Fleet Category Lead	26 AUG
<b>14</b>	Prepare Contract Award and Debrief Letters	Procurement	30 AUG
<b>15</b>	Approval of contract award and debrief letters	Head of Finance and Procurement	13 SEP
<b>16</b>	Issue Award Letter	Procurement	13 SEP
<b>2022</b>			
<b>17</b>	Vehicle Build	Contractor	28 FEB
<b>18</b>	Vehicle Inspection	Fleet	09 MAR
<b>19</b>	Vehicle pre delivery and then sent to North ARC		31 MAR

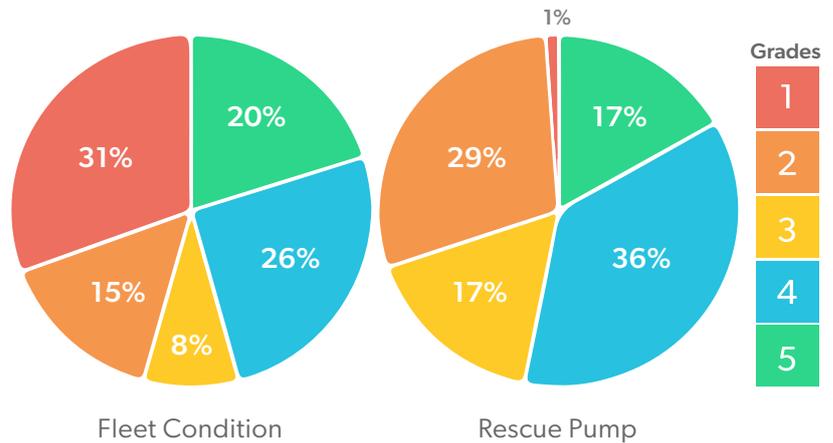


## 6.6 Vehicle Grading

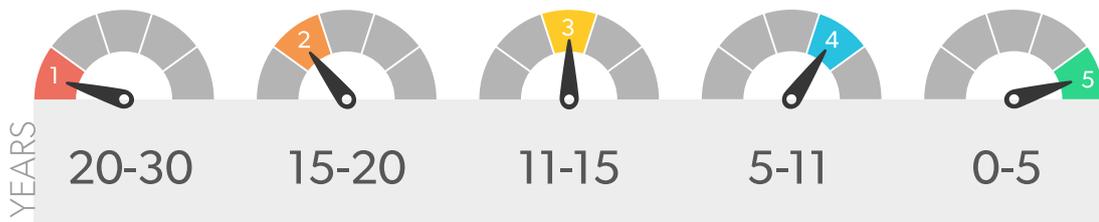
Appendix 4 of this SAMP document explains the vehicle condition grading matrix in detail. All vehicles are assessed on a number of risk factors to assess an overall condition grade.

Grade 5 is the best grade and grade 1 is the worst condition grade. The graphic is an overview of the vehicle grading scale.

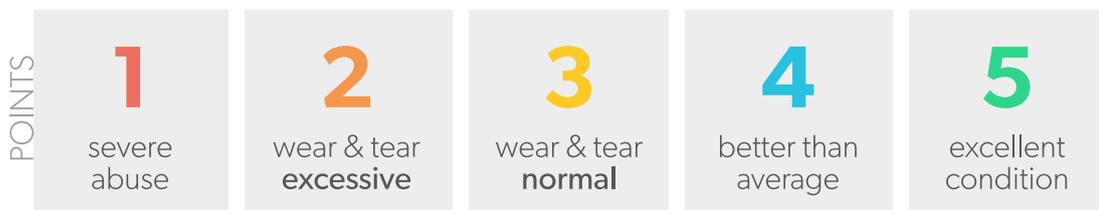
The Fleet condition chart highlights that 31% of the overall SFRS fleet is in the lowest grade category. The rescue appliance chart highlights that 47% of SFRS rescue appliances are in the lowest condition grades.



## Age



## Condition



Condition is made up of three element groups:

- Paint, body and interior
- Cab, chassis and underside
- Mechanical and fire engineering

**Condition** score up to maximum of 15 combined with the **age** score to give a vehicle an **overall** score



## 7 Strategic Drivers

### 7.1 Introduction

The strategic drivers for the SAMP exist both internally and externally. There are a number of key internal drivers and aligning our fleet operations to the internal changes we are making is fundamental to successfully supporting our frontline operational staff.

Externally, there are a wider set of external policies and Government initiatives that have significant implications on our future fleet. For example, for more than ten years the UK has consistently been prepared against increased terrorist threat levels.

As a public-sector service with a significant fleet, we are committed to aligning ourselves with the Scottish Government and demonstrating progress towards decarbonisation. A further external factor driving the need for a renewed SAMP is technology.

As the ULEV market is maturing, the availability and viability of ULEVs is being continually advanced. SFRS want to be at the forefront of adopting this technology into our operational duties.

### 7.2 Operational Change

There are a number of organisational strategies and transformation programmes underway to enhance how we respond and deliver an effective service.

These include the People, Training, Finance and Assets System (PTFSA), the increased threat of wildfires and flooding events, the Service Delivery Model Programme, development of a strategic asset management plan for property, changing community risks, the use of new technology in both operational and support functions and the recently approved Operational Strategy, which is a vehicle for identifying, developing and implementing future operational response and driving transformation.

Modernising our fleet is a component of the overall strategic development of SFRS and is an integral part of our new Operational Strategy and overall strategic vision of being a fit for purpose, efficient, effective and sustainable 21st century fire and rescue service.

### 7.3 Climate Change

More stringent vehicle emission standards and clear air zones are examples of environmental factors driving changes in fleet. The impact that weather-related incidents are having on the SFRS emergency response profile is already recognised by the Service.

The number and scale of incidents that fall into this category is increasing in volume, and severity. The Scottish Government has set a legally binding target of net zero greenhouse gas emissions by 2045.

To do this, the Programme for Government outlines the next steps and aligning our SFRS vision to supporting this is a key component and driver for change.



Every organisation, industry and area of society has been impacted by, and will continue to be, influenced to a significant degree by reform to Governmental policy to mitigate and reverse the effects of Climate Change.

In Scotland, an estimated 284,000 homes and premises are at risk of flooding, with an additional 110,000 properties at risk by the 2080s.

The SFRS has prioritised resources and aligned itself with the Scottish Government's aim to achieve the ambitious target for Scotland to achieve Net Zero carbon emissions by 2045, (5 years before the rest of the UK), through:

- Committing to a Service Climate Change Response Plan
- A pledge to reduce carbon emissions by 6 per cent each year until 2030 (this is equivalent of an 80% overall reduction in our emissions)
- An annual budget that supports the delivery of our Carbon Management Plan which is supplemented by the Scottish Government's Green Public-Sector Estate Decarbonisation Scheme
- The creation of an Environment and Carbon Management Board which oversees our carbon reduction programme

As one of the largest public-sector bodies, SFRS are committed to working in partnership with the Scottish Government to significantly contribute to the delivery of this strategic objective.

The Programme for Government sets out some of the next steps on Scotland's journey to net zero emissions. There is a need to ensure that our SAMP is aligned to this. Without making changes, the implications in terms of our future funding and increased costs are significant.

Four of the key areas from the Programme for Government which are directly applicable and highlight why we need a SAMP are set out below:

- **Public Sector Fleet:** The 2025 target set by the Scottish Government for public sector fleet shows the importance of the public sector in transitioning to ULEVs. Our SAMP needs to be aligned now to set out our strategic direction for phasing out fossil fuel vehicles.
- **Low Emission Zones:** The first phase of Scotland's Low Emission Zone (LEZ) was launched in Glasgow, plans are progressing to put LEZs in place for Edinburgh, Aberdeen and Dundee this year. Whilst there are some exemptions for emergency vehicles the placement of our fleet in and around LEZ's should endeavour to meet the requirements set for these zones.
- **Electric vehicles:** Building the infrastructure for transitioning to ULEVs is fundamental. There is a significant opportunity for SFRS to collaborate and make use of the funding provisions being made available to build charging infrastructure. The Environmental Team who have secured another £1.5million funding from Transport Scotland for electric charging with the agreement that this would be carried forward into 2022/23.
- **Supporting transport innovation:** The Scottish Government has stated that it will establish a new supply chain accelerator programme to help public bodies and commercial partners develop innovative solutions to the challenge of decarbonising public-sector vehicle fleets. Through adopting an innovative and forward-thinking approach to fleet in the SAMP, there is an opportunity for SFRS to work in collaboration with private and public bodies.



Whilst we are working hard to reduce our electricity consumption, it is noted that the introduction of electric vehicles will increase it. However, the CO2 emissions associated with this increase will be offset by the savings made in reducing the number of diesel vehicles in our light fleet.

These savings will also contribute to improving local air quality by reducing the particulate matter that is emitted from diesel engines.

At a time when legislation is driving the replacement of internal combustion engine vehicles with electric vehicles, this presents a challenge to the SFRS in procuring new assets and gaining best value.

This challenge is compounded by the fact that current prototype low emission fire appliances are limited by range and this entire field is in its infancy.

Given the challenging targets to be made by 2030, we must take all conceivable action and explore all available options.

The Service have made inroads to meet Scottish Government's targets of phasing out internal combustion vehicles and moving to ULEVs by 2030 already, through:

- The Introduction of 45 Renault Zoe electric vehicles and 62 Kia E-Nero cars;
- 98 EV charge points spread across 61 sites;
- Committing to grow our ULEV network as funding becomes available; and
- Participating in a project to develop a prototype low carbon emissions fire appliance.

We have been working with our partners at Police Scotland and the Scottish Ambulance Service in developing a national Blue Light ULEV charging network.



When the required charging network is in place, and SFRS has assessed the suitability of using ULEVs for emergency response, the existing Flexi Duty Officer (FDO) response fleet will be reviewed and considered for replacement.

Heavy Fleet and Plant Technology has yet to find a suitable replacement for diesel heavy goods vehicles, however, delivery of our carbon targets will eventually require the replacement of diesel as the fuel for fire appliances.

We are tracking the development of ultra-low emission heavy vehicles and have commissioned a prototype fully electric fire appliance.

Replacing the existing diesel fleet of fire appliances will be critical to the delivery of a net zero emissions Service. Until a feasible option for heavy fleet exists, the focus will be replacing all older appliances with Euro 6 rated appliances.

As the fleet becomes more electrified this will have an impact on our electricity use and therefore potentially increase carbon emissions from electricity, however there will be an overall reduction over traditional diesel burning transport.

## 7.4 Technology

It is vital that we get the best value from our fleet and prioritise investment accordingly to ensure our assets are fit for purpose and technologically advanced but meet the demands of the service, which means they have the performance and range necessary for their operational purpose, whether daily use, or specialised vehicles.

Our aim is to be at the forefront of the advances in the ULEV market and integrate these vehicles into our operational environment.

E-mobility is one of the biggest drivers for change across the fleet industry. It is recognised that the market is on the cusp of a paradigm shift from ICE vehicles to zero emission vehicles.

This switch is driven by both demand and regulatory government interventions on a global scale in response to rising greenhouse gases.

The advancement of electric vehicles in the market, and the continuing speed of development of these demonstrate the rapidly changing move towards electric vehicles.

SFRS wants to be at the forefront of e-mobility, providing ULEVs to staff that are fit for purpose and advanced. We recognise that investing in new technology will provide our people with highly efficient vehicles that enable them to do their jobs in the most effective way possible whilst reducing our carbon footprint.





## 8 Fleet Strategic Objectives

### 8.1 Fit for Purpose

We recognise the importance of providing the right resources and technology to support our people in effective service delivery. Fleet Services aim to develop a sustainable, high quality fleet that meets operational requirements while always considering the safety and wellbeing of our people.

To enhance the experience of our people, our SAMP will aim to minimise downtime of resources through planning and technology and ensure that there is a positive and collaborative working environment.

#### 8.1.1 Reserve Vehicles

Feedback from the Station focus groups and comments from the internal survey recognised that there is a need for better quality reserve vehicles. As part of the SAMP, we have highlighted the investment backlog of over £70 million which is a significant contributor to the fact that many of our reserve rescue pumps are over the NFCC Transport Groups maximum recommended age profile of 15 years.

Increased investment in our fleet will help to significantly reduce the age profile of our overall fleet and thereby that of the reserve vehicles.

The safety of our people is paramount, being able to provide an appropriate reserve vehicle is key to ensuring our fleet is safely maintained and unscheduled maintenance can be quickly responded to without impacting operational duties.

The overall impact of this strategic change will improve the wellbeing of our people, reduce operational time lost and encourage all users of vehicles to contribute to maintaining our fleet to a high standard.

#### 8.1.2 Greater Stakeholder Engagement

We have a wide range of ways to engage with vehicle users across the organisation. As we move forward to reform this area we will look to continuously improve our current engagement practices in order to help us understand and respond to operational needs.

To further enhance our user engagement, we will strive to introduce innovative technologies, to enable dialogue and ensure that we continue to improve. Engagement with our Corporate Support Services and ICT will help to facilitate this.

Based on stakeholder engagement we have an improvement action to improve the fleet structure as to allow the Fleet Managers greater opportunities to seek stakeholder views first hand by visiting more fire stations each year; we will also issue feedback surveys at the end of vehicles servicing and encourage greater communication and engagement all round thanks to a dedicated fleet services web-page.

#### 8.1.3 Fleet Structure

We will review the Fleet Structure to ensure it is resourced appropriately to meet the requirements of this SAMP. From an initial fleet services review and based on stakeholder feedback we are aware that succession and workforce planning is a key issue.

There are also too many single points of failure within the current Fleet structure, the Fleet management average age is over 61. We will seek to implement a new structure for fleet that seeks to address single points of failure, create a central admin team, provide deputies for key positions, increase apprenticeships, give staff promotion opportunities and a clear career development pathway.



#### 8.1.4. Staff Training

Feedback from the focus groups highlighted a general lack of consistent training for fleet staff. Whilst part of this is attributable to Covid, we will now seek to invest in staff training and ensure that all staff are trained to an appropriate level each year.

Staff training, enhancement of skills, qualifications and knowledge will lead to advancement of staff competence.

#### 8.1.5 ISO 9001:2015

To enhance Fleet Services management system, it is Fleet Services vision to gain accreditation to the International Organization for Standardisation (ISO) 9001:2015 Quality management Systems standard nationally.



At present, the Fleet workshop in Glasgow has been successfully accredited to the ISO 9001:2015 Quality Management Systems standard for a number of years.

In order to improve processes and procedures at the three other workshops it is proposed to implement ISO 9001:2015 within the fleet function at each of these workshops.

#### 8.1.6 Key Benefits

- Greater Capital Investment would help to reduce the age profile of reserve vehicles and help to optimise the availability of reserve vehicles
- The overall age and condition of vehicles will be improved and it will be easier for staff to get a reserve vehicle
- Greater engagement. The SAMP will increase effective two-way communication, aiding continuous improvement and ensuring that operational insights and needs are included in future decisions
- Processes and procedures at all four workshops will be aligned to the same ISO9001: 2015 standard which will also help to ensure that the Civica Tranman system is updated in a consistent manner





## 8.2 Modernising

We recognise that there is a need to make short-term improvements as well as delivering the longer-term vision of the SAMP. It is vital that we understand and meet current and future demand due to emerging risks, such as climate change and the increase in wildland fires and/or flooding events.

As a result, we recognise the need to align the SAMP to the imminent changes in the way that we serve Scotland's people. In order to improve the current fleet, there are a number of key areas in which there will be a focus.

### 8.2.1 Enhanced Analysis of Automatic Vehicle Location System (AVLS) Data

Ensuring our people have access to the tools and resources to fulfil their operational duties is critical. Due to the diverse and large geographical area that SFRS cover, understanding where and how our vehicles are used is fundamental.

Such knowledge will help us to make improvements in the short-term, ensuring that vehicles are available to our people. Currently 100% of our light fleet and 30% of our operational fire appliances have AVLS. The ambition is to install AVLS across the fleet.

A key component of our SAMP is to understand the utilisation and location of the fleet. Together with the Civica Tranman fleet management system, the AVLS will provide real-time data on the utilisation of vehicles.

By making use of technology to understand our demand, we will be able to allocate vehicles to the areas with the most critical need. Through continuing to build up an understanding of the patterns and trends of our utilisation, we can be adaptable and make changes in an agile manner.

This knowledge will allow any necessary changes to be made to the allocation of vehicles as well as inform future planning decisions. The overall aim will be to improve access to vehicles for our people when they need them.

Collecting and analysing the AVLS data allows us to determine exactly how often vehicles are used, their regular stopping points, and the period of time that they are parked.

These factors crucial in pinpointing the vehicles that could be replaced with ULEVs, and indicating the scale of, and best locations for, supporting charging infrastructure. We will develop the tools to better analyse the AVLS data captured to inform and support fleet decision making.

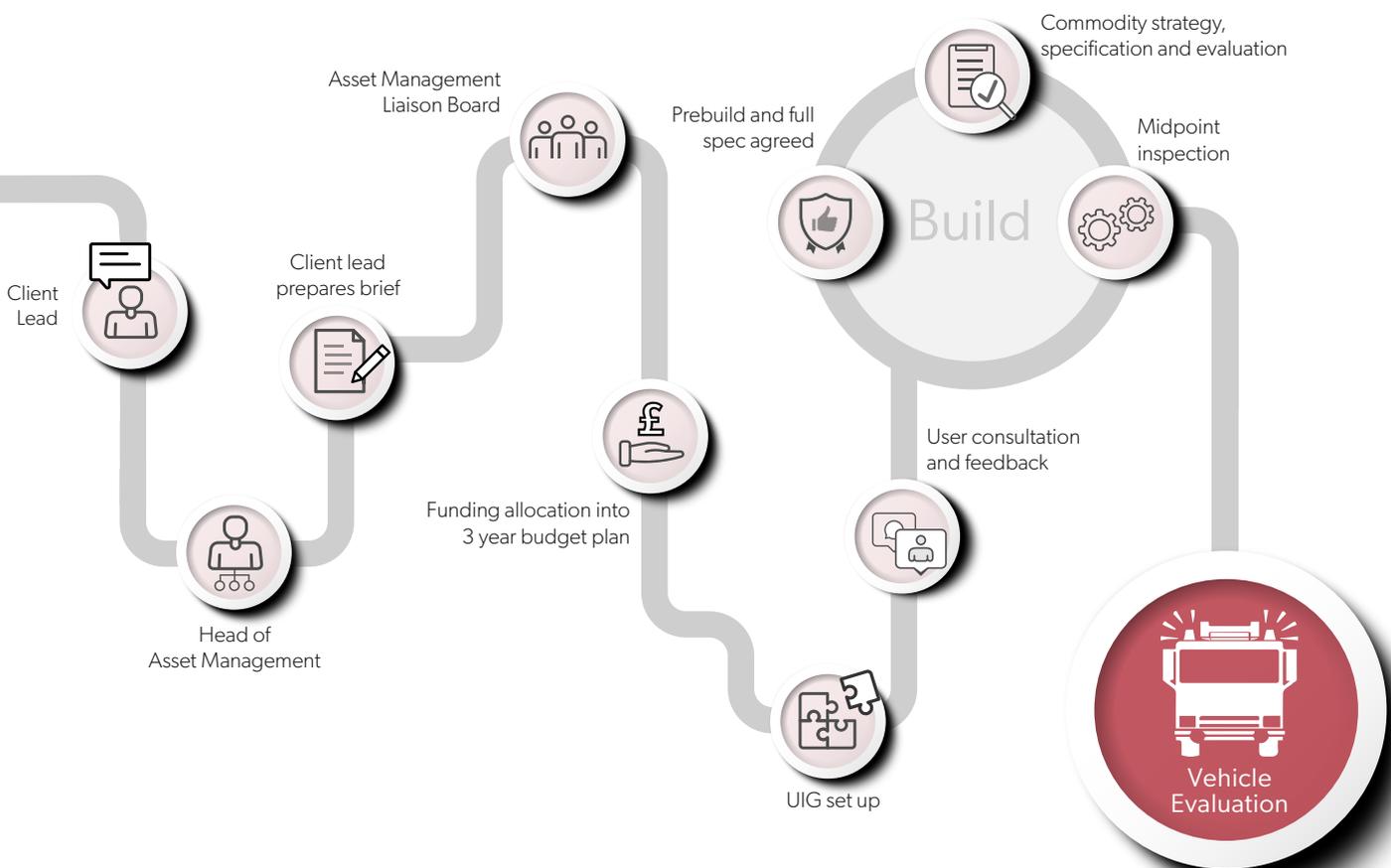


## 8.2.2 New Fleet Development Pathway

In conjunction with the User Intelligence Group (UIG) Additional or Replacement Vehicles should follow a process similar to the diagram which ensures that a formal justification is evidenced and placed in context of the SFRS Strategic Plan ensuring all interested parties are involved in the process, Health & Safety requirements are met and that the vehicle is fit for the purpose intended.

Selecting effective vehicles for the wide variety of roles is a complex process that takes into consideration a number of factors such as:

- Existing fleet profile
- Technical expertise of the Fleet team
- Manufacturers long term support and extended warranty packages
- Parts availability for the life of the product
- Fuel type
- Specialist tool requirements
- Load capacity (GVW)
- Suitability for role
- Health and Safety requirements including
- Environmental considerations
- Vehicle/equipment whole life cycle costs
- Vehicle evaluation by operational users
- Financial viability of the supply chain by the services procurement department



### 8.2.3 Asset Allocation

In the case of vehicle assets these will be allocated to by the Fleet Manager after consulting operational colleagues. Vehicles will normally be issued to stations where activity levels are higher, before being transferred to less active stations.

This ensures vehicle use will be maximised in the early years after issue and during the warranty periods to maximise operational effectiveness and reduce whole life running costs and to maximise the resale value. The rotation of fleet assets ensures that we maximise their potential and ensure best value is adhered to at all times.

Upon notification of the delivery of vehicles, their allocation will be made by the Fleet Manager, taking into account the following factors:

- Operational needs of the service and risk profile
- New engineering developments for appliances
- Variance in maintenance requirements
- Training needs including specific driver training
- Attempt to keep 'like' appliances on the same stations
- Consequential 'cascade' impact to other stations
- Ability of the station to house the appliance, or modifications required
- Appliances into reserve fleet
- Reserve fleet to disposal
- Operational resilience – maintaining fire cover arrangements

The Training Team will arrange for the necessary training and development for operational staff once allocation has been determined.

The Fleet Manager will arrange for the delivery and effective handover of the new appliances and equipment to fire stations, supported by any 'technical documentation' which is to include Health and Safety elements, technical specifications and instructions for the appliance.

The Fleet Manager will also arrange for the 'knock on' appliances to be serviced and be refurbished, receive modifications if required before delivery to the receiving station.

Light vehicles allocated to flexible duty officer posts will be assessed annually. Vehicles may be reallocated as necessary in order to average out operational life so as to achieve the optimum resale value.

### 8.2.4 Raise the Profile of Fleet Services

In order to raise the profile and stress the importance of the work undertaken by Fleet, we will promote key aspects of our work on a dedicated fleet news page on the intranet.

### 8.2.5 West Asset Resource Centre

The Glasgow Workshop is no longer fit for purpose and construction has started on a new state of the art fleet workshop facility with completion in 2023. We will work to minimise disruption to workshop activity



## 8.2.6 Vehicle Replacement Cycle

Our strategic approach to vehicle replacement is determined through striking a balance between the optimum replacement criteria and the amount of capital funding available.

As previously outlined due to the investment backlog of circa £70 million significant additional Capital Investment will be required to improve the condition of our vehicles and enhance staff experience

The SFRS replacement programme is based on a combination of age and mileage. If a vehicle has met the age and also the mileage criteria, it is replaced.

If a vehicle reaches its age and the mileage is lower than the replacement criteria, an assessment is taken by the Fleet Manager.

Where a vehicle is assessed to be in a safe condition, these will continue to be used for a short period until the mileage is reached.

Additional Capital Investment from Scottish Government would allow us to significantly reduce the average age of the fleet, thereby improving the stock of reserve vehicles, which will allow SFRS to maintain a modern, efficient fleet, meeting the demands of our people and operational requirements across a wide and varied geographical terrain.

Through undertaking greater analysis of the AVLS data we can begin to streamline the fleet and take a pragmatic approach to removing appliances and fleet items that are underutilised and may possibly be no longer required.

## 8.2.7 Key Benefits

### (Assuming Additional Capital Investment from Scottish Government)

- Utilisation of vehicles improved, AVLS will enable demand to be more fully understood and allow us to allocate vehicles to the areas with the most critical need
- Improved fleet to better support operational service delivery
- Overall reduction in the number of miles across all categories before a vehicle is replaced which will improve the overall condition of the fleet
- Age of vehicles reduced, the average age of our vehicles will decrease meaning that our officers and staff have access to newer vehicles
- Maintenance costs reduced, as vehicles are travelling less miles before being replaced, meaning that our funding can be utilised for investing in ULEV





## 8.3 ULEV

Successful delivery of this objective will mean investing in ultra-low emission vehicle solutions for our light fleet by 2030 and the required infrastructure being in place to realise the long-term environmental sustainability and to ensure that the light fleet meets standards set by the Scottish Government.

### 8.3.1 Transitioning to ULEVs

We will continue to invest in ULEV fleet to improve the overall fleet, the SAMP will be to ensure 50% of our light fleet is ULEV by 2025, and that by 2030 100% of the light fleet is ULEV.

This strategic approach ties into the Programme for Government target for phasing out new ICE vehicles in the public sector by 2025.

It also ensures that the viability of ULEVs has been established in a fire service environment and will be appropriate for light vehicles. Other benefits of focusing on replacing the light fleet initially are that the infrastructure for ULEVs will be embedded into our estate, the mileage range of ULEVs will be greater and our staff will be comfortable in using ULEVs in their operational duties.

The switch to ULEV replacement vehicles will enable an ongoing reduction of CO<sub>2</sub> each year by 2030. The significant reduction in CO<sub>2</sub> demonstrates the contribution and benefit that this SAMP will bring to the environment.

SFRS will continue to look to reduce their CO<sub>2</sub> through further initiatives. For example, sourcing fully renewable energy would provide zero CO<sub>2</sub> in the future transition.

### 8.3.2 Investing in infrastructure

Significant investment in our infrastructure will be required to enable the transition to ULEVs. The future Property SAMP will align with this for future co-located buildings that are yet to be built, close collaboration with the Property team will be required to ensure that the appropriate infrastructure is put in place.

For our existing buildings, which will remain in the estates portfolio, understanding the viability of inserting charging points is being undertaken.

Charging points will be based on the number of vehicles that are anticipated to be located at a site and the appropriate charging ratio adopted. Current guidance is one charging point for every three vehicles.

As part of the innovative approach of this SAMP we are looking to utilise the wider charging infrastructure being developed across Scotland to minimise costs. This, however, will need to be balanced against operational requirements and security.

We will also look to partner with the public and private sector to secure investment and partnerships to build the infrastructure in a collaborative manner. This will bring mutual benefits to both parties and will aid the funding challenges that investing in ULEV on a large scale brings.

In January 2022, the Scottish Government committed to a £60 million plan to double the number of public charging points across Scotland over the next four years.

The UK government has previously outlined plans to ban the sale of new petrol and diesel vehicles by the end of the decade, with Transport Scotland predicting there will be between 500,000 and one million electric vehicles on Scotland's roads by the end of the decade.



### 8.3.3 Training for Vehicle Technicians

The switch to ULEV's will have implications on the training needs of our people. In some cases, there is a requirement for our vehicle technicians to develop new skills, knowledge and qualifications in the maintenance and repair of ULEVs.

This will require Fleet Services to work alongside the Training team to ensure that our people have the right skill set. Feedback from the fleet teams across the country highlighted a lack of training in general which must be addressed as a priority.

We must ensure our fleet staff receive refresher training, general training and ensure that a proportion of our fleet technicians undertake ULEV engineering and maintenance training to obtain certificated qualifications to allow Fleet Services to align with technology.

### 8.3.4 Low Carbon Fire Appliance

Working with our operational colleagues we will undertake a thorough review and evaluation of the Low Carbon Fire Appliance and feedback to Scottish Government and the National Fire Chiefs Council.

There will be a period of between 12 and 18 months during which operational evaluations, to identify any performance issues or concerns, which will inform the design and construction methodology of a future production model. The Low Carbon Fire Appliance is anticipated to be on the run in early 2023.

### 8.3.5 Key benefits

- Significantly reduced CO2 Emissions - Our CO2 will be reduced by XX% through transitioning our fleet to ULEVs. This will significantly reduce our carbon footprint and support the environment in Scotland
- Development of our people - The skills of our people will be enhanced by implementing a programme of refresher training and electric vehicle training will be provided to service, maintain and repair ULEVs. This is an opportunity to upskill our people and enhance their working experience and competence
- Alignment to the Scottish Government - Our SAMP is aligned to the Programme for Government and will allow SFRS to work in partnership with the Scottish Government to support the delivery of national outcomes and CO2 reductions
- Technologically advanced fleet and infrastructure - The SAMP will provide our people with technologically advanced vehicles and appropriate infrastructure that is at the forefront of the fleet market, future-proofing our operations





## 8.4 Technology

Innovation on one of the four core values at SFRS and innovative technologies will play a significant role in achieving this objective. Maintaining our understanding of current and future developments in technology will help us plan for future changes in demand.

Fleet services will continue to work with our operational colleagues and invest in innovative technological solutions to improve service delivery including the latest in-vehicle technologies.

### 8.4.1 Tranman Application and E-forms

Our Fleet Services aims to make the processes around daily checks of our vehicles as efficient as possible for our staff. In order to support our engagement with the vehicle users, we will look to pilot an app that allow making daily vehicle checks easier.

The application (app) development will be aligned with our mobile working practices and will be accessed via mobile devices.

To assist in making the entire fleet operation paperless, we will aim to implement the DVSA approved E-forms. The implementation of this solution into the workshop environment allows you to create your own electronic service inspection forms appropriate to our diverse fleet, which are then available to the technicians on-line and linked directly through the touch screen solution.

All forms are created and customised by the end user and do not require development from Civica. Forms can be created for inspection sheets, vehicle condition reports and daily driver checks. The implementation of e-forms will save time, improved efficiency and help to ensure compliance.

Upon submission of the form from the device it is uploaded directly into the Tranman database, attached to the appropriate job record, and includes the electronic signature of the technician. The detail of the form can be viewed directly from the system and regenerated if required.

The functionality is available across all Tranman modules where any paper forms are currently utilised. Feedback gathered from existing Tranman customers currently using this functionality have been positive across the module for pre and after use vehicle inspections.

To further enhance our use of the system we will invest in Tranman training for all staff that express an interest and also create a dedicated Tranman User Group with representatives from all four workshops. Feedback from the focus groups also highlighted the lack of Computers for Fleet Technicians and the poor wi-fi connectivity in the workshops; this will be a priority improvement area.

### 8.4.2 Tranman Daily Checks App

The Tranman Daily Vehicle Checks app will allow drivers to input a vehicle registration, which in turn will pull through some basic vehicle information. From there our people will be able to input the vehicle mileage and complete the check.

This information is fed automatically back to our existing Tranman system. More frequent readings will help us refine the dates of upcoming scheduled maintenance and aid in Fleet Services future planning. Fleet services and SFRS ICT will work with the Application Developers to ensure the app is tailored to the needs of SFRS.



Fleet services aims to run a modern and fit for purpose fleet. To continue to do so, we will remain cognisant of future technological advances and aim to remain aligned to them when considering future fleet models.

There are a number of technological trends that will have implications on our Fleet Services in the short, medium, and long term. Further, as we transition into ULEV vehicles developments in the automotive sector will mean that electric vehicles will become more advanced.

Wireless electric vehicle charging is being developed internationally and will culminate with the roll out of charging pads and roads.

### 8.4.3 Emergency Services Network (ESN)

The ICT section within SFRS is working closely with Fleet services to ensure the best possible development of the new Emergency Services Network (ESN) with regard to power consumption and loading requirements to ensure future compliance with vehicle battery specification.

As ESN develops all vehicle based communications equipment will have to operate with ESN compliant devices. This will require planning so that asset and logistical resources are used as effectively as possible and that operational availability is in no way compromised.

The benefits of ESN include:

- Improved operational efficiency as staff will be able to complete documentation remotely, eliminating unnecessary journeys back to a fixed location, prevents duplication of documentation and eases workload;
- Secure and resilient critical communications the Emergency Services can trust to keep them safe;
- A modern voice and data platform which will enable the Emergency Services to improve front-line operations; and
- A common platform to enable the Emergency Services to work more closely together for data sharing in emergencies

### 8.4.4 Key benefits

- Using Tranman on Touchscreen devices will free up fleet staff time from paperwork and also improve the speed of data input and accuracy of information in the system
- Investment in Technology - Through investing in technology such as AVLS and the Tranman App, staff will be able to focus on their operational duties as less time is required for administrative reporting
- Supportive environment for future technology - The SAMP sets out a focussed effort at looking at innovative ways in which to use technology to support operational staff. This will continue through keeping up with advancements in technology and understanding the viability of options





## 8.5 Collaboration

We can define Collaboration as a professional relationship which brings together two or more groups or organisations to work collectively to improve outcomes for the community and achieve a goal or strategic aim which the organisations share.



SFRS, as a public-sector service can work most effectively and efficiently and best maximise its resources by utilising all available resources from the public, private and third sectors. This means that collaborative working and partnership delivery is essential to the operating of an efficient and sustainable fleet.

Our partnerships with other blue light services will continue to be developed in a way that is mutually beneficial. We will continue to share workshop space in our existing partnerships and develop opportunities to enhance these arrangements.

We are actively working with Blue Light colleagues in exploring and developing further collaboration based opportunities to maximise the utilisation of assets across all Blue Light fleets.

With the introduction of ULEV into public sector fleet in Scotland there will be a developing need to share capabilities and skills with other blue light services.

The maintenance of ULEV and associated electric charging infrastructure will require a skill shift for vehicle technicians. This long-term plan aims to deliver meaningful collaboration that will improve our fleet services for our staff by enhancing our capabilities and capacity.

### 8.5.1 Public Sector Collaboration

We work closely with other public-sector organisations, such as the Convention of Scottish Local Authorities (COSLA), to ensure that key shared objectives are met. SFRS work with Transport Scotland, alongside the Scottish Government to provide an efficient, cost-effective and sustainable fleet that serves the needs of the public and communities.

SFRS work closely with work with the Royal National Lifeboat Association (RNLI) on a wide range of fleet, infrastructure and equipment issues.

For example, we engage with RNLI to look at specifications and requirements for coastal operational boats, and the levels of Personal Protective Equipment (PPE) being operated within RNLI who operate in a tidal environment, similar to areas within which SFRS have to operate. We are also examining a shared services approach with RNLI with regards to Property.

'In all decisions involving new investment of capital resources, particularly on buildings and fleet, consideration of any collaborative opportunities will be explored in sharing assets with others.

SFRS already has a strong record of working closely with the Scottish Ambulance Service and other response partners to share fire station space and this will continue to be developed.



SFRS must consider how it best designs and delivers services and interventions, how it successfully operates in partnership with other public services and with communities and how it will achieve financial efficiencies in order to more widely reduce the demands and cost pressures on other public services.

Further collaboration with partners should provide the opportunity to establish new working practices that deliver the public safety priorities of our communities across prevention, protection, response and resilience activities. Use of effective and innovative partnership working, helping people to work across organisational boundaries to achieve positive results should continue

We will continue to collaborate with Police Scotland and the Scottish Ambulance Service on joint framework vehicle procurement contracts so as to obtain best value. We will further seek to develop meaningful fleet performance benchmarking information with Blue Light partners.

### 8.5.2 Reform Collaboration Group (RCG)

The introduction of an ULEV fleet is dependent on collaboration with some private sector organisations, such as energy suppliers.

The electric charging infrastructure will be developed to meet the needs and requirements of an operational fleet.

Energy suppliers will act as enabler to the development of our future fleet. We will work with them closely to ensure that our fleet is efficient, whilst meeting our low carbon objectives.

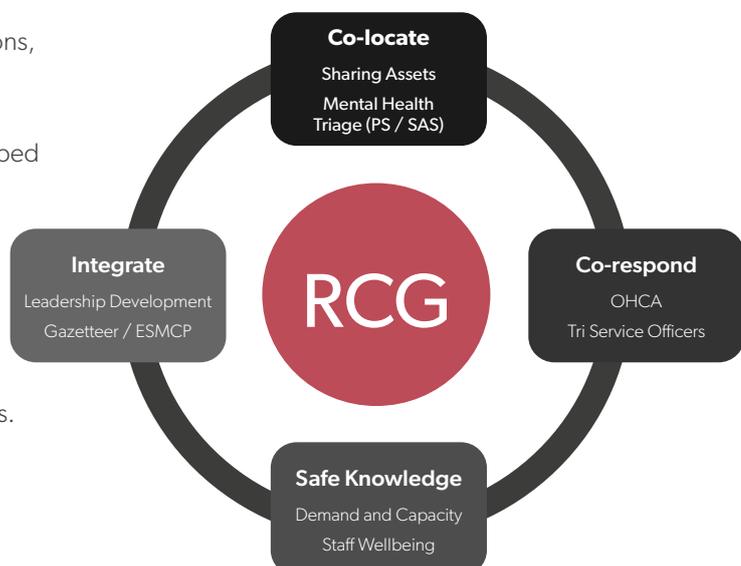
### 8.5.3 Private Sector Collaboration

The introduction of an ULEV fleet is dependent on collaboration with some private sector organisations, such as energy suppliers.

The electric charging infrastructure will be developed to meet the needs and requirements of an operational fleet. Energy suppliers will act as enabler to the development of our future fleet. We will work with them closely to ensure that our fleet is efficient, whilst meeting our low carbon objectives.

### 8.5.4 Key benefits

- Partnership delivery - Potential to deliver efficient, effective Fleet Services with partners. This will include the sharing of resources and electric charging infrastructure
- Sharing knowledge - Sharing knowledge and skills with partners will enhance our capability and capacity
- Innovative working - Working in a way that drives innovation across the public and private sectors ensuring that our fleet is prepared for the future



# 9 Implementation

## 9.1 Introduction

The implementation programme, setting out how we will deliver and subsequently measure the success of this SAMP is detailed below. Engaging with our staff during development and future implementation will be key to successfully delivering this SAMP.

This SAMP sets out the vision and strategic direction for SFRS's fleet assets and Fleet Services over the next five years. The implementation of such an ambitious SAMP will require careful planning, collaboration and taking opportunities to maximise funding and resources available to deliver this SAMP.

As with any change, understanding the aspects that will contribute and determine the success of a SAMP is important. There are five key areas which will need to be considered throughout the implementation of the SAMP which are:

- 1 People
- 2 Funding
- 3 Organisational Context
- 4 Systems
- 5 Culture

### 9.1.1 People

Feedback from the focus groups and from the online survey have evidenced that it is vital to involve people from across the organisation in developing the SAMP.

Having the right staff mix, such as full-time and retained Firefighters, Driver Training staff, Fleet staff and Unions, from across the organisation involved in developing and implementing the plan will enable the SAMP to move forward more effectively. We will establish an appropriate project team that is responsible for driving forward the delivery of the SAMP.

### 9.1.2 Funding

To address the £70 million investment backlog, we need to secure additional funding from Scottish Government and we must also continue to secure additional funding through all available sources, for example grants for electric charging infrastructure. Seeking opportunities and maximising the allocated funding available will provide the best possible base for achieving the SAMP.

### 9.1.3 Organisational Context

We recognise that there are a number of transformational activities occurring within the organisation.

These include the Wildland Fire Project, Operational Strategy, Low Carbon Appliance Project, Service Delivery Model Programme, Height Appliances Replacement Programme, Medium Rescue Pump Deployment Programme and the Digital Strategy. These improvements will help to support the strategic goals of Fleet Services to be achieved.

### 9.1.4 Systems

Investing in the right tools and technology is key, shifting our light fleet to ULEV by 2030 demonstrates our commitment to fully integrate with the wider shift of Scotland's Public Sector to a low carbon environment.

Also through further investment in the AVLS and the Civica Tranman system we recognise the importance of data as a facilitator to help achieve the outcomes within this SAMP.



### 9.1.5 Culture

Creating an environment that supports the collective completion of activities to reach the vision statement for fleet over the next five years will be required.

Understanding the operational impact as implementation progresses and ensuring that stakeholder feedback is incorporated into future delivery activity will help to create a culture of innovation and progression.

## 9.2 Communication

A key feedback area from the stakeholder engagement sessions was how much operational and fleet staff appreciated on-site in person visits. This allowed for feedback to be provided directly from Operational staff to members of the Fleet team.

Continued communication and engagement both internally and externally will be fundamental to supporting the successful implementation of the SAMP. We will communicate progress through a variety of channels, for example through the Intranet and in-person, as well as obtain feedback from a wide range of stakeholders.

We recognise that change requires stakeholder buy-in and sustained communication will be necessary to drive the change. Engagement with our partners in the public and private sector will allow well informed decisions to be taken as the implementation of the SAMP progresses over a number of years.

The strategic collaborations that will be established will require trust and ongoing communication to ensure that these partnerships are successful.

## 9.3 Vehicle Procurement

A significant aspect of implementing this SAMP will be to procure vehicles that are fit for purpose and meet operational requirements. SFRS currently have a few options available for the procurement of vehicles. Crown Commercial Services (CCS) can be used for light fleet contracts enabling SFRS to direct award.



**NFCC**  
National Fire  
Chiefs Council

The National Fire Chiefs Council has a procurement framework in place. NFCC Emergency Response Vehicle Framework allows access to capable suppliers with bespoke terms and conditions specifically for the Fire Sector.

Standalone contracts are sometimes used by SFRS. In the case of the procurement of medium weight appliances a standalone contract was used which, following UIG and commodity SAMP, led to a full tender preparation, return and evaluation scoring before award. This contract format was used to enable the procurement of complete build including chassis, body and equipment.

SFRS will remain open to selecting the best procurement method and will continue to keep up with developments and opportunities to procure collaboratively with organisations.

We will also continue to develop innovative ideas and approaches which will produce the best results for delivering the SAMP



## 9.4 Communication on Membership of User Information Group (UIG)

Feedback from the stakeholder engagement sessions and the online survey was very clear that we should communicate more often, on a variety of channels, about membership of UIGs for new vehicles.

As part of the SAMP, we are cognisant of the importance of this communication and will endeavour to continue to seek feedback on this issue over the life of this SAMP.

## 9.5 Whole Life Costs

As part of the evaluation process during procurement, the whole life cost of a vehicle from purchase to disposal is used in order to provide best value to SFRS. We will continue to take this approach as part of this SAMP.

As we transition to ULEVs we will monitor the reduction in fuel costs as well as take account of electricity costs in our whole life costing.

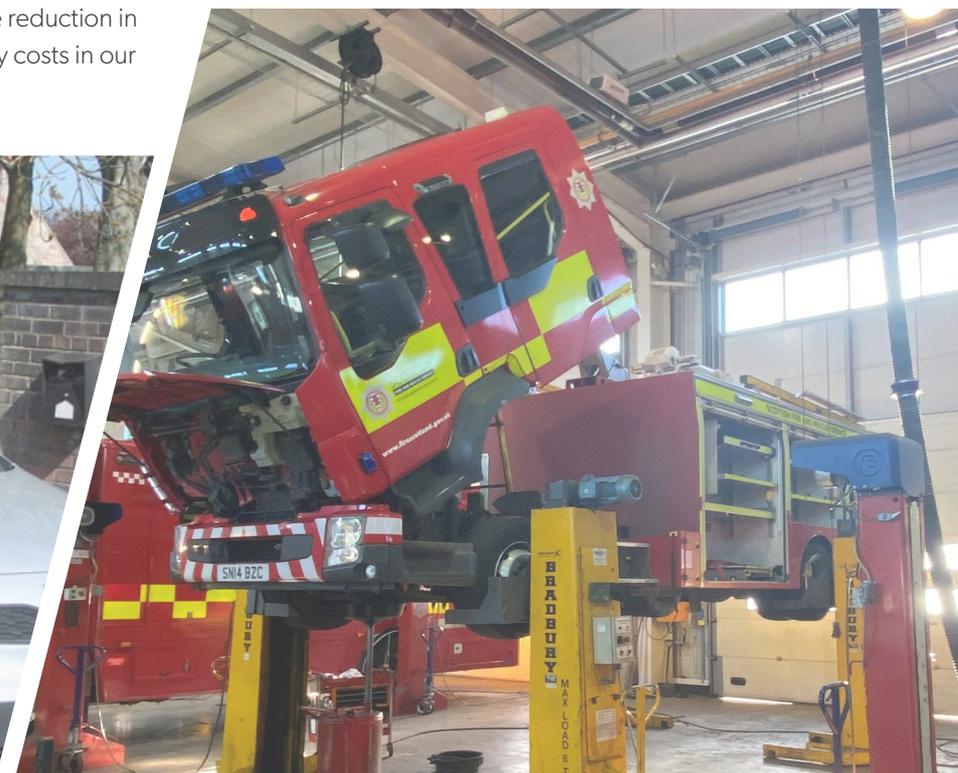
## 9.6 Improvement Actions

A set of improvement actions for each of the five strategic objective areas of the SAMP has been developed and these will be fully integrated into appropriate Plans as necessary in order to execute the SAMP.

The indicative high-level implementation plan outlines the top-level activities in each of the five strategic areas that SFRS will aim to undertake over the next five years.

Once stakeholder engagement and importantly clarity of the additional funding requirements from Scottish Government is fully understood, a full implementation plan will be developed together with a stakeholder evaluation plan.

This cycle of feedback will allow SFRS to understand what is working well, identify challenges, and record lessons learnt throughout the process.



# 10 Funding and Finance

## 10.1 Introduction

The 2019-20 Programme for Government established an ambitious aim to phase out fossil-fuelled cars by 2025 and all other fossil-fuelled vehicles within the public sector by 2030.

The SAMP also states that a pragmatic approach will be applied to emergency service vehicles. The recently published 2020-21 Programme for Government reinforces the aim to decarbonised public sector fleet. This is a key focus of the SFRS fleet planning and sustainability objectives.

The SAMP has been developed to ensure that value for money is achieved through investing in both the current and future fleet. Our fleet assets are a key tool to enable our people to deliver their operational duties.

Continued investment will always be necessary to maintain depreciating assets and it is critical that SFRS look to invest in a sustainable manner

## 10.2 Investment Backlog

As at March 2022 SFRS have an investment backlog for its fleet assets of over £70 million. The pace of change outlined within this SAMP will be driven by the funding available for fleet.

Furthermore, we recognise that if the level of investment stays at current levels the investment backlog will increase at a substantial rate.

Since 2016 the size of the fleet has increased from 1,277 to 1,632 vehicles, this represents an increase of over 28%. Appendix 1 details the number and type of each vehicle currently held by SFRS; the unit cost of each vehicle as at 2021 prices, as well as the manufacturers recommended replacement cycle.

In the current year 680 vehicles are older than the stated vehicle replacement cycle, representing the investment backlog of over £70 million. Over the next 5 years as vehicles require replacement this will increase by approximately £50 million.

This means that in order to “stand still” SFRS require to allocate £10 million per annum in capital investment to fleet, the capital allocation this financial year is £8.65 million.

Due to the nature of depreciating fleet assets, capital investment will continue to be a requirement to provide fit for purpose vehicles to carry out operational roles. The overarching principles of investing in ULEVs and strategic partnerships in this SAMP will ensure that we are reducing ongoing costs whilst investing in future technology.

Decarbonising operational fire vehicles is more of a challenge, due to the size and weight but also due to the length of time currently required to charge the vehicle.

The Service is continually monitoring and assessing new technology as it emerges, and has recently completed a procurement exercise with the aid of a £500,000 grant from Transport Scotland to implement the world’s first fully-electric fire engine.

The SFRS is therefore at the forefront of advances in electric appliance technology, which seek to drive down our carbon emissions and better protect our staff.

However, the cost of replacing a combustion engine vehicle with an electric vehicle is in most instances nearly double the cost. Whilst it is hoped that the costs for electric vehicles may fall in the future as electric vehicle ownership increases.



## 10.3 Funding Constraints

It is recognised that funding constraints have put pressure on our existing assets and limited the ability of SFRS to meet the current replacement schedule.

The impact of this has been a significant increase in the age of our vehicles and the associated repairs and maintenance costs, increasing our revenue spend.

Further impacts include limited investment in new technology to support operational staff and a restricted ability to grow our partnership working.

Should additional Capital investment not be forthcoming then the fleet will continue to age and incur increasing maintenance costs, which is already below the required levels of funding to maintain our fleet in a sustainable manner.

Continuation of capital investment at existing levels will increase the pressure on the revenue budget as well as decrease vehicle availability associated with an ageing fleet.

The present levels of capital funding under this option could only be utilised to cover existing urgent replacements of ICE vehicles with like-for-like ICE vehicles.

It could not provide the level of reserve vehicles outlined in the SAMP to minimise the amount of lost operational time. This option does not progress the SAMP or meet SFRS's carbon reduction targets and will be a risk to the Service going forward.

SFRS will look to secure funding through public and private sources as well as work with the Scottish Government as they expand their public infrastructure network.

Through adopting this approach, it is anticipated that partnership working will develop the required infrastructure in a collective manner that drives economies of scale and maximises benefits to all partners.

The additional funding will enable the key objectives of the SAMP to be met as outlined below:

- The replacement cycle will be met, providing a fit for purpose fleet asset for our staff
- The average age of the fleet will fall thereby ensuring that a suitable quality of reserve vehicles is available, also ensuring that our people have access to replacement vehicles which are fit for purpose and do not impinge on their operational responsibilities during servicing and maintenance
- Investment in ULEV vehicles in line with the SAMP will be executed
- Significant contribution to reducing our CO2 emissions will be realised
- Partnership working can be explored which will offer an opportunity for SFRS to further minimise their revenue spend



# 11 Measuring Success

## 11.1 Introduction

Measuring the success of the SAMP will be fundamental to allow SFRS to understand the impact of the transition to ULEVs, establishing strategic collaborations and how it is has improved the operational performance of our staff.

A range of qualitative and quantitative Key Performance Indicators (KPIs) will be measured to show progress over time and will also be used for benchmarking purposes against other blue light partners.

Understanding the efficiency of Fleet Services will enable SFRS to demonstrate that they are obtaining best value and using resources effectively.

Alongside this, understanding the effectiveness of the Fleet Service and vehicles will be equally important. Both these areas will enable the success of the SAMP to be measured.

## 11.2 KPIs Summary

We have listed some KPIs below which will be further developed through meetings with the Fleet Services management team:

### Effectiveness

- Fleet Services Customer Satisfaction Survey (Monthly)
- Average age of fleet (Yearly)
- Reduction in CO2 emissions (Yearly)
- % of Light Fleet that is ULEV (Yearly)
- Workshop productivity (Quarterly)
- Safety Inspections Completed on time (Quarterly)

### Efficiency

- Capital Investment Backlog (Yearly)
- Maintenance costs (Yearly)
- Individual Asset operational running Costs
- Vehicle utilisation and Vehicle downtime (Monthly)
- Fuel Revenue savings generated from the transition to ULEV (Yearly)



### 11.2.1 Effectiveness

How we measure our Effectiveness will be as follows:

- **Fleet Services Customer satisfaction survey** - Tailored surveys will be developed, with a robust methodology and questions that allow rich insights to be gained. These surveys will be undertaken regularly to demonstrate progress and feedback from a wide range of stakeholders. Results will be collated monthly and regional workshop data trends will be discussed at the Fleet managers meeting.
- **Average age of the fleet** - Data monitoring the average age of our entire fleet will be refreshed regularly to show the progress towards decreasing the age of our fleet by almost a year.
- **Reduction in CO2 emissions** - This is completed as part of our mandatory Carbon Management reporting. Monitoring of this performance indicator will allow us to show progress towards the CO2 emission decrease that is anticipated from transitioning to ULEVs.
- % of light fleet that is ULEV
- **Workshop productivity** - This performance indicator will measure the performance of each workshops, this will include a measure of vehicle downtime and availability. We will engage with the workshop managers to select a suitable methodology for measurement of workshop productivity that can be measured within the Tranman system. We will benchmark this data on a monthly basis between individual workshops in order to highlight productivity, and also to better understand reasons for disparities between workshops.
- **Safety Inspections Completed on time**, this will be a quarterly indicator covering safety Inspections, Annual Servicing, MOTs and will be used to compare workshop performance.

### 11.2.2 Efficiency

How we measure our Efficiency will be as follows:

- **Capital Investment Backlog** - This will be a yearly assessment of the value of the Investment Backlog which will be compared to previous years to highlight the % change
- **Maintenance costs** - The transition to ULEVs and the revised replacement cycle will mean that maintenance costs should decrease. The Civica Tranman data will allow progress on this performance indicator to be shown against each individual category of vehicle.
- **Vehicle utilisation and vehicle downtime** - AVLS will provide detailed data on vehicle utilisation and downtime. This real-time data will provide reporting to enable future strategic decisions to be made and allow the impact of changes made to be shown through utilisation.
- **Fuel Revenue savings generated from the transition to ULEV** - Revenue savings from ICE fuel savings as well as maintenance costs will be generated. Measurement of these will be supported through our internal revenue reporting.

As the SAMP progresses, there will be a need to review the Efficiency and Effectiveness measures for appropriateness.

This will ensure that measuring our success remains dynamic and responsive to changes as the SAMP progresses.

Effective communication of our measures of success will highlight progress made and show our commitment to delivering a SAMP that is fit for purpose.





## 11.3 Improvement Actions

Throughout the development of the SAMP, engagement and consultation with our focus groups has been undertaken as well as an internal survey being issued on the intranet to all staff members.

Based on the feedback received we have identified a number of areas for improvement. The improvement actions are documented below against the fleet strategic objectives.

We will continue to engage with all of our stakeholders as we seek to implement these improvement actions.

<b>1 Fit for purpose</b> 	<b>2 Modernising</b> 	<b>3 ULEV</b> 
<ul style="list-style-type: none"> <li>• Improve Quality of Reserve Vehicles</li> <li>• Increase Stakeholder Consultation</li> <li>• Fleet structure</li> <li>• Staff Training</li> <li>• ISO9001 accreditation</li> </ul>	<ul style="list-style-type: none"> <li>• Increase Use and Analysis of Automatic Vehicle Location System (AVLS) Data</li> <li>• Publicise the New Fleet Development Pathway</li> <li>• Improve Transparency around Asset Allocation</li> <li>• Raise profile of Fleet Services</li> <li>• Improve vehicle replacement cycle</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to invest in ULEV and Charging Infrastructure</li> <li>• Significantly reduced CO2 Emissions</li> <li>• Provide Training for Vehicle Technicians on ULEV</li> </ul>
<b>4 Technology</b> 	<b>5 Collaboration</b> 	
<ul style="list-style-type: none"> <li>• Implement the Tablet version of Tranman</li> <li>• Implement Tranman Daily Checks App</li> <li>• Improve Training on Tranman and setup a Tranman User Group</li> <li>• Improve ICT within Fleet Workshops</li> <li>• Assist with the development of the new Emergency Services Network</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to participate in the Blue Light Collaboration Programme</li> <li>• Develop meaningful fleet performance benchmarking information</li> <li>• Continue to collaborate on joint framework vehicle procurement contracts with Blue Light partners</li> </ul>	





### 11.3.1 SAMP Objective 1: **Fit for Purpose**

Improvement Action	
<b>Reserve Vehicles</b>	Feedback from the focus groups and comments from the internal survey recognised that there is a need for better quality of reserve vehicles. An increase in investment will improve the overall age of the fleet and thereby the age and quality of reserve vehicles
<b>Greater Stakeholder Engagement</b>	To further enhance our user engagement, we will strive to introduce more opportunities for stakeholder engagement so that we continue to improve. This will include a dedicated fleet web-page and stakeholder consultation survey. Fleet workshop managers will also be expected to undertake more visits to Fire Stations
<b>Fleet Structure</b>	Succession and Workforce Planning is a key issue. There are too many single points of failure and not enough succession planning within the current Fleet structure, Fleet management average age is over 61. We will seek to implement a new structure for fleet that seeks to address single points of failure, create a central admin team, provide deputies for key positions, increase apprenticeships, give staff promotion opportunities and a clear career path
<b>Staff Training</b>	Feedback from the focus groups highlighted a general lack of training for fleet staff. Whilst part of this is attributable to Covid, we will now seek to invest in staff training and ensure that all staff receive refresher training and are trained to an appropriate level each year
<b>ISO 9001</b>	The Fleet workshop in Glasgow has for a number of years been successfully accredited to the International Organization for Standardisation (ISO) 9001:2015 standard. In order to standardise processes and procedures at the three other workshops it is proposed to implement ISO 9001 within all fleet workshops. This will also help to ensure that the Civica Tranman system is updated in a consistent manner

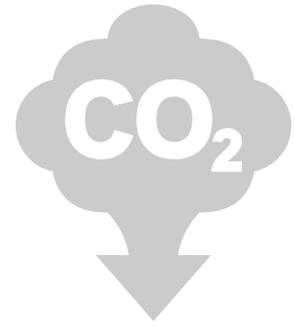




### 11.3.2 SAMP Objective2: **Modernising**

Improvement Action	
<b>Enhanced Analysis of Automatic Vehicle Location System (AVLS) Data</b>	A key component of our SAMP is to understand the utilisation and location of the fleet. Such knowledge will help us to make improvements in the short-term, ensuring that vehicles are available to our people
<b>New Fleet Development Pathway</b>	To further enhance our user engagement, we will strive to publicise and make operational staff aware of the personnel involved and the findings of the new Fleet User Intelligence Groups (UIG)
<b>Asset Allocation</b>	We will work with our Operational colleagues to let Fire Stations know well in advance their fire appliance is scheduled for replacement and be more transparent in allocating fleet assets, with the intention being to improve the overall communication on the entire process of acquiring new appliances
<b>Raise the Profile of Fleet Services</b>	In order to raise the profile and stress the importance of the work undertaken by Fleet, we will promote key aspects of our work on a dedicated fleet news page on the iHub
<b>West Asset Resource Centre</b>	The Glasgow Workshop is no longer fit for purpose and construction has started on a new state of the art fleet workshop facility with completion in 2023. We will work to minimise disruption to workshop activity whilst planning the move from the existing Cowcaddens workshop to the new facility
<b>Vehicle Replacement Cycle</b>	Feedback from the focus groups and comments from the internal survey recognised that there is a need for a faster replacement vehicle cycle. Our strategic approach to vehicle replacement is determined through striking a balance between the optimum replacement criteria and the amount of capital funding available. Assuming additional funding from Scottish Government we would seek to significantly reduce the number of vehicles overdue for replacement (39%)

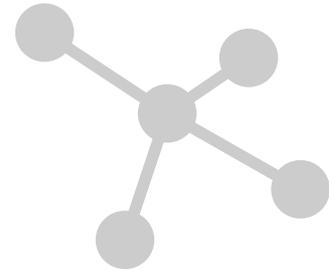




### 11.3.3 SAMP Objective3: ULEV

Improvement Action	
<b>Transitioning to ULEVs</b>	Transitioning to ULEVs - We will continue to invest in ULEV fleet to improve the overall fleet, the SAMP will be to ensure 50% of our light fleet is ULEV by 2025, and that by 2030 100% of the light fleet is ULEV
<b>Investing in Charging Infrastructure</b>	Significant investment in our infrastructure will be required to enable the transition to ULEVs
<b>Significantly reduced CO2 Emissions</b>	Our CO2 will be reduced through transitioning our fleet to ULEVs. This will significantly reduce our carbon footprint and support the environment in Scotland
<b>Training for Vehicle Technicians</b>	The switch to ULEV's will have implications on the training needs of our people. Feedback from the fleet teams across the country highlighted a lack of training in general. Ensuring that a proportion of our fleet technicians undertake ULEV engineering and maintenance certificated training is therefore a priority. Ensuring fleet staff are competent in line with technological advances is crucial to enhance safety of all staff.
<b>Electric Fire Appliance</b>	Working with our operational colleagues we will undertake a thorough review and evaluation of this appliance and feedback to Scottish Government and the National Fire Chiefs Council

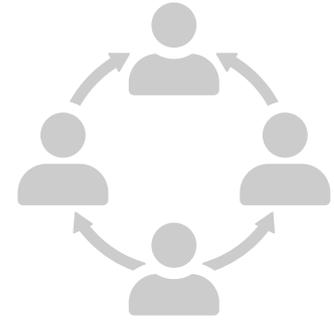




### 11.3.4 SAMP Objective 4: **Technology**

Improvement Action	
<b>Tranman Application</b>	Feedback from the focus groups was conclusive that we need to move to the cloud based tablet version of Tranman for the Fleet technicians to reduce paperwork and improve data input times and accuracy
<b>Tranman Daily Checks App</b>	The Tranman Daily Vehicle Checks app will allow drivers to input a vehicle registration, which in turn will pull through some basic vehicle information. From there our people will be able to input the vehicle mileage and complete the check. This information is fed automatically back to our existing Tranman system. More frequent readings will help us refine the dates of upcoming scheduled maintenance and aid in Fleet Services future planning
<b>Tranman Training and User Group</b>	To further enhance our use of the system we will invest in Tranman training for all staff that express an interest and also create a dedicated Tranman User Group with representatives from all four workshops.
<b>ICT within Fleet Workshops</b>	Feedback from the focus groups highlighted the lack of Computers for Fleet Technicians and the poor wi-fi connectivity in the workshops; this will be a priority improvement area
<b>Emergency Services Network (ESN)</b>	The ICT section within SFRS is working closely with Fleet services to ensure the best possible development of the new Emergency Services Network (ESN) with regard to power consumption and loading requirements to ensure future compliance with vehicle battery specification
<b>Tranman Application</b>	Feedback from the focus groups was conclusive that we need to move to the cloud based tablet version of Tranman for the Fleet technicians to reduce paperwork and improve data input times and accuracy





### 11.3.5 SAMP Objective 5: **Collaboration**

Improvement Action	
Transitioning to ULEVs	Continue to participate in the Blue Light Collaboration Programme with the potential to deliver efficient, effective Fleet Services with partners. This will include the sharing of resources and electric charging infrastructure
Investing in Charging Infrastructure	Develop meaningful fleet performance benchmarking information with Blue Light partners
Significantly reduced CO2 Emissions	Our CO2 will be reduced through transitioning our fleet to ULEVs. This will significantly reduce our carbon footprint and support the environment in Scotland
Training for Vehicle Technicians -	Continue to collaborate with Police Scotland and the Scottish Ambulance Service on joint framework vehicle procurement contracts so as to obtain best value
Electric Fire Appliance	The introduction of an ULEV fleet is dependent on collaboration with some private sector organisations, such as energy suppliers. The electric charging infrastructure will be developed to meet the needs and requirements of an operational fleet. Energy suppliers will act as enabler to the development of our future fleet. We will work with them closely to ensure that our fleet is efficient, whilst meeting our low carbon objectives.



## Strategic Asset Management Plan: Fleet 2022-2027 on a page

### Shaping our Strategy



Sustainable



Data led



People

### Our Objectives



Fit for purpose



Modernizing



ULEV



Technology



Collaboration

### Measuring Success



KPIs



Benchmarking



Improvement actions

**Progressing towards ISO55001 accreditation**





# Appendices

## **Appendix 1:**

Fleet Investment Backlog

## **Appendix 2:**

Consultation Feedback

## **Appendix 3:**

Asset Management Risk Matrix

## **Appendix 4:**

Vehicle Grading Matrix

# Appendix 1:

## Fleet Investment Backlog

Vehicle Type	Total On fleet	Increase in Fleet from 2016	Replacement Cycle (years)	Unit Cost	Quantity to replace 2021/22	Backlog cost to replace
Aerial Ladder Platform	9	1	15	£725,000	3	£2,175,000
Aerial Rescue Pump	15		12	£800,000	13	£10,400,000
All-Terrain Vehicle	1		15	£20,000	1	£20,000
CFS Interactive vehicle	3		15	£160,000	1	£160,000
Command Support Unit	8		15	£120,000	4	£480,000
DET ID Monitoring	4		10	£125,000	4	£500,000
Env. Protection Unit	2		15	£315,000	1	£315,000
Essential / Lease Car	51		9			
Forklift Truck	2		15	£45,000	1	£450,000
Heavy Rescue Unit	5	2	15	£230,000	2	£460,000
Historic Vehicle	20					
Hot Fire Artic	1		15	£140,000	1	£140,000
Incident Support Unit	9		15	£210,000	5	£1,050,000
Investigation Unit	2		7	£120,000	2	£240,000
Major Incident Unit	6		15	£315,000	6	£1,890,000
Minibus	11		7	£40,000	7	£280,000
Multirole Vehicle	18	10	7	£27,000	11	£297,000
Multirole 4x4	55	11	7	£29,000	36	£1,044,000
Officer Provided Car	10		3	£35,000	3	£105,000
Pool Car Automatic	108	108	3	£3,500		
Pool Car Manual	117		7	£19,000	65	£1,235,000



Vehicle Type	Total On fleet	Increase in Fleet from 2016	Replacement Cycle (years)	Unit Cost	Quantity to replace 2021/22	Backlog cost to replace
Pool Van Large	46		7	£22,000	35	£770,000
Pool Van Small	124		7	£17,000	65	£1,105,000
Pri	26	5	15	£220,000	16	£3,520,000
Pump	79		15	£270,000	53	£14,310,000
Rapid Response Unit	40	40	15	£210,000		
Rescue Pump	451	9	15	£270,000	158	£15,660,000
Response Car	353	214	7	£22,000	80	£1,760,000
Rope Rescue Vehicle	3	2	15	£130,000		
Spec Ops Response Unit	4	4	15	£120,000		
Support Lorry Small	7		7	£105,000	4	£415,000
Support Vehicle Hydrants	9	6	7	£17,000	9	£153,000
Support Vehicle Occ. Health	2	2	7	£35,000	2	£70,000
Support Vehicle Stores	20	7	4	£32,000	11	£352,000
Support Vehicle Workshops	29		4	£46,000	22	£1,012,000
Support Vehicle	10	8	7	£82,000	8	£656,000
Tractor	1		12	£42,000		
Training Vehicle	2		15	£270,000	2	£540,000
Turntable Ladder	4	2	15	£725,000	1	£725,000
Vol Support Unit	34	4	15	£180,000	34	£6,120,000
Water Carrier	6		15	£180,000	6	£1,080,000
Water Rescue Unit	21	18	15	£120,000	8	£960,000
					<b>TOTAL</b>	<b>£70,449,000</b>



# Appendix 2:

## Consultation questionnaire and feedback

Stakeholder Engagement with Focus Groups		
Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Regional Urban</b>	<p><b>Right vehicle, right kit</b></p> <p>Standardisation is needed across the fleet. There was concern regarding the age of some vehicles and replacement. A programme of replacement with dates for vehicle replacement would be welcomed.</p>	Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as greater promotion of the New Vehicle Working Group.
	<p><b>Modernised fleet</b></p> <p>The age and condition of some of the fleet was an area of discussion. ULEV was recognised as suitable for light vehicles but concerns raised over its place in operational appliances</p>	The implementation of the SAMP will mean that the average age of our vehicles will decrease. Fleet services will ensure that procured vehicles are fit for purpose and meet operational requirements.
	<p><b>The right number of vehicles</b></p> <p>There is some concern that there are not enough of some vehicle types to provide suitable replacements during servicing.</p>	The implementation of the SAMP will mean that the average age of our vehicles will decrease. Fleet services will ensure that procured vehicles are fit for purpose and meet operational requirements.



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Regional Rural</b>	<p><b>Right vehicle, right kit</b></p> <p>Standardisation is key across the fleet however there should be recognition that one size does not necessarily fit all with distances involved for some rural incidents.</p> <p>Crew cabs can be uncomfortable for long journeys. The opinions of local firefighters should be taken into account.</p>	<p>Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as the New Vehicle Working Group</p>
	<p><b>Vehicle Reliability</b></p> <p>It was felt that there the quality of replacement vehicles could be poor. Different vehicles could be provided which resulted in less storage space and crews having to decide what kit to leave off.</p>	<p>The SAMP aims to address the issue of vehicles retained beyond their scheduled replacement date as well as the condition of training vehicle.</p>
	<p><b>The right number of vehicles</b></p> <p>There is some concern that there are not enough of some vehicle types to provide suitable replacements during servicing.</p>	<p>The implementation of the SAMP will mean that the average age of our vehicles will decrease. Fleet services will ensure that procured vehicles are fit for purpose and meet operational requirements.</p>
	<p><b>Improving Current Fleet</b></p> <p>It was recognised that the Service operates on a limited budget however some response vehicles are now 20 years old. It would be useful to be provided with a projection of when vehicles will be replaced</p>	<p>Fleet services will continue to work with business areas to understand their vehicle requirements and take cognisance of new and emerging risks. We will work to improve communication on the replacement of vehicles.</p>
	<p><b>ULEV</b></p> <p>Concerns about the viability of ULEVs for operational vehicles due to distances and lack of charging infrastructure</p>	<p>One of the objectives of the SAMP is Collaboration, not only with blue light partners but also with local authorities</p>



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Regional Remote</b>	<p><b>Fit for purpose fleet</b> Although standardised vehicles are recognized as the way forward there needs to be some level of tailoring to specific requirements and consultation on what is needed, particularly in rural and remote areas, for example more lights to assist with manoeuvres in dark country locations.</p>	<p>Fleet services aims to work with areas to discuss their operational needs and regularly meet with Vehicle User Groups. Engagement with the Vehicle User Groups means that we are able to ensure that the right vehicle is being used at the right time in line with operational demand.</p>
	<p><b>Space in vehicles</b> Space within the vehicle is constrained. This is particularly prevalent for longer journeys to incidents....sometimes over an hour or longer</p>	<p>Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as the New Vehicle Working Group?</p>



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Fleet Workshops</b>	<p>Improving Current Fleet – Increasing age of vehicles through a lack of adequate funding. Servicing takes longer on older vehicles with additional risk for technicians signing off these vehicles.</p>	<p>Fleet services will continue to work with business areas to understand their vehicle requirements and take cognisance of new and emerging risks. We will work to improve communication on the replacement of vehicles.</p>
	<p><b>Training</b> There is a lack of training for technicians. Every workshop should have cross section competent in a new vehicle before it arrives. There should be centralised training with someone to coordinate training across workshops.</p>	<p>This SAMP recognises that there will be training requirements for vehicle users as we move towards using ULEV. Fleet services aims to develop training in a coordinated manner across all fleet workshops to meet the demands of new vehicle technology and ULEV.</p>
	<p><b>Technology</b> There is too much paperwork in workshops...we need to upgrade to tablets, more pcs and wifi in workshops. Tablets with connectivity in workshops could enable online manuals to be accessed. It can take all day to input paperwork into pcs back at the workshop after four days out at stations.</p>	<p>This SAMP will look at Tranman application with a user group introduced and develop improvements with handheld equipment to reduce paperwork and enhance productivity</p>



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Training</b>	<p><b>Improving Current Fleet</b> Training vehicles are aged. They should reflect what recruits will then be operational with. It doesn't reflect best value to retrain.</p>	<p>Fleet services will continue to work with business areas to understand their vehicle requirements and take cognisance of new and emerging risks. We will work to improve communication on the replacement of vehicles.</p>
	<p><b>Electric charging Infrastructure</b> It was recognised that the current electric charging infrastructure is limited, particularly in rural areas.</p>	<p>The SAMP seeks to highlight the need for increased electric charging infrastructure and outlines the need for funding including our rural regions.</p>
	<p><b>Space within vehicles</b> Greater input to UIGs to be able to shape and influence future design.</p>	<p>Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as the New Vehicle Working Group</p>



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Health and Safety</b>	<p><b>The right number of vehicles</b> Viewing the objectives from a safety perspective the less the investment, the longer it takes to de-risk the organisation. Consider lease instead of purchase</p>	<p>The implementation of the SAMP will mean that the average age of our vehicles will decrease. Fleet services will ensure that procured vehicles are fit for purpose and meet operational requirements. Leasing was an option when funded by Scottish Government, however transforming the light fleet which has some leased vehicles will be addressed by 2030.</p>
	<p><b>Right vehicle, right kit</b> Drive change to enhance crew safety. It was felt more engagement was necessary and the importance of the UIG process. Perhaps the introduction of an ergonomics expert into the process. More driver training in advance of new vehicles arriving.</p>	<p>Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as the New Vehicle Working Group? Coordinated training will be set up across the organisation.</p>
	<p><b>ULEV</b> Concern regarding lithium batteries in ULEV's near fire incidents. Concerns over availability of sufficient charging points.</p>	<p>Collaboration with blue light partners and local authorities to investigate shared infrastructure and explore co-location opportunities</p>



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Operations</b>	<p><b>Right vehicle, right kit</b>            UIG – End users are the subject experts. Get their input at the earliest opportunity.</p>	<p>Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as the New Vehicle Working Group</p>
	<p><b>Modernised fleet</b>            The age and condition of some of the fleet was an area of discussion. The average of vehicles was a concern and the investment required to change the age of the fleet</p>	<p>The implementation of the SAMP will mean that the average age of our vehicles will decrease. Fleet services will ensure that procured vehicles are fit for purpose and meet operational requirements.</p>
	<p><b>Operational SAMP</b>            How does this SAMP link to the Operational SAMP?</p>	<p>The SAMP will align with the Operational SAMP and ensure that new vehicles are prioritised by condition scoring and age and replaced on basis by need to support operational activities</p>



## Stakeholder Engagement with Focus Groups

Area	Feedback from Focus Groups	How the SAMP will aim to address the feedback
<b>Service Delivery East, West, North</b>	<p><b>Right vehicle, right kit</b>            UIG – get the right people on this forum – the people that use the vehicle are given a voice.            UIGs should reach a wider audience.            Standardisation is key across the fleet.            There needs to be more consultation on new kit, more communication and listen to the people who use the kit.</p>	<p>Fleet services aims to work with business areas and promote the activities of any UIG through iHub, as well as the New Vehicle Working Group</p>
	<p><b>Vehicle reality</b>            Lack of appropriate vehicles and fit for purpose fleet for replacement.             With standardisation like for like pumps could be replaced during servicing periods.             Older vehicles arrive here from other locations.</p>	<p>Fleet services will continue to work to ensure that vehicles are serviced and maintained to the highest standard. Staffing levels and recruitment issues will be tackled given the increasing size of fleet.</p>
	<p><b>Improving current fleet</b>            There was appreciation of the limited budgets available, however there needs to be improvement across the fleet when some vehicles are 20 years old.            More communication on UIGs and who is on them.            More communication on planned replacement of vehicles.</p>	<p>Fleet services will continue to work with business areas to understand their vehicle requirements and take cognisance of new and emerging risks. We will work to improve communication on the replacement of vehicles.</p>



## Internal Survey Feedback

An internal questionnaire focusing on the Fleet Strategy was developed giving all officers and staff within Scottish Fire and Rescue Service an opportunity to participate. The questionnaire was open for three weeks and attracted responses from a wide range of officers and staff across all areas of the Service.

A total of 412 responses was received. The feedback from the questionnaire is aligned with that of the focus groups and has provided a holistic understanding of officers and staffs perception of the current and future fleet. The results of the analysis and feedback received have informed the strategy and have been incorporated throughout.

Participants were asked to what extent they agreed or disagreed with the five key strategic objectives set out within the Fleet Strategy. They were also asked to rank the objectives in order of importance. The rankings primarily remained as published apart from Collaboration being marked strongly as ranking fifth and is now below Technology.

The percentage of respondents who 'agreed' or 'strongly agreed' were:

- Objective 1 — Fit for Purpose: 86%
- Objective 2 — Modernising: 82%
- Objective 3 — ULEVs by 2030: 41%
- Objective 4 — Technologically advanced: 57%
- Objective 5 — Strategic collaboration partnerships: 30%

92% of respondents agree that SFRS should have a Fleet Strategy.

In addition to this, participants were asked to rate their perception of the current state of the fleet.

The results were:

- Concern on replacement interval: 60% of respondents agreed
- Concern with the age of vehicles: 70% of respondents agreed

Respondents had the opportunity to utilise the 'free text' fields to add additional comments - these comments have provided an in depth understanding of respondent's views. Analysis of these comments has highlighted a particular focus and interest across the following areas:

- Fit for Purpose —Investment in contingency vehicles was positively welcomed. There is a need for greater consultation with vehicle users
- Modernising - There is some concern on the age of some elements of the fleet and the training put in place when new vehicles are introduced
- ULEVs by 2030 — Overall positive comments towards ULEV, recognising SFRS has a responsibility to the environment, however there is some apprehension on the suitability of ULEV in rural and remote locations and if the technology in ULEVs is sufficiently advanced at this point for operational appliances.
- Technologically advanced fleet —General agreement that vehicles need to have technology added or incorporated into vehicles and the use of AVLS to identify underused vehicles and ensure best use is made of available fleet.
- Strategic collaboration partnerships —A strong support for collaborating with partners with regard to shared charging infrastructure and the opportunities to co-locate.



# Appendix 3:

## Asset Management Risk Matrix

Risk	Impact	Mitigating Action if Required	Aligned to Strategic Risk Register
Failure to minimise communities' exposure to risk and harm	There is a risk that assets in poor condition due to age, defect, or poor maintenance fail in operational use resulting in poor service delivery, a pollution event, or injury to a member of the public	Robust procedures for asset use and maintenance, coupled with the monitoring of relevant performance indicators, appropriate business continuity arrangements and reporting of incidents/near misses will mitigate this risk	Ability to improve the safety and well-being of people throughout Scotland through the delivery of our services
Failure to ensure the Health, Safety and Wellbeing of firefighters and other employees	There is a risk that assets in poor condition due to age, defect, or poor maintenance fail in operational use or training resulting in injury to an SFRS employee	Robust procedures for asset use and maintenance, coupled with the monitoring of relevant performance indicators, appropriate business continuity arrangements and reporting of incidents/near misses will mitigate this risk	Ability to have in place a suitably skilled, trained and motivated workforce that is well supported both physically and mentally
Failure to deliver Service Transformation	There is a risk that through poor planning or lack of affordability assets required to deliver service transformation are not available when required	By ensuring early cross directorate visibility of organisational priorities through the Asset Management Liaison Board, realistic timelines can be developed and plans put in place	Ability to anticipate and adapt to a changing environment through innovation and improved performance
Failure to ensure Financial Sustainability	There is a risk that insufficient funding is available to maintain an adequate asset portfolio to deliver our service.	Work will continue with Scottish Government to highlight asset investment requirements	Ability to deliver a high quality, sustainable service within the funding envelope



Risk	Impact	Mitigating Action if Required	Aligned to Strategic Risk Register
Failure to ensure Legal Compliance	There is a risk that assets are not used or maintained in accordance with legal and regulatory requirements	By maintaining an ongoing review of the legislative environment and ensuring policies and procedures are subject to regular review across all disciplines, this risk will be mitigated	Ability to ensure legal and regulatory compliance
Failure to maintain effective systems of control	There is a risk that procedures for the use, maintenance and support of assets are not adhered to	The Service's Assurance Framework is designed to ensure that effective controls are maintained and any weaknesses are highlighted and addressed	Ability to ensure legal and regulatory compliance
Failure to maintain confidence in the Service	There is a risk that high profile asset-related failure leads to high profile political and media interest	The actions outlined above are intended to ensure such failures are avoided or at least minimised.	Ability to collaborate effectively with partners and communities, to enhance service delivery and best value



# Appendix 4:

## Vehicle Grading Matrix

### Grade 5 – in excellent condition

- **PAINT, BODY & INTERIOR**
  - Only minor defects in panel surfaces and bodywork requiring no body or paint work;
  - No missing, broken or damaged parts that require replacement;
  - No visible glass damage;
  - No missing, broken or damaged parts that require replacement;
  - No cuts, tears or burns that require repair;
  - Shows no signs of wear.
- **CAB / CHASSIS / UNDERSIDE**
  - Cab/Chassis/structure has no sign of corrosion;
  - Expected to meet required specifications.
- **MECHANICAL / FIRE ENGINEERING**
  - Mechanically sound;
  - All equipment and accessories are operable.

### Grade 4 – is better than average

- **PAINT, BODY & INTERIOR**
  - Minor chips or scratches in panel surfaces requiring minor conventional body and paint work;
  - May require removal of small dents that have not broken the paint;
  - May require replacement of minor missing or broken part;
  - No visible glass damage beyond minor pitting of windscreen;
  - Clean, showing minimal wear;
  - May require replacement of minor missing or broken part
- **CAB / CHASSIS / UNDERSIDE**
  - Cab/Chassis/structure has minor signs of corrosion;
  - Expected to meet required specifications.
- **MECHANICAL / FIRE ENGINEERING**
  - Mechanically sound;
  - All equipment and accessories are operable

### Grade 3 – Normal wear and tear

- **PAINT, BODY & INTERIOR**
  - May require minor body and paint work;
  - May require replacement of parts;
  - May have sustained cosmetic or light damage;
  - No visible glass damage beyond minor pitting of windscreen;
  - Shows signs of normal wear and usage;
  - May require repair or replacement of parts.
- **CAB / CHASSIS / UNDERSIDE**
  - Cab/Chassis/underside has signs of corrosion;
  - May require repair or replacement of parts;
  - Expected to meet required specifications.





- **MECHANICAL / FIRE ENGINEERING**

- Mechanically sound;
- May require minor mechanical repairs;
- May require minor repair of equipment or accessories.

### Grade 2 – Shows signs of excessive wear and tear

- **PAINT, BODY & INTERIOR**

- Dents, scratches, and body panels that may require replacement;
- Parts may be broken and missing;
- May have multiple prior repairs to be carried out;
- May have repaired or unrepaired damage;
- Windscreen may be damaged;
- Shows signs of excess wear;
- May have burns, cuts, tears, and non-removable stains.

- **CAB / CHASSIS / UNDERSIDE**

- Cab/Chassis/underside has excessive signs of corrosion and deformation;
- May not meet required specifications.

- **MECHANICAL / FIRE ENGINEERING**

- May have mechanical damage that prohibits vehicle from operating properly;
- Engine and/or transmission may be in poor condition;
- Operability of equipment or accessories is questionable.

### Grade 1 – Shows signs of severe abuse

- Paint and body work requiring major work;
- May be cost prohibitive to extensively recondition this vehicle to Fire Service Standards;
- Cab/Chassis/underside severely corroded, deformed or cracked and does not meet required specifications;
- May have severely worn, missing or disconnected mechanical parts;
- Although operable, this vehicle is at the end of its useful life;
- Operability of equipment or accessories is doubtful.

### Grade 0 – Vehicle is inoperative

- Good for parts only;
- Mechanical and body parts may be inoperable, disconnected, damaged or missing.

#### Mark each vehicle 0 – 5 in three categories:

- Body / interior;
- Cab/Chassis & components;
- Mechanical / Fire engineering.



# Grade Summary

## Grade 5

The vehicle is in excellent condition, with only minor defects in panel surfaces which do not require body or paint work. There are no missing, broken or damaged parts and no visible glass damage. The vehicle's cab/chassis/structure has no signs of corrosion and meets required specifications. The interior does not show any signs of wear. The vehicle is mechanically sound and all equipment is operable.

## Grade 4

The vehicle is better than average, with only minor chips or scratches in panel surfaces which may require minor body and paint work. The vehicle may have sustained cosmetic or light damage. The vehicle's cab/chassis/structure has minor signs of corrosion and is expected to meet required specifications. A minor missing or broken part may require replacement. The interior is clean, shows minimal wear. There is no visible glass damage beyond minor pitting of the windscreen. The vehicle is mechanically sound and all accessories are operable.

## Grade 3

The vehicle has normal wear and tear (for example, dings, small scratches, chips and/or minor broken parts). It may require minor body and paint work or replacement of parts. The vehicle may have sustained cosmetic or light damage and been repaired. The vehicle's cab/chassis/structure has some corrosion and may have been repaired and is expected to meet required specifications. The interior shows signs of normal wear and usage, requiring repair or replacement of parts. There is no visible glass damage beyond minor pitting of the windscreen. The vehicle is mechanically sound but may require maintenance and minor repair of accessories.

## Grade 2

The vehicle shows signs of excessive wear and tear. The body may have dents, scratches and body panels that require replacement. Parts may be broken and missing. The interior may show signs of excess wear with burns, cuts or tears and non-removable stains. The vehicle may have had multiple repairs performed at an earlier date. The cab/chassis/structure may be damaged, repaired and may not meet required specifications. The vehicle may have mechanical defects that prohibit it from operating properly, repairs can be made. The engine, transmission or main pump may be in poor condition. Operability of accessories is questionable.

## Grade 1

The vehicle shows signs of severe abuse or may have sustained major damage. It may be cost prohibitive to recondition this vehicle to Fire Service standards. The cab/chassis/structure may be severely corroded and not meet required specifications. The vehicle may have missing or disconnected mechanical/fire engineering parts. Although operable, the vehicle is at the end of its useful life. Operability of accessories is doubtful.

## Grade 0

The vehicle is inoperative. Mechanical and body parts may be disconnected, damaged or missing. The vehicle's condition renders it suitable for dismantling or scrap.





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Strategic Asset Management Plan: Fleet 2022-27

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