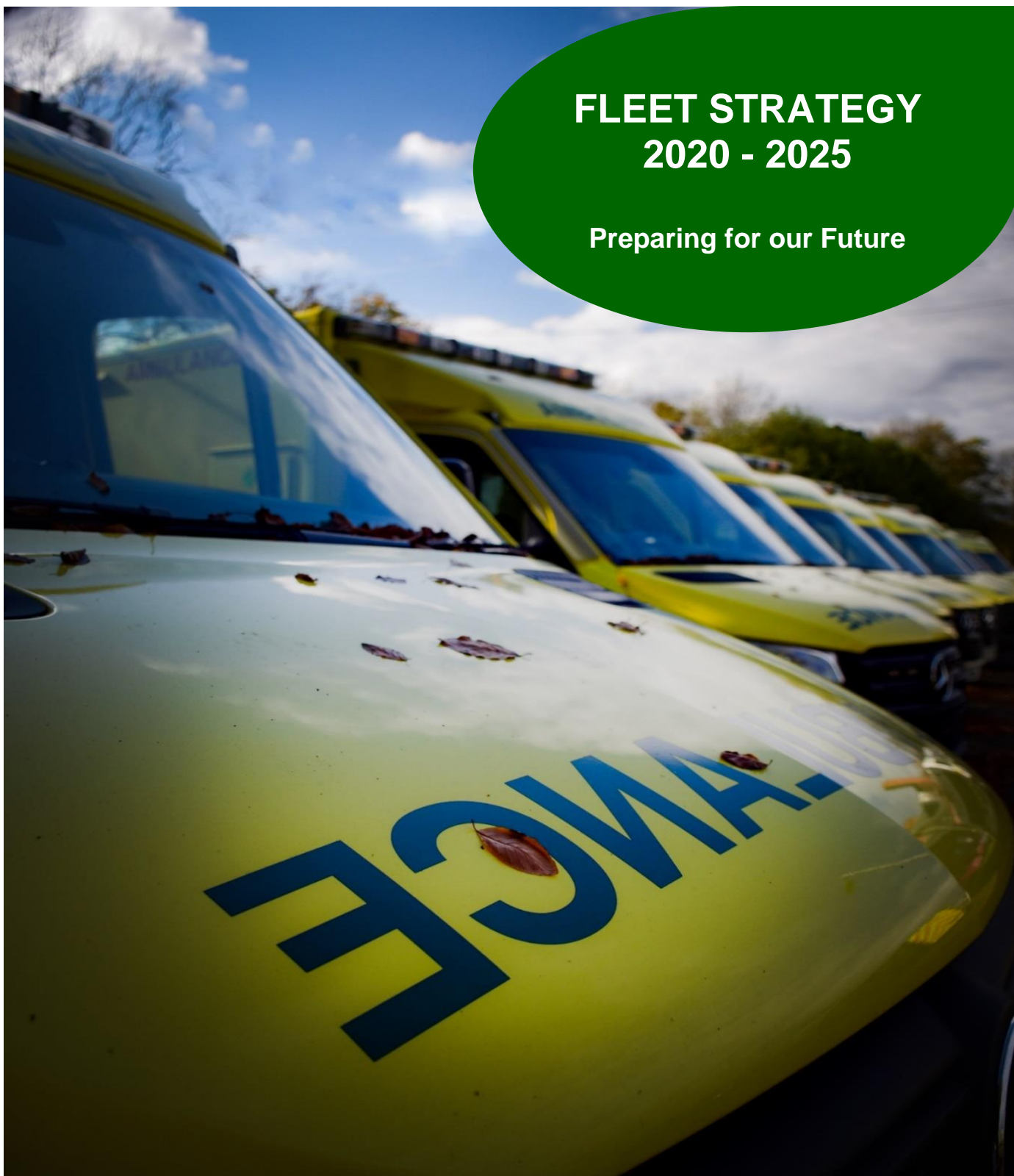**Northern Ireland Ambulance Service Health and Social Care Trust**

ENGAGEMENT DOCUMENT

FLEET STRATEGY 2020 - 2025

Preparing for our Future

Contents

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FOREWORD

I am delighted to introduce this Fleet Strategy engagement document which supports the Northern Ireland Ambulance Service's implementation of the Department of Health's 'Health and Wellbeing 2026: Delivering Together' where it is recognised that NIAS staff cannot operate safely, effectively and efficiently without a fit for purpose infrastructure, sound environmental objectives and commitment to the whole of our community.

NIAS must begin planning for our next generation of vehicles to ensure we have the right type and quantity of vehicles to match our response models, take advantage of developing technologies and reduce our carbon footprint. Environmental challenges must and will influence current and future decision making for all aspects of the Northern Ireland Ambulance Service.

This Fleet Strategy has been designed to support the Trust by providing a comprehensive range of medical emergency and support vehicles for the provision of care for the people of Northern Ireland, ensuring effective and sustainable benefits for patients and the wider Health & Social Care arena. Patients and our front-line ambulance clinicians are at the heart of everything we do, and we will continually strive to ensure we provide fit for purpose, value for money, safe, efficient and sustainable vehicles that best meet their needs, whilst minimising, wherever practicable, carbon and other emissions and environmental issues.

We want to hear your views on our Fleet Strategy proposals. We ask some questions in an associated separate document entitled "Appendix C: Fleet Strategy Engagement Feedback" and you can comment on any or all of these by emailing: **mignonne.smith@nias.hscni.net**

We welcome your responses by **Wednesday 12 May 2021** and we look forward to sharing our final Fleet Strategy with you in the coming months.

Michael Bloomfield, Chief Executive
Northern Ireland Ambulance Service

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OUR VISION FOR NIAS FLEET SERVICES

The Northern Ireland Ambulance Service (NIAS) Health & Social Care Trust has a central role to play in the implementation of the Department of Health's 'Health and Wellbeing 2026: Delivering Together' strategy and can contribute to addressing many of the priorities within it. The Trust has developed a long-term strategy 'Caring today, planning for tomorrow – **Our Strategy to Transform: 2020 – 2026** that sets out how we will maximise this contribution by addressing our current challenges and bring tangible benefits to patients, staff and communities over the coming decade.

This Fleet Strategy has been developed to compliment and support the implementation of our **Strategy to Transform**. In addition to describing our fleet replacement programme, the Strategy sets out how we will ensure our fleet has the right profile to support effective provision of service whilst reducing our impact on the environment over the next 6 years.

Whilst it is recognised that Northern Ireland does not yet have a Climate Act, NIAS is highly conscious of its responsibility to, where possible, improve the environment for people through reducing its Fleet CO_2 emissions, improving sustainability and adapting to renewable energy, whilst continuing to meet public need through the delivery of a safe and effective ambulance service.

Operating an ambulance fleet has obvious environmental impacts. Much has been achieved to date through technological advances to mitigate the impact of our base vehicles. We will continue, wherever practicable, to explore the opportunity to adopt more environmental practices. We will endeavour to reduce our carbon footprint by adopting new technologies such as electric and hybrid vehicles as these become viable options. We will also seek out greener energies for our vehicle system power, such as hydrogen fuel cells and solar power. By utilising vehicle management information supplied by telemetry systems, we will aim to improve vehicle and driver performance to improve efficiency and reduce environmental impact.

At its heart, this Strategy aims to ensure the NIAS Fleet is fit for purpose, value for money, safe, efficient and sustainable whilst minimising, wherever practicable, carbon and other emissions and environmental issues.

Fleet Strategy on a Page

The Strategic Priorities of the Fleet Strategy are to:

- Ensure value for money

- Ensure reliability, availability and safety

- Protect the environment

These priorities are underpinned within each of our Fleet Strategic Themes

Facts & Figures
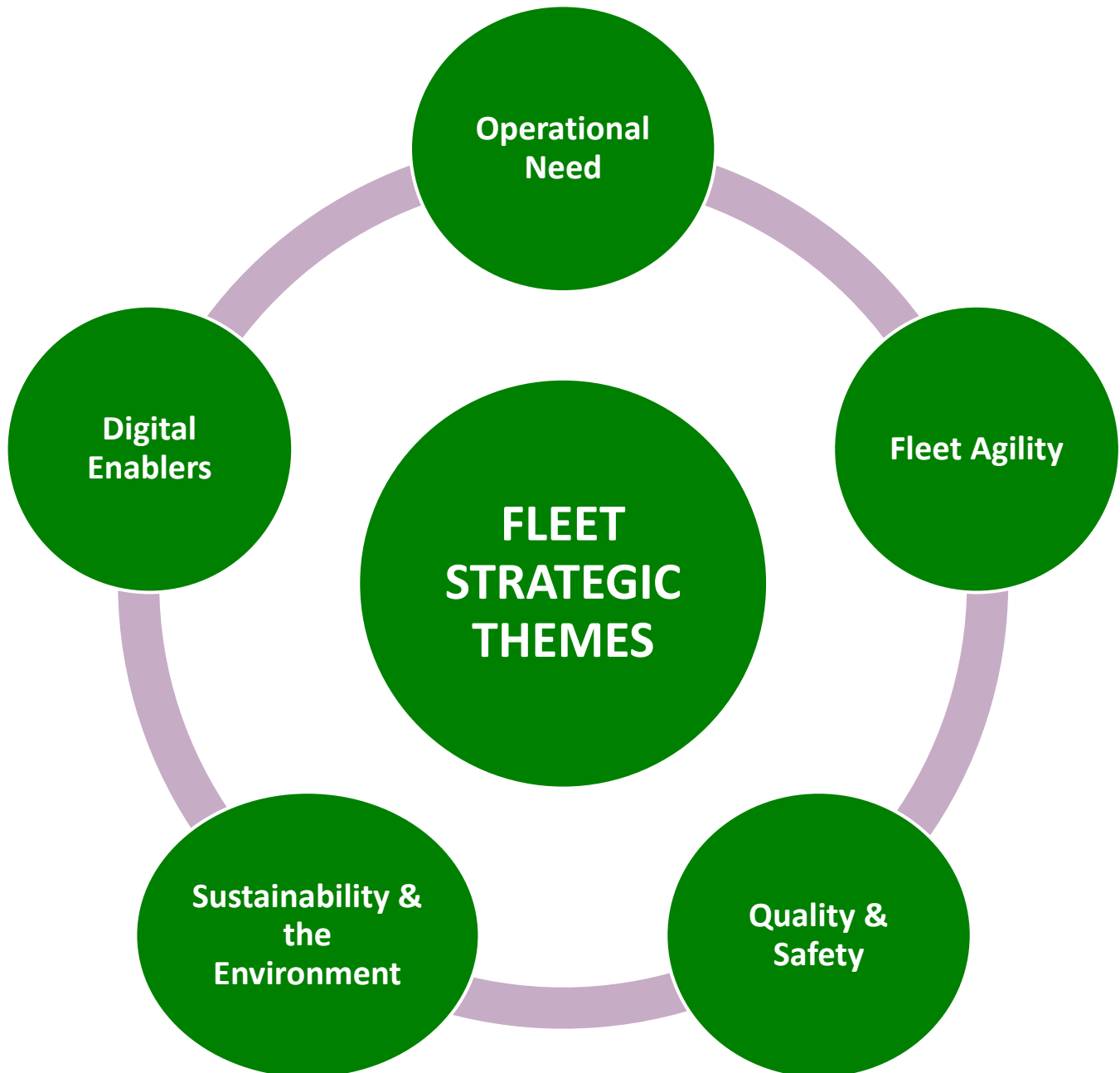
In 2018-2019

We received **218,000 urgent & emergency care calls** of which **195,000** resulted in an **ambulance arriving on scene**
59,000 calls were for immediately life-threatening conditions
(Category A)
89,000 calls were for serious but not immediately life-threatening conditions
(Category B)
47,000 calls were for not immediately life-threatening or serious conditions
(Category C)
We made **200,000 non-emergency journeys**, taking people to and from hospital appointments or for routine treatment

We currently have:
Circa 1,400 staff supported by **250 volunteer first responders** and almost **100 volunteer car drivers**
275 frontline vehicles (116 frontline, double-crewed emergency ambbulances, 43 rapid response ambulance cars, **112 non-emergency and 4 NISTAR vehicles)** coordinated by **one Emergency Control Room** and **one Non-Emergency Control Room** across **five operating divisions** and out of **59 ambulance stations or deployment points**

NIAS has an annual operating **budget of circa £80m**

Our Business

The Northern Ireland Ambulance Service Health & Social Care (HSC) Trust responds to the needs of the population of Northern Ireland (NI) of 1.9 million people in the pre-hospital environment. NIAS has an operational area of approximately 5,500 square miles, serviced by a fleet of 275 frontline vehicles. We provide ambulance care, treatment and transportation services to the people of NI 24 hours per day, 7 days per week, and 365 days per year. Services include, but are not limited to:

> *Responding to urgent and emergency calls*
> *Non-emergency patient care and transportation*
> *Specialised health transport services*
> *Training and education of ambulance professionals*
> *Planning for coordination of major events*

Our Mission

To consistently show compassion, professionalism and respect to the patients we care for.

Our Values & Behaviours

NIAS has adopted the new HSC Values and expected behaviours and will work to embed these across all our functions and activities.

Working together	Excellence	Openness & Honesty	Compassion
We work together for the best outcome for people we care for and support. We work across HSC and with other external organisations and agencies, recognising that leadership is the responsibility of all.	We commit to being the best we can be in our work, aiming to improve and develop services to achieve positive changes. We deliver safe, high quality, compassionate care and support.	We are open and honest with each other and act with integrity and candour.	We are sensitive, caring, respectful and understanding towards those we care for and support and our colleagues. We listen carefully to others to better understand and take action to help them and ourselves.

These values, and the behaviours they instil, form the foundations for the culture and ethos for the whole organisation.

Our Range of Responses

Double-crewed emergency ambulance

Rapid response paramedic cars

Helicopter Emergency Medical Services

Clinical Support Desk (CSD) – providing clinical advice, and referral when needed, over the phone (Hear & Treat)

Appropriate Care Pathways (ACPs) and direct referral routes avoiding hospital emergency departments e.g. for falls, COPD, heart failure, palliative care and diabetes

Community paramedics – commissioned in specified rural areas to support the provision of primary care services for patients with long-term conditions and the assessment and treatment of minor illnesses and injuries, while maintaining the ability to provide an emergency response in life-threatening situations.

Community First Responders (CRFs) – volunteers trained in vital life-saving skills for those experiencing or at risk of cardiac arrest

Specialised intervention for our frequent callers to identify underlying needs and engage with social, community or secondary care services on their behalf

Multi-agency mental health triage team for those in mental health crisis

Emergency preparedness and specialist resources for major incidents, complex or hazardous environments and mass casualty

NEW CLINICAL RESPONSE MODEL

A study undertaken on behalf of NIAS by specialist consultants 'Operational Research in Health' in December 2019 predicts that demand for urgent and emergency care in NI will increase by 2.8% per year over the next five years. This finding was a key driver in the Trust's decision to introduce a new Clinical Response Model (CRM).

New Clinical Response Model

The NIAS new Clinical Response Model (CRM) came into operation in November 2019 and defines how we deliver our core service for Urgent & Emergency Care (UEC). It focuses on achieving optimal outcomes for patients by providing the right response, in the right place, based on clinical need, for every call. The model uses evidence-based prioritisation of categories for presenting conditions when someone calls 999, and new response targets aligned to these categories.

The primary aim is to identify and get treatment to patients with a life-threatening issue fastest, and for all other patients ensure we provide the most appropriate response for their clinical needs. The diagram below describes the model:

Identifying the Sickest Quickest → Getting to the Sickest Quickest → Sending the Right Resource First Time → Providing the Best Patient Care

The proposed response time standards for the new CRM are shown in Table 1.

Table 1:   CRM – Proposed new response time standards

Call type	Category	Proposed response time target
999 immediately life threatening	Category 1	Mean 08.00 mins 90th centile = 15 mins
999 potentially serious incidents	Category 2	Mean 18.00 mins 90th centile 40.00 mins
Urgent problem	Category 3	90th centile 120.00 mins
Less urgent problems	Category 4	90th centile 180.00 mins
Non-urgent enquiry	Category 5	No specific targets

Increase in Fleet

Successful implementation of the new CRM is dependent on a significant uplift in workforce establishment levels and related increase in Fleet, subject to investment. The projected increase in Fleet is reflected within this Strategy.

NIAS is unique within the HSC in Northern Ireland in that its primary clinical working environment is mobile, i.e. its fleet. The NIAS Fleet is a fundamental enabler of the delivery of an efficient Urgent & Emergency Care (UEC) and Patient Care Service (PCS) to a population of almost 2 million people across NI. It must therefore consistently provide a safe, reliable and technically suitable environment for the care and transportation of patients and NIAS staff for today and into the future, as our service continues to increase and expand within the HSC arena.

To deliver this Strategy between now and 2025 involves elements of change and innovation across every aspect of the organisation. "Our infrastructure" is cited as one of the Trust's seven priority areas for transformation. Plans to expand our workforce in accordance with the Trust's new Clinical Response Model, along with new ways of working, will create a significant reliance on our infrastructure and key assets, such as our Fleet, in being fit for purpose to support effective and efficient operations.

This Fleet Strategy will support the Trust by providing a comprehensive range of medical emergency and support vehicles for the provision of care for the people of NI, ensuring effective and sustainable benefits for patients and the wider HSC. Patients and our front-line ambulance clinicians are at the heart of everything we do, and we will continually strive to ensure we provide fit for purpose, value for money, safe, efficient and sustainable vehicles that best meet their needs, whilst minimising, wherever practicable, carbon and other emissions and environmental issues.

This Fleet Strategy sets out the key drivers and rationale for the future Fleet. The programme for the development of our Fleet is based on the premise of future proofing this asset as change takes place and on efficient sustainability, whilst reducing our impact on the environment.

We have a large and diverse assets inventory and we will work towards rebalancing our vehicle numbers and types to support the introduction of the new CRM and other key developments as they arise. Replacing vehicles at the optimal time through the utilisation of our fleet replacement programme, scheduling regular maintenance with other servicing requirements and unplanned repairs to reduce downtime, and ensuring proper fiscal management are paramount.

The NIAS Fleet Services will demonstrate though the implementation of this Strategy that services will be provided to an efficient and high-quality standard, and service provision, quality and performance will be reviewed on a regular basis.

The detail of this Strategy focuses on the next 6 years, until 2025. However, we recognise the need for flexibility and adjustment in order to ensure that it remains relevant and achievable as new and emerging innovations and technologies become available, particularly in terms of safety, efficiency, value for money, the environment and sustainability.

This Strategy incorporates how we as an organisation must manage and grow our fleet to meet the predicted increase in demand for UEC, and to maximise our services to our patients through improved operational performance and improved patient experience. It sets out our future direction, which will continue to be driven by the organisation's needs.

NIAS currently receives an average of 600 emergency and routine calls per day. During 2018-2019, frontline ambulance clinicians responded to 195,000 urgent and emergency calls with a vehicle arriving on scene, and over 200,000 non-emergency journeys.

Fleet Replacement Programme (2014-2019)

We have a clear understanding of our current Fleet profile, with the majority of vehicles 5 years old or less.

The Trust's fleet replacement programme has enabled the replacement of Accident & Emergency (A&E) Ambulances, PCS vehicles and Rapid Response (RRV) cars every five years, on a rolling basis as detailed in Table 2 below. As the Support Fleet varies according to type and use, the replacement cycle is between 5 years to in excess of 10 years for more specialised vehicles.

Table 2:   Number, Average Age and Replacement Cycle of Specific Vehicles

Vehicle Type	Total	Average Age	Annual Replacement over 5 Years
A&E Ambulance	116	3.2	23.2
Patient Care Service	112	3.2	22.4
Rapid Response Vehicle	43	3.5	8.6
NISTAR	4	3.7	0.8
Officer/Incident Response	20	3.5	4
Training Officers	7	4.1	1.4
Medical Directorate	2	1.1	0.4
Community Paramedic	1	1.1	0.2
Emergency Planning Vehicles	13	7.7	2.6
Hazardous Area Response Team	5	1.4	1
Education Vehicles	3	12.1	0.6
Fleet Maintenance	2	4.6	0.4
Stores	2	2.6	0.4
Grand Total	**330**	**3.98**	**66**

This Strategy will inform the development of a new Fleet Replacement Business Case to cover 2020 -2025.

Fleet Mileage

NIAS vehicles covered 7.9 million miles during 2018-2019.

Table 3: Breakdown of average miles per vehicle, per year for the A&E, PCS, RRV and Support fleet

31/03/2019	Average miles per vehicle per year
A&E	33,775
PCS	21,624
RRV	20,144
Support	12,583

Fleet Revenue and Capital Spend

The revenue and capital spend on Fleet during 2019 is set out in Table 4.

Table 4:   Revenue and Capital spend 2019

Totals

FUEL COSTS	£1,902,000
MAINTENANCE COSTS	£1,116,420
INSURANCE COSTS	£106,560
ACCIDENTS	£47,010

Capital:	**£4,295,665**
Revenue:	**£3,171,990**

Developments

Significant development and progress has occurred in recent years.

- Successful delivery of our 5-year fleet replacement programme; ensures the Trust has a modern, reliable fleet of the correct vehicle type dependent on job role, that meets current safety and environmental legislation and standards.

- Introduction of emergency response cars fitted with Start/Stop technology; minimises unnecessary engine idling and fuel usage, thereby reducing vehicle CO_2 emissions.

- Introduction of ECO-RUN on a number of vehicles to trial the system; an automatic idling control system fitted to A&E vehicles in order to reduce unnecessary idling and fuel usage, thereby reducing vehicle CO_2 emissions.

- Introduction of vehicle-based renewable energy systems; high efficiency solar panels fitted to the roofs of Emergency Ambulance vehicles from 2019.

- Introduction of a number of electric emergency response cars with range extenders, with more planned as part of our fleet replacement programme;

- Creation of an electric vehicle charging infrastructure to support the introduction of electric vehicles; nine electric vehicle charging points installed across NI to date with plans in place to roll out further.

- Reconditioning of high value items such as emergency lighting systems in cars, doubling the lifecycle from 5 to 10 years;

- Retaining and reconditioning specialist parts such as ambulance seating and locking mechanisms from decommissioned vehicles for re-use when required.

- Flexibility of fleet and equipment strategies to adapt to the changing operational environment in supporting our clinicians to provide more advanced clinical interventions and improved patient outcomes.

- Introduction of dedicated Vehicle Cleansing Operatives; improves compliance with vehicle cleanliness and hygiene audits, and supports Infection, Prevention & Control requirements; enables ambulance clinicians to concentrate on their core tasks without having to worry about their vehicle being ready for use.

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- Scoping the 'hub and spoke' structure within our Estates programme. The Trust's ambition to have a hub and spoke configuration, supported by a 'Make Ready' system (Box 1) and incorporating services such as fleet maintenance, will enable us to become more efficient, thereby improving vehicle availability and reducing downtime.

Box 1: MAKE READY

The 'Make Ready' System is a quality assured vehicle preparation programme, designed to minimise cross infection and maximise patient safety, whilst eliminating the hours of service associated with the cleaning and stocking of vehicles. All of the vehicle preparation is undertaken by specially trained, non-clinical staff, allowing ambulance clinicians to focus on the delivery of high quality patient care.

Key benefits of a Make Ready System

- **Improvement in standards of cleanliness**
- **A significant reduction in lost hours of ambulance availability**
- **A reduction in stock consumption measurable with procurement and financial data**
- **Improved vehicle reliability**
- **An improvement in patient safety measurable in reduction of adverse incidents**
- **Enables effective asset management**
- **Savings made on consumables and drugs stocks with no out of date items being wasted**

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We will achieve our Fleet vision through the provision of strong foundations while enhancing key services.

The optimal Fleet for NIAS must ensure sufficient ambulance vehicles of the right type and specification are available when required to meet the planned delivery of services, and to provide reasonable contingency for unplanned but foreseeable events.

We will focus on our five strategic themes as highlighted in our vision for Fleet Services and we will work closely with the Trust's Estates and Digital strategies to maximise efficiency for NIAS Fleet.

Our Fleet Strategy is ambitious but we believe it is achievable if we put in place the necessary support, investment and related infrastructure and work with the following underpinning principles:

Partnership Working

- Working with our internal Fleet Groups (A&E and PCS) who adopt the themes of the Strategy in their work plans
- Working in partnership with our estate colleagues in relation to the development of the Hub and Spoke model in order to build a network of Fleet Maintenance & Repair Workshop locations, to improve business continuity considerations and to solve organisational logistical problems
- Working collaboratively with the CRM programme as it evolves to ensure the timely procurement of additional vehicles by type, according to role
- Working collaboratively with our Regional Ambulance Training Centre (RATC) colleagues to support the delivery of planned Driver Training Programmes for new recruits to frontline clinical roles and to support the planning and delivery of familiarisation training when introducing changes to our Fleet, e.g. through the introduction of automatic gearboxes, hybrid and/or fully-electric vehicles and new technological advances related to Fleet and equipment
- Working collaboratively with other regional emergency services i.e. he Police Service of Northern Ireland (PSNI) and the Northern Ireland Fire & Rescue Service (NIFRS) in order to share learning and best practice
- Continuing to work nationally with the relevant groups to shape and influence the direction of future ambulance Fleet services and vehicles

Leadership

- We have leaders at all levels truly committed to NIAS values and behaviours and these are displayed at all times in all that we do
- We invest in and develop staff and leaders to be the best they can be

Excellence in Delivery

- We get the basics right, first time, every time
- We have in place enough vehicles at the right place, at the right time, of the right type to service operational needs
- We provide vehicles that are clean, safe and as energy-efficient as possible, with minimum downtime, to support ambulance clinicians in the provision of quality patient care
- We provide reasonable contingency for unplanned but foreseeable events/incidents

- Our maintenance colleagues are skilled, deliver consistent vehicles back into operational service, add value to the department and are supported by managers to achieve their best
- Fleet Services staff will have their appraisals and objectives linked directly to the delivery of the Fleet Services Strategy

Supporting the Achievement of the Trust's Key Goals and Priorities

The Trust has identified four key goals and seven areas of priority for transformation, as described in Table 5 below.

Table 5

Goals		Key Priorities
Our patients will feel professionally cared for; always with compassion and respect	**Our staff will feel positive and proud to work for NIAS**	1. *Delivering care* 2. *Our workforce* 3. *Organisational health* 4. *Quality improvement* 5. *Digital enablers* 6. *Our infrastructure* 7. *Communication and engagement*
Our stakeholders and partners will have confidence in us as a reliable provider at the centre of urgent and emergency care	**Our communities will continue to value and trust us**	

This Fleet Strategy aligns to the Trust's key priorities as described below:

Delivery of Care

Patients and our front-line ambulance clinicians are at the heart of everything we do, and we will continually strive to ensure we provide fit for purpose, value for money, safe, efficient and sustainable vehicles that best meet their needs, whilst minimising, wherever practicable, carbon and other emissions and environmental issues.

Our Workforce

We will collaborate with related functions across the Trust to ensure the timely planning and delivery of familiarization and training for all of our frontline staff when making changes to our Fleet, e.g. through the introduction of automatic gearboxes, hybrid and/or fully-electric vehicles and new technological advances related to Fleet and equipment.

Quality Improvement

Quality and improvement will be central when researching and procuring additional and replacement Fleet and equipment with a focus on value for money, safety, efficiency and sustainability, whilst reducing our impact on the environment.

Organisational Health

Transforming NIAS means more than just changing some of our systems and processes. We welcome the investment that will support some of the major changes we are making in implementing our new CRM, including the recruitment of almost a third again of our frontline workforce – more than 300 extra clinicians. This alone will have wide-ranging impact on how the organization operates, and our corporate services and infrastructure, including Fleet, will necessarily expand to accommodate these changes.

Digital Enablers

NIAS is open to new technologies as they emerge and become reliable. We have a workforce dispersed right across the country and our frontline staff are on the move most of their working day or night. We therefore have a strong need to provide seamless connectivity and an ability to be able to communicate with every individual member of staff no matter where they are working. We will work flexibly and efficiently to support the introduction of all new technologies within the Trust's mobile clinical working environment, i.e. it's Fleet.

Our Infrastructure

We will strive to future-proof our Fleet as change takes place and on efficient sustainability, whilst reducing negative impact on the environment. Over time, we will move to a new model of hub & spoke locations to support the introduction of 'Make Ready' systems.

We will endeavor to reduce the Trust's carbon footprint by adopting new technologies such as electric and hybrid vehicles. We will also seek out greener energies for our vehicle system power, such as hydrogen fuel cells and solar power. By utilising vehicle management information supplied by telemetry systems, we will aim to improve vehicle and driver performance to improve efficiency and reduce environmental impact.

Communication and Engagement

Fleet Services recognise that our staff, i.e. the people who work in the NIAS clinical mobile environment, are key to the successful implementation of this Strategy. We therefore pledge to continue to work in partnership with our unions, staff representatives, managers and others in relation to new Fleet initiatives, respecting any impacts on our staff, ensuring they have a voice and input to the way we develop.

New Clinical Response Model (CRM)

Successful implementation of the new CRM is dependent on the introduction of an additional 4,387 hours of cover per week. This requires an uplift in workforce establishment levels and related increase in Fleet to meet the increased hours of cover and to ensure delivery of commissioned hours.

In addition to the ongoing management and replacement of our current Fleet inventory, Fleet Services will procure and make ready an additional 95 vehicles over the lifespan of this Strategy,

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subject to investment, in order to support the Trust to fully implement the new CRM, as detailed in Table 6 below:

Table 6:   CRM – Fleet uplift

Vehicle Type	Baseline 2019-2020	CRM Uplift	Total Future Requirement
A&E Ambulance	116	51	167
Patient Care Service	112	0	112
Rapid Response Vehicle	43	0	43
NISTAR	4	0	4
Officer/Incident Response	20	26	46
Training Officers	7	1	8
Medical Directorate	2	0	2
Community Paramedic	1	TBC	1
Emergency Planning Vehicles	13	0	13
Hazardous Area Response Team	5	0	5
Helicopter Emergency Medical Service	0	1	1
Sub Total	**322**	**79**	**401**
Education Vehicles	3	0	3
Fleet Maintenance	2	0	2
Stores	2	2	4
Community Resuscitation Team	0	4	4
Complex Case Team	0	5	5
Logistics Team	0	5	5
Sub Total	**7**	**16**	**23**
Grand Total	**329**	**95**	**427**

Barriers to Success

Fleet Team

The NIAS Fleet service is currently delivered by a small team consisting of a manager, a supervisor and two mechanics. A review of the structure is required to ensure the service is appropriately resourced to achieve our vision, particularly in terms of taking forward the green agenda and supporting the implementation of the CRM programme as it evolves.
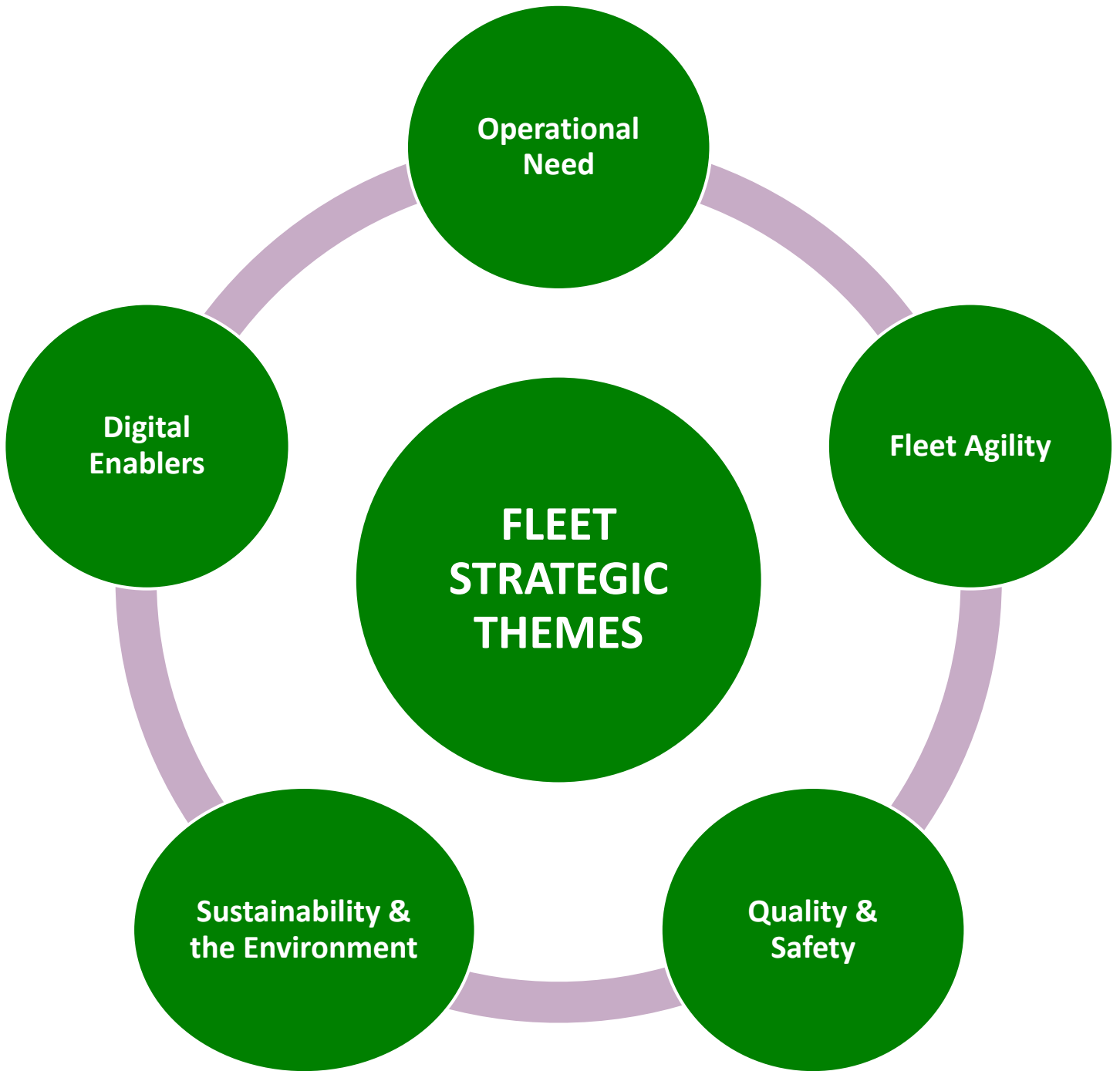
> **Strong Fleet management foundations to enable efficient and effective services in order to proactively support the Trust to achieve its key goals and priorities**

Fleet Maintenance & Repair

We are heavily reliant on external contractors to carry out essential fleet maintenance and repairs across NI. The COVID-19 pandemic highlighted that this reliance proved a significant risk to fleet business continuity, when external contractors largely closed during the lockdown in the early months of the pandemic.

We will therefore collaborate with colleagues during the development of the Trust's Estates Strategy to ensure that, along with Make Ready systems, consideration is given to the provision of Fleet Maintenance & Repair Workshops within the hub and spoke model.

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FLEET STRATEGIC THEMES

- Operational Need
- Fleet Agility
- Quality & Safety
- Sustainability & the Environment
- Digital Enablers

Theme 1   Operational Need

Delivery of Urgent & Emergency Care and non-emergency Patient Care Services to the population of Northern Ireland is our core business, at the heart of out-of-hospital healthcare provision. Our services are an important and integral part of the emergency and non-emergency healthcare environment, not simply transporting patients but providing advanced medical interventions to the 'sickest quickest' in the pre-hospital arena.

At the core of these services in the Trust's Fleet; a Fleet that must be fit for purpose, value for money, safe, efficient and sustainable in order to meet both the operational needs of the organization and the needs of our patients both now and into the future.
This will be achieved by ensuring:

AIM

We aim to continuously improve our Fleet Services to meet the needs of the organization and our patients over the lifespan of this Strategy

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- Vehicles are procured in accordance with HSC guidance and in line with the Trust's 5-year vehicle replacement programme

- The correct specification of vehicle is procured for the role the vehicle will undertake

- Fleet of the correct size and type to enable the organization, as it continues to grow and expand, to operate efficiently and effectively on a 24/7 basis across NI (Appendix A)

- An effective and proactive maintenance / servicing regime aimed at reducing vehicle breakdowns or unscheduled repairs, thereby reducing Vehicle off Road

- Collaborate with the Trust's Estates Department with regard to the development of a hub & spoke estate, to include vehicle maintenance workshops and the 'Make Ready' system

- Where possible, to work with other ambulance services, emergency and other healthcare providers to leverage combined purchasing power through centralized procurement.

- Maintenance and servicing is carried out in accordance with legal, manufacturer and Trust agreed requirements

- Collaborate with the PCS Review in order to improve reliability of our scheduled care transport

- A progressive approach to migrate vehicles to cleaner fuel technologies as options become viable

- Minimize, wherever practicable, carbon and other emissions and environmental issues

- Promotion of better driving and accident reduction

- Effective management of Fleet Insurance requirements

- Continue to use technology to better understand our fleet & logistics

- Continued introduction of telematics within vehicles

- Continued use of solar and battery storage technologies and other renewable energies to support off-grid travel across the Trust

Benefits

- Responsive to operational need

- Lower our carbon footprint

- Increased use of smart technology

- Increased vehicle availability

Measure of Success

- Right number and type of vehicle in the right place at the right time

- Delivery & commissioning of new and replacement vehicles to plan

- Vehicle compliance – MOT / maintenance / servicing

- Vehicle availability – reduced VoR rates

- Reduction in accidents

- Introduction of telematics within vehicles

- Introduction of 'Make Ready' system

- Introduction of Vehicle Maintenance Workshops across the Trust

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Working together   Excellence   Openness & Honesty   Compassion

Theme 2   Fleet Agility

The detail of this Strategy focuses on the next five years, until 2025. However, we recognise the need for flexibility and adjustment in order to ensure that it remains relevant and achievable as new and emerging innovations and technologies become available, particularly in terms of safety, efficiency, value for money, the environment and sustainability.

In an ever changing environment, this Fleet Strategy will need to be agile to meet operational needs and the needs of our patients. Fleet Services will demonstrate though the implementation of this Strategy that services will be provided flexibly and to an efficient and high-quality standard, and service provision, quality and performance will be reviewed on a regular basis.

> ## AIM
>
> **We aim to ensure the NIAS Fleet is fit for purpose, value for money, safe, efficient and sustainable both now and into the future whilst minimising, wherever practicable, carbon and other emissions and environmental issues.**

We hope to achieve these aims by:

- Achieving approval of our Fleet Replacement Business Case 2020-2025

- Effectively and efficiently managing the implementation of the fleet replacement programme over the lifespan of this Strategy. Replacing vehicles at the optimal time, scheduling regular maintenance with other servicing requirements and unplanned repairs to reduce downtime, and ensuring proper fiscal management are paramount.

- Working towards rebalancing our vehicle numbers and types to support the introduction of the new CRM and other key developments as they arise.

- Flexibility of fleet and equipment strategies to adapt to the changing operational environment in supporting our clinicians to provide more advanced clinical interventions and improved patient outcomes.

- Engaging with all departments within the Trust that use our vehicles to ensure provision of appropriate specialist single and multi-role vehicles within established funding. Engagement with vehicle design groups that assess the viability and clinical effectiveness of equipment and consumables will be critical to support the changing requirement, and input from operational staff, managers and trade union representatives will be instrumental in maintaining a frontline focus on the vehicle's clinical effectiveness

- Continuing to explore the market for vehicles to meet the requirements of the organization such as automatic gearboxes and potential hybrid and electric vehicles that meet load requirements. Already we are seeing the innovative development of a prototype A&E ambulance through the national Project ZERRO initiative (Box 2), however, the reality of this is still a number of years away.

- Delivering an operational fleet that is fit for purpose and affordable in conjunction with the Trust's operational, clinical and financial plans.
- Understanding the required number of vehicles to support ongoing operational delivery to provide best patient care and experience.

- Ensuring best outcomes for patients by having the right vehicle at the right place at the right time.

- Scoping the 'Hub and Spoke' structure within our Estates programme. The Trust's ambition to have a hub and spoke configuration, support by a 'Make Ready' system and incorporating services such as fleet maintenance, will enable us to become more efficient, thereby improving vehicle availability and reducing downtime.

Benefits

- Responsive to organization change

- Collaborative working with related key
- functions and stakeholders

Measure of Success

- Fleet Replacement Business Case approved and implemented effectively

- CRM Business Case approved and required number and types of vehicles procured

- Make Ready / regional Maintenance Workshops progressed through Estates strategy

Box 2: PROJECT ZERRO

Zero Emission Rapid Response Operations Ambulance

The project, funded by Innovate UK, is a collaboration between ULEMCo, London Ambulance Service, Mellor Coachcraft, Lyra Electronics and Ocado to:

• Build and demonstrate a zero-emission, fit-for-purpose emergency ambulance
• Average miles: 200 miles/day
• Expected Max range: 250 to 300 miles
• Supported by NHSI with input from other UK NHS Trusts
• 2.5 year project

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Theme 3   Quality & Safety

We are dedicated to providing operational and service excellence which is sustainable and innovative, putting our patients and frontline clinicians at the heart of what we do. We will demonstrate this commitment through delivering high standards of health, safety and environmental management.

AIM

We aim to continually improve our performance, always seeking to reduce risk. We believe in always doing the right thing and in doing it safely, without unnecessary risk to health or to the environment.

This aim will be achieved by supporting the following initiatives that underpin quality and safety:

- Conduct a review of the current Fleet management structure to ensure it is appropriately resourced to meet the requirements of this Strategy

- Establish an Accident Reduction Group aimed at promotion of better driving and reduction of accidents.

- Promote better driving: new recruits to PCS, A&E and Driving Instructor roles must undertake and successfully complete an appropriate formal ambulance driver training qualification before becoming operational – see Appendix B for further detail.

- Collaborate with the NIAS Regional Ambulance Training Centre and other related functions to ensure the timely planning and delivery of familiarization and training for all of our frontline staff when introducing changes to our Fleet, e.g. through the introduction of automatic gearboxes, hybrid and/or fully-electric vehicles and new technological advances related to Fleet and equipment.

- Ergonomic principles for safety in the workplace are included in vehicle design

- All vehicles procured include suitable safety systems and technologies to reduce risks to the driver, crew and patient

- Promote improvement of compliance with IPC standards: existing staff in patient-facing roles are required to undertake yearly IPC refresher training, rotating on an annual basis through e-learning and tutor-led programmes.

- Introduction of dedicated Vehicle Cleansing Operatives; improves response time performance and patient outcomes by increasing the number of hours frontline ambulance clinicians are available to respond and provide care to patients, otherwise spent cleaning and stocking ambulances; improves vehicle cleanliness and hygiene; supports compliance with IPC standards

- Work flexibly and efficiently to support the introduction of all new technologies within the Trust's mobile clinical

- Promote improvement of compliance with Infection Prevention & Control (IPC) standards; new recruits to all patient-facing roles must undertake and successfully complete IPC training before becoming operational. Training is incorporated into the following ambulance education programmes:

- PCS Students: Ambulance Care Assistant programme
- Emergency Medical Technician (EMT) Students: Associate Ambulance Practitioner programme

- Paramedic Students: Foundation Degree in Paramedic Science (and the forthcoming BSc in Paramedic Science programme).

working environment, i.e. the NIAS Fleet.

- Review opportunities to use low emission vehicles and alternative fuels as they come onto the market.

- Contribute to the development and implementation of a new Quality and Safety Strategy to further enhance Fleet Services.

- Encourage our staff to be physically active by replacing car journeys with cycling and walking (where appropriate and feasible) to improve their health and wellbeing.

Benefits

- Effective contribution to the Trust's quality and safety priorities

- Collaborative working with related key functions and stakeholders

Measure of Success

- Reduction in accidents & incidents

- Improved IP&C compliance

- Improved health and wellbeing of our staff

- Reduction of carbon emissions

- Achievement of roll-out of new technologies related to Fleet

Theme 4   Sustainability & the Environment

While COVID-19 is posing an unprecedented challenge globally, there is increasing recognition of the Climate Crisis as the greatest global challenge we face in this century. Within the 2015 Paris Climate Change Accord[1], 197 countries agreed to set emission targets that would limit global temperature rise by 1.5 degrees Celsius by capping greenhouse emissions at "net zero" – or absorbing as much carbon as they emit – by 2050.

The UK Committee on Climate Change advice for Government is to reduce Greenhouse Gases (GHG) to zero by 2050. The UK Clean Air Strategy 2019[2] has also said that air pollution is the top environmental risk to human health in the UK.
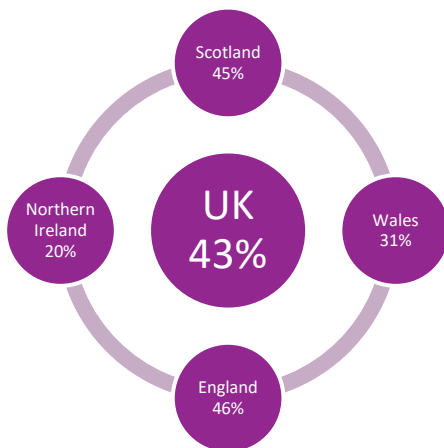
TEDxStormont 'Countdown'

TEDxStormont 2020 hosted 'Countdown' – a global initiative to champion and accelerate solutions to the climate crisis, turning ideas into action. The online event, broadcast from Belfast, took place on Saturday 10 October 2020 as part of the global launch. Nichola Mallon, NI Minister for Infrastructure, gave the following stark warning in her keynote speech:

> *"There is no doubt that climate change is the single biggest environmental crisis we face today. It is an emergency. Meeting the net zero target by 2050 is too late. We can't wait. We, all of us, must act. And act now."*

Figures published by the Department of Agriculture, Environment and Rural Affairs (DAERA)[3] in June 2020 revealed that NI is hindering the UK's net zero progress, as demonstrated in Figure 1 below.

Figure 1

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[1] United Nations Paris Climate Agreement (2015)
https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

[2] UK Clean Air Strategy (2019)
https://www.gov.uk/government/publications/clean-air-strategy-2019

[3] Northern Ireland Climate Change Adaptation Programme (2019-2024)
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NI is currently the only region in the UK and Ireland without any specific legislation to tackle the global crisis. However, an announcement made on 21 October 2020 confirmed that a Climate Change Bill, developed by a group of legal experts, scientists, academics and environmentalists, is to be presented to the NI Assembly. The draft legislation declares a climate emergency and proposes a series of targets to cut carbon emissions.

The Bill envisages NI being carbon neutral by 2045 by cutting emissions across energy, transport, business, waste management and agriculture. The introduction of this legislation will build on a commitment within the New Decade, New Approach agreement[4] to reduce greenhouse gases.

> **AIM**
>
> **NIAS Fleet Services is highly conscious that operating a large fleet of vehicles of various types has obvious environmental impacts. We will therefore, until the targets within the NI Climate Change Bill are known, where possible, replace our vehicles on a year on year basis with greener and environmentally friendly vehicle capabilities to reduce GHG emissions and related pollutants, reduce fossil fuel consumption, and protect the environment.**

How we hope to achieve this aim is described below:

GREEN VEHICLES

A&E and PCS
Whilst ideal reduced or zero carbon emission alternatives for our double-crewed A&E and PCS vehicles are not currently available, we do know that the market is changing and we expect a new range of vehicles to be available within the lifespan of this Strategy.

For example, work is in progress nationally through the Project ZERRO initiative, as identified within the NHS publication Delivering a 'Net Zero' National Health Service[5], to work towards road-testing for what would be the world's first zero-emission A&E ambulance by 2022.

We will therefore continue to collaborate with UK Ambulance Trusts through the National Ambulance Strategic Fleet Group, and others, in relation to Project ZERRO and other fleet manufacturer developments of greener vehicles.

We plan to trial reduced or zero carbon emission A&E and PCS vehicle options, subject to market availability (and subject to business case approval and related investment), in order to test our true requirements and gain operational feedback.

Emergency Response Cars
NIAS is conscious that we do not currently meet the UK Government's 2020 target of 95g c02/km for cars. We are therefore currently piloting a number of BMW i3 electric cars with range extenders with anticipated combined C02 emissions of 13g/km.

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[4] New Decade, New Approach, January 2020
[5] Delivering a 'Net Zero' National Health Service, January 2020

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It is our aim to replace a minimum of 50% of our emergency response cars with either hybrid or fully electric fuel capabilities, over the lifespan of this Strategy, subject to the availability of suitable options and related investment.

Electric Vehicle Charging Points

The Trust will continue to roll out charging points across our estate in order to support the implementation of a strategy of hybrid and electric vehicles. Fleet Services will work closely with our Estates colleagues in this regard.

The Estates Strategy will provide more detail on the Infrastructure requirements and options.

It should be noted that electric vehicles will reduce our fuel costs, but an increase in electrical usage will occur, which will require an adjustment to budgets; however, our ambition to use renewable energy across our Estate will have a considerable impact on our CO_2 emissions.

Other initiatives include:

- The implementation of sustainable/green management practices to adopt cleaner fuels and technologies

- Embedding green criteria in the fleet procurement process to significantly reduce GHG emissions and air pollutants from vehicles

- Seeking out greener energies for our vehicle system power such as hydrogen fuel cells and power

- Continue to measure emissions from our fleet and develop comparison calculations for ultra and low emission versus petrol & diesel vehicles in order to inform future decisions

- Monitor electricity consumption from electric charging points

- Implement a fuel management monitoring system and robust data capture to ensure savings and fuel consumption are tracked

- Utilising vehicle management information systems, we will aim to improve vehicle and driver performance to improve efficiency and reduce environmental impact

- Ensure additional and replacement emergency response cars are fitted with Start/Stop technology to minimise unnecessary engine idling and fuel usage, thereby reducing vehicle CO2 emissions.

- Continue to fit ECO-RUN, an automatic idling control system to A&E vehicles to reduce unnecessary idling and fuel usage, thereby reducing vehicle CO2 emissions.

- Continue to retain and recondition specialist parts such as ambulance seating and locking mechanisms from decommissioned vehicles for re-use when required.

- Continuing to collaborate with other regional emergency services in order to share learning and best practice in terms of the development of a greener fleet.

- Continuing to work nationally with the relevant groups to shape and influence the direction of future ambulance Fleet services and vehicles

- Promoting alternative forms of transport and encouraging our staff to

- Continue to Introduce vehicle-based renewable energy systems; high efficiency solar panels fitted to the roofs of A&E vehicles.
- Continue to recondition high value items such as emergency lighting systems in cars, doubling the lifecycle from 5 to 10 years;

- Safe disposal of batteries

consider if business travel is needed (Box 3).

- Continued use of solar and battery storage technologies and other renewable energies to support off-grid travel across the Trust

Longer Term Strategy

- Meet government climate and environmental targets

- Continue to monitor alternative fuel vehicle development

Benefits

- Responsive to organizational change
- Contribute to the green agenda

Measure of Success

- Sustainable/green management practices to adopt cleaner fuels and technologies implemented

- Green criteria embedded in Fleet procurement process

- Procurement of low emission emergency response cars

- Systems in place to measure emissions from fleet and comparison calculations developed for ultra and low emission versus petrol & diesel vehicles and used to inform decisions

- Systems in place to monitor and report on electricity consumption from electric charging points

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Box 3: PROMOTING THE GREEN AGENDA

Travelling to the Workplace
Encourage staff to consider alternative ways of getting to and from the workplace, such as:

- Cycling and walking (where appropriate and feasible) for increased wellbeing
- The use of public transport or park and ride schemes
- Car sharing
- Promote the Cycle to Work Scheme
- Provide electrical vehicle charging facilities to encourage the purchase of low emission vehicles
- Actively promote the benefits of hybrid and electric vehicles

Business Travel
This Strategy is also linked closely to the Digital Strategy, helping to promote remote working and communication technologies to reduce our actual business travel around the region. We will encourage staff to review travel options available to them, which can increase efficiency, reduce travel time and mileage and minimize emissions, such as:

- Can you reduce travel by working remotely?
- Does there need to be an 'in person' meeting? Will an audio or web conference meet the business need?
- Can a more sustainable mode of travel be used such as walking, cycling or public transport?
- Is there a low emission vehicle available?
- Can the journey be shared with a colleague?
- What is the best time for the meeting to minimize journey disruption?

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Theme 5 Digital Enablers

The Bengoa Report[6] states '*To deliver a sustainable world class service into the future will require all of us to work together very differently. We need an infrastructure that makes this possible'.*

NIAS recognises that the optimisation of technology utilisation and improvements in connectivity across NIAS vehicles, systems and the wider HSC will greatly enable and support the delivery of our emergency and non-emergency care services. It is widely acknowledged that the ambulance vehicle (including emergency response cars) is the key operating environment for the frontline ambulance clinician and it is essential that through the use of digital technology we can support our mobile and regional workforce.
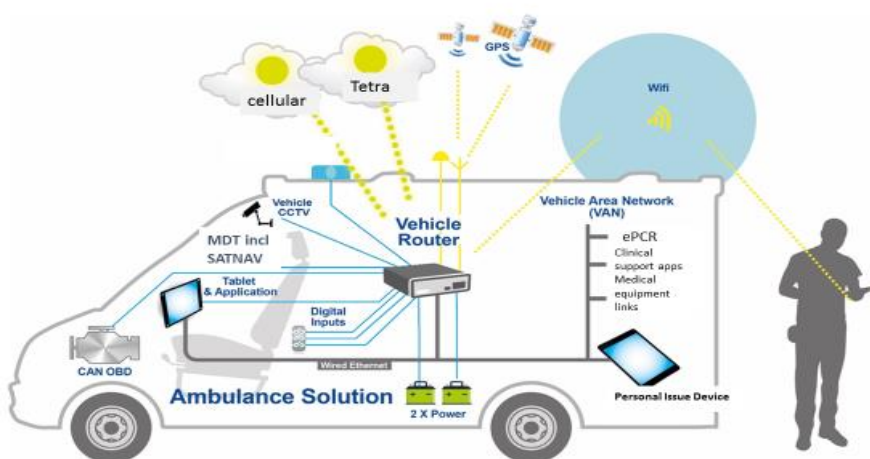
Our vehicles are now connected hubs, able to receive and send critical data relating to calls and patients across the secure NIAS network. Within each vehicle there is a secure vehicle area network (VAN) for two-way communication between NIAS command and control systems and vehicle devices as well as externally supporting the transmission of patient clinical data in advance of arrival at Emergency Departments (EDs). The ambulance is a 'connected' mobile treatment centre benefitting from technological advances in clinical equipment and logistical tracking of assets.

The Trust is making enormous progress to achieving the above ambition through its **REACH** programme - **R**egional **E**lectronic **A**mbulance **C**ommunication **H**ub.

The aim of **REACH** is to build an 'end to end' electronic solution for patient records, replacing the current paper based system, supported by personal issue devices and a vehicle communications infrastructure and technical infrastructure to enable data sharing between NIAS systems and the wider HSC.

The key objectives of **REACH** are:

- Supporting the patient journey from the 999 call to the patient destination
- Improving patient safety and the reduction of risk with real time data and clinical decision support tools available at scene

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[6] Systems, Not Structures (October 2016)
https://www.health-ni.gov.uk/publications/systems-not-structures-changing-health-and-social-care-full-report

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Significant developments achieved to date include:

- Mobile data systems now on a single platform that allows seamless switching between Emergency and Non-Emergency staff to support call response

- Communications technology installed within the frontline ambulance fleet, i.e. A&E, PCS and emergency response cars. This includes the ability to support up to 4 cellular networks and the tetra network for radio communications technologies, including a wired Ethernet interface, Wi-Fi as a 'hot spot' access point for devices within the vehicle.

- Black box technology

- MDT – mobile data terminal. Smart based tablet fixed at the front of the vehicle with software for the allocation and mobilisation of vehicles. Two-way communication is supported from CAD systems at command and control with mobile data systems in the vehicles to receive critical call information and provide status updates back to control. The MDT also has in-built satellite navigation systems.

- Roll-out of new Digital Trunk Radio – base radio and hand-held portable radios. Radios also act as pagers linked to the MDT system for when crews are away from the vehicle

- CCTV/Dashboard footage

- **Roll-out of the ePCR (electronic care record) – an end to end electronic solution for recording patient clinical records**
  - integrated with command and control systems to receive call and known patient information;
  - integrated with the master patient index for Health & Care Number look up in the mobile environment;
  - integration of medical devices with the ePCR
  - ability to transmit patient information, observations, any change in condition, ECG reading etc. to Clinical Workstations in EDs
  - onward transmission of ePCR to the ED whilst en-route to the hospital

- **Personal Issue Electronic Devices**
  - Windows tablet - allows access to the NIAS network, Sharepoint, emails etc.
  - Mobimed smart software for e-PCR

Benefits

- Improved patient care through use of technological advances

Measure of Success

- 100% of vehicles have a Wi-Fi communications infrastructure

- Regional Wi-Fi across our estate and in vehicles

- Flexible access to systems and services, any place, any time controlled by business need

- Use of technology to better understand our fleet and logistics

- supported by cellular and tetra networks

- Key call and incident data is communication to and from vehicles via the central communication hubs

- All frontline staff are accessing NIAS networks and systems from the vehicles

- Integration of medical devices with patient systems

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COMMUNICATION & ENGAGEMENT

Significant communication and engagement took place during the development of this Strategy to get it to where it is today, with individuals and groups such as:

- CRM Programme Director
- Fleet Manager
- Cenex Low Emission Vehicle Research & Consultancy
- Projects Development and Implementation Manager
- Clinical Training Manager
- NIAS Driver Training Advisory Group (DTAG) Representative
- NIAS Fleet Group
- NIAS Chair and Chief Executive
- Senior Management Team
- Operational Managers
- Trust Board

A sincere word of thanks goes to all those who had a keen interest in the development of the Strategy and provided many positive contributions.

CONCLUSION

This Strategy outlines an ambitious programme of work for over its lifetime up to 2025, agreed with those listed above. It will require tangible investment in NIAS; the programme of work cannot be realised without approval of the Fleet Replacement Business Case 2020-2025.

The implementation of this Strategy and achievement of milestones will be monitored by NIAS Governance processes through regular highlight reports so that we can adapt to changing circumstances, measure progress and manage risks along the way.

Priority Actions

1.	Achieve approval of our Strategy and develop a supporting business case to secure funding for a Fleet Replacement Programme 2020-2025.
2.	Review the Fleet Management structure to ensure it is resourced appropriately to meet the requirements of this Strategy.
3.	Meet the operational need for Fleet in terms of vehicle numbers, type and configuration.
4.	Ensure the stability of the age and mileage profile of the Fleet through effective management of the fleet replacement programme.
5.	Ensure the timely procurement and availability of additional vehicles to meet the requirements of the CRM programme.
6.	Ensure vehicle specifications conform with relevant safety guidelines and specifications.
7.	Trial, through the approval of a business case, reduced or zero carbon emission A&E and PCS vehicle options, subject to market availability, to test our true requirements and gain operational feedback.
8.	Replace a minimum of 50% of emergency response cars with reduced or zero carbon emission options, subject to market availability and investment.

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Appendix A: Vehicle Types

Below is a description of the main types of vehicles currently in use within the NIAS Fleet and an overview of the roles each perform.

Accident & Emergency (A&E) Ambulance

A&E ambulances (as used by the majority of UK and Ireland ambulance services) have a chassis/cab base construction with a chassis weight limit of 5.5 tonnes. A&E ambulances require the grater chassis weight limit to facilitate the clinical workspace requirement and the extra equipment carried (both medical and operational, such as mechanized tail lifts). These ambulances are specifically designed for the pre-hospital treatment and transportation of the most seriously ill patients. Patients are provided with the highest standard of pre-hospital care at the scene of their illness or injury and during their journey to hospital. A&E ambulances are based on light commercial vehicles and are a chassis cab with a modular body. They incorporate sophisticated control systems to safeguard vehicle reliability, patient monitoring and communications. They provide a mobile treatment centre for the practice of life-saving paramedic interventions at the point of need.

Rapid Response Vehicles (RRV)

RRVs are deployed to life-threatening calls as a first response and are crewed by an individual paramedic. They are intended to quickly deliver enhanced clinical care and patient outcomes through early arrival, assessment, intervention, treatment and care. The RRV fleet comprises of 43 vehicles. Where possible, these will be four-wheel drive to enable them to access the varied terrain they encounter in the course of service delivery.

Though they do not transport patients, RRVs do carry equipment similar to a full scale A&E ambulance. The mode of operation is that they remain available for the majority of their shift times (due to the non-transport element) and they remain out in the community rather than being based in ambulance stations. Thus the activation times, travel times, and unavailability times are all kept to a minimum.

The early presence of a paramedic at the scene of an incident, or seriously ill patient, can improve the outcome for the patient and also speed up the management of the incident by having the patient ready for transportation on arrival of the A&E ambulance.

Patient Care Service (PCS) Vehicles

PCS vehicles are a less complex vehicle than A&E ambulances and are a van conversion (similar in nature to a large minibus) with a chassis weight limit of 3.5 tonnes. The non-emergency PCS ambulance provides transport and care for patients travelling to hospital for pre-planned appointments, patients travelling between hospitals and thereafter for discharge to home.

The PCS is increasingly used to carry out an Intermediate Care Service (ICS) in order to transport and transfer patients who require more than basic care. Intermediate Care Vehicles (ICV) are used to transport patients with mobility difficulties or who require some clinical intervention such as oxygen therapy, but not a paramedical level of care. These vehicles are adapted to accommodate wheelchairs and stretcher and bariatric patients.

As a result, non-emergency patient transport work is becoming more specialized and with inter-hospital transfers requiring the use of trolleys rather than wheelchairs (or no assisted movement), fewer patients are being carried per vehicle across the PCS/ICS as a whole, thereby increasing the number of journeys.

NIAS has commenced a dedicated review of the Patient Care Service, the finding of which will inform the future profile of the NIAS Fleet.

Emergency Planning and Hazardous Area Response Teams (HART)

These are specialist vehicles designed to support the management of major medical emergencies or incidents by providing communications and specialist equipment at the scene of major incidents or mass casualty events. HART vehicles are also a mix of vehicle types that provide further equipment for specialist hazardous operations e.g. rescue from height, chemical incidents, mountain or difficult terrain and confined space rescue. These vehicles do not transport patients.

NI Specialist Transport and Retrieval Team (NISTAR)

These vehicles are of a similar design to A&E ambulances with increased medical equipment and doctor-led specialist teams for the transportation of acutely sick babies, children and adults. The service is based in Belfast; however, it operates throughout NI, including transportation of patients to specialist centres throughout the island of Ireland.

Management and Support vehicles

The vehicular requirements of divisional management are determined by the roles and responsibilities of the management team.

There are five officers currently on-call who must respond to a major incident at any time after 5pm Monday to Friday and twenty-four hours a day on Saturday, Sunday and public holidays. In addition, pagers will alert all officers to a major occurrence and those who are available will respond in their vehicles and be tasked appropriately to the incident. These officers' vehicles carry basic life-saving equipment and management protocols for major incidents and for serious incident management.

During normal working hours these vehicles are available for incidents in addition to facilitating operational management of a geographical area in terms of estate, human resource and fleet resource management.

Maintenance and Stores Vehicles

Maintenance and Stores vehicles are all currently based in Belfast and provide an 'out-of-hours' on-call service, breakdown recovery and minor repairs. The staff who provide the maintenance and stores 'out-of-hours' service are also required to play their part in major incidents by driving to the scene and managing the Emergency Communications Vehicle and Emergency Equipment Vehicle.

Appendix B: AMBULANCE DRIVER TRAINING PROGRAMMES

A suite of ambulance driving qualifications have been developed and regulated to meet the core requirements of NHS Ambulance Trusts, Independent Ambulance Services and Voluntary Aid Services for learners working or intending to work in patient transport and urgent & emergency care.

Developed by Futurequals in partnership with the NHS Ambulance Service Driver Training Advisory Group (DTAG), these qualifications meet the requirements for ambulance service drivers to claim exemptions under the Road Traffic Act and to operate to the specification of the high-speed driver training regulations of the Department for Transport.

FAQ Level 3 Award in Patient Care Services: Ambulance Driving	The purpose of this qualification is to provide the learner with the skills, knowledge and understanding necessary to drive a range of patient care ambulance vehicles safely and commensurate with patient safety and vehicle empathy.
FAQ Level 3 Certificate in Emergency Response Ambulance Driving	This qualification has been developed to meet the core requirements of NHS Ambulance Trusts for learners working or intending to work as emergency clinical practitioners and emergency care support staff. The requirement for competency is safe response to emergency calls and the conveyance of patients to the definitive place of care.
FAQ Level 4 Diploma in Emergency Response Ambulance Driving Instructure	This qualification provides a trainee Ambulance Driving Instructor with the enhanced knowledge, behaviours, understanding and skills required to instruct, coach, support and assess learners in the delivery of routine and emergency response and demonstration driving, including knowledge and understanding of the driving legislation, regulation, standards and agreed ways of working to a safe and competent level as set out in the High Speed Driver Training Competencies. Learners will understand the Human Factors that can influence attitude to risk for a developing emergency response ambulance driver, focusing on 3 main areas: completion of the Ambulance Driver Risk Index, developing a working knowledge of the Goals for Education framework and completion of the Driving Instructor Ambulance Driver Risk Index to measure progress and development.

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