Strategic Board

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Essex Police Digital Strategy 2021 to 2026

Introduction

Essex Police's 2020 – 2025 Digital Strategy has the Force Plan at its core. Aligning with, while also pushing the boundaries of, the national digital strategy, it sets out the force's core principles for prioritising digital change and innovation to ensure officers and staff are skilled, equipped and enabled in a constantly evolving and fast moving digital world. Importantly, the digital strategy does not work in isolation but with a series of strategies across the force all of which are designed to support the force plan in ensuring we keep people safe, catch criminals and help people.

This ambitious digital strategy is underpinned by an equally ambitious digital plan. While the plan will adjust and flex in response to the changing nature of crime and the world in which we live, the strategy provides a consistent framework for allocating resources and prioritising change and innovation in a vast and complex digital landscape.

Essex Police is committed to remaining relevant in the digital age and this strategy sets out how we intend to do so while also leading the way in policing.

Section 1: What is our strategy and what is it for?

The purpose of this strategy is to provide a persistent guide to digital change in Essex Police over the next five years. The strategy is supported by a digital plan that will vary over time in response to a wide range of factors including the needs of the county and its citizens, the changing nature of crime, the force plan and technology itself to name but a few. However, the strategy, and the vision and principles within it, will remain the same providing a persistent guide to the digital plan.

The National Digital Data and Technology Strategy 2020-2030 was launched at the Police ICT Summit in January 2020 and sets out a new digital ambition for UK policing. It presents a set of tangible digital priorities and outlines the key data and technology building blocks required to deliver them.

In addition, the national strategy sets out seven digital trends expected to continue over the next 10 years, as well as a 'policing futures framework' which identifies the main technological areas likely to impact the police and the communities they serve. The technology framework is a list of technologies which this strategy supports as those currently known and likely to be prevalent over the next 5 years.

Notably the national strategy recognises five priority areas; seamless citizen experience, addressing harm, enabling officers and staff through digital, embedding a whole public system approach, and empowering the private sector. This strategy will adopt these five areas to frame the priorities for 2020 to 2025.

Taken together the digital trends, priority areas and the futures framework (see appendices) detailed in the national digital strategy offer a useful frame of reference for local police forces. In terms of current digital change projects and development there is a strong link between the national and local vision as well as the priorities and digital trends. Essex Police's strategy will therefore align to these three elements of the national strategy. set out below.

Section 2: The Vision – what do we want to be and why?

Essex Police is digitally ambitious and looks to lead the way in policing; using digital technology to help people, keep them safe and catch criminals by embracing the opportunities technology provides in an ethical and responsible way; that maintains public trust and confidence.

The force also recognises the need to remain relevant in the digital age in order to reflect the communities we serve, and this means that officers and staff must be skilled, equipped and enabled for the digital age. In addition, the organisation needs to be sufficiently agile to respond to the speed of technological change and the resultant impact on the way people live and work.

The national strategic assessment (2020) paints a vivid picture of the threat from organised criminals and their use of technology. This is a threat which will impact Essex as county in many ways. It is therefore essential that Essex Police are skilled, equipped and enabled to protect the county.

This strategy will therefore ensure that Essex Police recognises the threat from serious organised crime and other criminals inherent in the use and proliferation of digital technology to commit crime and prey on the most vulnerable in our community. For this reason, Essex Police will ensure that it continues to invest in its officers, staff and capability to tackle cyber and digital crime, with a particular focus on children and vulnerable people and the victims of crime. In so doing the force is committed to working with partners from academia, the third sector and the technology sector.

Section 3: The thinking behind the vision – why do we need a vision and what drives digital change?

The vision is important in that it sets the strategic direction of the digital strategy in a short and easily understandable way, that people can interpret and apply using the strategic principles in section four (which provide further detail).

As set out in section one, this strategy aligns to three key elements of the national police digital strategy namely: the seven digital trends; the five key areas; and the futures framework. In relation to what drives digital change the digital trends and the futures framework are particularly relevant. The seven digital trends are identified as:

- Global, borderless, online crime
- Growing density of our digital lives
- Vulnerability to digital distortion
- The impact of bots, algorithms, automation and big data
- Complex convergence of our digital and physical realities
- New crimes, and new victims, enabled by digital
- The future of work

This strategy includes one more:

Digital ethics and surveillance

To understand what drives digital change; and therefore, the thinking behind the vision and the core strategic principles in this strategy it is necessary to look at each trend in turn.

Global, borderless, online crime — this is in fact two trends in one; globalisation and borderless online crime. The world is much smaller. The internet connects everyone and everything, there is huge visibility of the way in which we work and live, and the opportunity to commit traditional crime in new ways has made traditional criminal justice outcomes redundant in many ways. This is either because the criminal is operating outside of the UK or because the volume and speed of online crime cannot be policed and responded to by traditional methods. This means that keeping people safe must place a greater reliance on prevention and this is therefore one of the core principles of this strategy.

Growing density of our digital lives – refers to the proliferation of digital devices and the impact of digital technology on our lives. There is no aspect of daily life which is not touched by digital technology. Our homes are filled with digital devices from smart TVs, mobile phones, digital doorbells and smart speakers and many others. Each device presents an investigative and evidential opportunity but also an opportunity for criminal activity. For this reason, it is important that the police can respond to, and deal with, both sides of the equation. We must ensure our officers and staff are skilled equipped and enabled to gather evidence and use the digital opportunities these digital devices offer. But we must also ensure that we safeguard and protect those who are vulnerable to, or who are victims of, crime. This

is not limited to digital crime as every crime will have digital elements, but we need to recognise that digital crime can have a significant impact on vulnerable groups. Therefore, ensuring that our officers and staff are skilled, equipped and enabled and prevention are both core strategic principles of this strategy.

Vulnerability to digital distortion – refers to the difficulty of separating fact from fiction in the digital age, sometimes referred to as post truth era. This is where more than one digital change has created an environment where it is sometimes hard to discern the truth. The first of these is the concept of the filter bubble, this is where social media groups, forums and chat rooms allow facts to be filtered down to the extent where only part is viewed, without the viewer or reader necessarily being aware that what they are seeing in not everything or just one single view of the truth. The second is the sheer volume of information and data available, with the result that it can be difficult for organisations and individuals to keep up. Finally, the world of the creation of news and media content is no longer the preserve of professional journalists and anyone can create a story and take photos on mobile devices that can travel around the world in minutes. Because of these changes, particularly the speed and open media creation, fact checking is limited, and digital distortion can occur. Essex Police is committed to the use of multi-channel communication with individuals, communities and the county as well as partners and other stakeholders. Therefore, the force will use digital technology to know and understand our communities both collectively and as individuals to keep people safe, catch criminals and help people. In addition, Essex Police will ensure its communications are accurate, and that all media, news information and research used and considered as part of an investigation, enquiry or policy development will be verified and checked to the best of our ability. This is a core strategic principle.

The impact of bots, algorithms automation and big data — this trend has many different aspects but the main thing they all have in common is Artificial Intelligence (AI), machine learning (ML), automated processes and the automated processing of data to provide insight and intelligence. In policing and other sectors algorithms and big data allow organisations to use the power of computing to make sense of vast amounts of data to help tackle issues and problems, automate processes and activity to save resource and drive efficiency. This technology is used globally and has been transformational, and in order to remain effective and relevant the police need to embrace the same technology and efficiency that have become prevalent in other sectors but must do so responsibly and ethically with enough transparency to retain the trust and confidence of the public. Essex Police seeks to take a leading role in pushing the boundaries of technology to keep the people of Essex safe, help people and catch criminals. However, we will do so in an open and transparent way, ensuring ethics is at the heart of our use of technology, and that decisions are always made by people and not machines. Therefore, these elements form part of the core strategic principles in this strategy.

Complex convergence of our physical and digital realities — this trend covers virtual and augmented reality, virtual currencies, complex technologies such as blockchain, as well as the general adoption of digital technology by society. Technology allows us to have virtual experiences, undertake virtual training, enjoy immersive gaming with friends all over the globe, use currencies that have no physical reality, and live our lives in both the real and virtual world. This technology is still evolving and developing and will increasingly impact on the way the police operate and the way in which crime is committed and harm occurs in our society. Essex Police is committed to ensuring that its officers and staff are skilled, equipped and enabled to use these technologies and opportunities to protect and serve Essex as well as to operate effectively to counter harm and criminal activity which utilises the same technology. For this reason, the commitment to the force being skilled, equipped and enabled is a core strategic principle of this strategy.

New crimes, and new victims, enabled by digital – this trend is about new crimes that are now possible as a result of digital technology, the effect they have on the most vulnerable in our society and more traditional crimes committed in new ways. In summary, cybercrime is made possible by technology and covers hacking and ransomware for example, traditional crime in new ways includes for example frauds that are committed online, and new victims are those whose safety is affected by the reach and industrialising effect of the internet. Cyber bullying, online grooming, and sextortion are examples of new harms that can impact on new victims who are some of the most vulnerable in society.

Another area which has been significantly impacted by digital technology and opportunity is Child Sexual Exploitation. The internet age has allowed communication, links between offenders and cross border activity, including live video streaming to order, allowing offenders to adopt patterns of offending and behaviour which were previously unimaginable.

Essex Police will invest in activity which will prevent and safeguard our communities against the digital elements now inherent in more traditional crime and provide support and advice to victims to avoid further harm. The force will be mobile and agile - to maximise resources and serve our communities through locally visible policing in both the real and digital community.

The future of work — there are many aspects to this trend which covers the impact of the digital age on the way that we work and the type of work that will be available. It is already possible to identify new businesses that are very successful with hardly any employees, such as Uber and Airbnb. Digital technology has impacted on traditional industries and businesses such as travel with the rise of online booking through sites such as Expedia and factory production most of which is now done by a combination of sophisticated machines, robotics and artificial intelligence with very few people remaining on the production line. The change is the way we work shows every indication of speeding up, and the rise in online shopping and the demise of the high street is another example of a sector going through massive and speedy change. In addition, technology offers the opportunity for organisations to be more mobile, agile, and flexible in terms of where people work from. As with other areas this trend offers great benefits as well as a greater potential for harm. Whilst the opportunity exists to be more flexible in terms of location and hours, working in this way can be isolating and could lead to

a less social society, especially when coupled with the rise of on-line communication. Add to this people who are less informed as a result of the trend towards digital distortion, and the potential for the broader fragmentation of society is clear. The increase in online activity makes people more vulnerable to cyber and online crime from fraud to sextortion and cyber bullying. The challenges for the police as a result of this trend are significant and some elements such as the change in the way we work are difficult to predict. Essex Police recognise the need to respond to the potential for harm to individuals and the county as a whole, and in particular the impact on the most vulnerable, as well as the need to be flexible and agile in the way the force works as well as reflecting the communities it serves. It is for this reason Essex Police will focus on prevention, being skilled equipped and enabled, mobile and agile, and will invest in the response to cyber and online crime.

Digital ethics and surveillance – this trend is in addition to those contained in the national strategy. In recent years there has been an increased focus on digital ethics in relation to the use of data and surveillance technology. Concern has been raised in relation to predictive policing, the use of algorithms and 'black box' policing as well as facial recognition. This will remain an area of concern for the public and will continue to attract scrutiny, oversight and increased regulation. Essex Police is committed to transparency and taking an ethical approach in relation to the use of data and digital technology, and for this reason this commitment is a key element of this digital strategy.

Section 4: The Core Strategic Principles – driving a consistent pattern of behaviour over time.

In order to respond to the trends identified above the force has identified 10 core strategic principles which will underpin the development and use of digital technology in the force. Whilst the plans which support the core principles will adapt to changing circumstances, the 10 principles will provide a frame of reference to drive a consistent pattern over time. It is anticipated that this ability will be critical given the likelihood of increased budgetary challenges over the next few years.

Essex Police will be at the forefront of digital policing leadership and practice and will ensure that officers and staff:

- 1. Are digitally skilled, equipped & enabled are trained and supported to use technology effectively in their role, are confident and empowered to use technology responsibly and have the right equipment to keep people safe from harm in the digital age, help people and catch criminals. Essex Police will seek to devolve as much digital skill and technology to the frontline as possible enabling officers and staff to self-serve the majority of their digital needs with support from specialist teams across the force. This will enable specialists to focus on the more complex and demanding work ensuring scarce skills and resources are maximised.
- 2. Are data driven with data at the heart of the force to provide insight and action.
- 3. Use digital technology to know and understand our communities both collectively and as individuals to keep people safe, catch criminals and help people. In addition, Essex Police will ensure its communications are accurate, and that all media, news information and research used and considered as part of an investigation, enquiry or policy development will be verified and checked to the best of our ability.
- 4. **Are mobile and agile** to maximise resources and serve our communities through locally visible policing in both the real and digital community.
- 5. Work with the partners for the benefit of the people of Essex including the technology sector, academia, the third sector and other partners to solve problems and keep Essex safe. Essex police is committed to being an intelligent customer in the technology and digital marketplace.
- 6. Are innovative and take a leading role in digital policing to benefit Essex and the wider police family Essex Police has a 'cautious' risk appetite in accordance with the ICO definition. This means the force is "willing to accept/tolerate a degree of risk in selecting which activities to undertake to achieve key deliverables or initiatives, where there is scope to achieve significant reward and/or realise an opportunity; or activities undertaken may carry a high degree of inherent risk that is deemed controllable to a large extent."
- 7. Prevent and detect digital crime with a focus on vulnerable groups in our communities Essex Police will invest in specialist teams to ensure that the force is able to prevent and detect digital crime, but will also ensure that all officers and staff are able to provide an effective response through ensuring they are skilled, equipped

- and enabled. Although Essex Police recognises the importance of prevention in the digital age, the force will also invest in the investigation and detection of digital crime as well as all crimes with a digital element. There will be no decrease in focus in terms of pursuing those who commit crime within in our communities.
- 8. Prevent and safeguard against the digital elements now inherent in more traditional crime and provide support and advice to victims to avoid further harm as well as developing an effective response to cyber and digital crime, the force will invest in skills and technology to tackle the digital aspects now present in all investigations and to safeguard those within local communities. This includes ensuring the assessment, preservation and use of digital evidence in accordance with best practice and to seek the best outcome for victims.
- 9. Ensure digital ethics are at the core of the use of technology whilst seeking to embrace digital technology and opportunities, Essex Police will do so whilst ensuring transparency and accountability in order to retain the trust and confidence of the public. The force police with the consent of local communities and will take active steps to use technology ethically and responsibly. Essex Police will continue to use and develop its data ethics framework to ensure all activity which uses data has an ethical basis. In so doing the force will align to best practice from across the public sector and the Department of Culture, Media and Sport.
- 10. Digital change will be led by the needs of everyone to deliver the best service to the people of Essex this means that the focus of digital change will be on delivering the force plan and its priorities. The delivery of all digital projects will have users at the heart of the design for the benefit our communities.

Section 5: How we will understand, interpret and apply the strategy – a persistent guide to the plan

This strategy sets out our vision and the case for change, as well as the strategic principles that will provide a consistent pattern of behaviour over time for the life of the strategy. This section covers how the strategy can be understood and applied to serve as a persistent guide to the plan which underpins it.

In simple terms the strategy sets out, at a very high level, what the force wants to achieve and look like to operate effectively in the digital age and respond to the trends identified in section three. The strategic principles are the points of reference against which all proposed activity, projects and developments will be assessed.

Over the life of the strategy, the plan designed to deliver it will develop and change in response to influences such as resourcing and budgets, the emergence of new technologies and crime types, legislative change, budgets, societal changes and national developments. While the plan may adapt to accommodate any, or all of these influences, the core principles in the strategy will provide a persistent guide to what is important, against which any change can be assessed. The drive for consistency across a set of agreed core principles is especially important in times of competing priorities for scarce resource. The core principles provide an effective set of principles against which benefits can be assessed and measured.

The digital landscape affects all areas of Essex Police and ideas for digital change and innovation will come from many different sources both internally within the force or externally. Irrespective of where the idea, innovation, concept, project or change originates, there will be consistent governance across the organisation and to some extent its core partners. In the context of governance, the core partners are Essex Police, Kent Police and the seven-force region. (The force also has other partners for individual projects.)

Strong governance will ensure the strategy is adhered to when any change or re-evaluation of existing projects, programmes and resources is considered with the 10 core principles providing a consistent framework. Chief Officer direction will be set by the Chief Officer Group, with co-ordination, deconfliction, interdependencies and savings opportunities managed through the Digital Transformation Oversight Board which bring key senior stakeholders and decision makers together. The strength of the strategy lies in its ability to be persistent over the next five years, irrespective of changes in governance structures. The core principles can be used by Chief Officers and leaders to assess resources, priorities, projects and ideas. The plan can, and probably will, change but the principles will not.

Appendix A Summary of Core Principles

Essex Police will be at the forefront of digital policing leadership and practice and will ensure that officers and staff:

- 1. Are digitally skilled, equipped & enabled
- 2. Are data driven
- 3. Use digital technology to know and understand our communities
- 4. Are mobile and agile
- 5. Work with partners for the benefit of the people of Essex
- 6. Are innovative and take a leading role in digital policing to benefit Essex and the wider police family
- 7. Prevent and detect digital crime with a focus on vulnerable groups in our communities
- 8. Prevent and safeguard against the digital elements now inherent in more traditional crime and provide support and advice to victims to avoid further harm
- 9. Ensure digital ethics are at the core of the use of technology
- 10. Digital change will be led by the needs of everyone to deliver the best service to the people of Essex

Appendix B Extracts from NPCC and APCC Digital Strategy 2020 - 2030

7 Digital Trends

- Global, borderless, online crime
- Growing density of our digital lives
- Vulnerability to digital distortion
- The impact of bots, algorithms, automation and big data
- Complex convergence of our digital and physical realities
- New crimes, and new victims, enabled by digital
- The future of work

NPCC and APCC Priority Areas

Seamless citizen experience	We will deliver seamless, digitally enabled experiences. The public will have more choice in how they engage with us, using channels, media or devices most relevant to them. We will be able to connect citizen interactions, information and data across departments, and across forces to build a more credible and richer intelligence picture, all whilst maintaining public trust by ethically acquiring, exploiting and sharing their data.	\bigcirc
Addressing harm	We will harness the power of digital technologies and behaviours to identify the risk of harm and protect the vulnerable in the physical and digital world. We will deliver earlier, more precise and targeted proactive policing approaches and early interventions through the application of digital technology.	\odot
Enabling officers & staff through digital	We will invest in our people, from leadership through to the front-line, to ensure they are equipped with the right capabilities (knowledge, skills and tools) to deal with increasingly complex crimes. We will establish digital leadership and ways of working to allow our workforce to focus on critical and value-adding activities.	
Embedding a whole public system approach	We will foster a philosophy of openness and deepen our collaboration with our public sector partners to jointly design and tackle complex public safety issues - sharing data insights and making use of digital tools to work more effectively across the public safety system, ensuring we do so in an ethical way to safeguard public trust.	
5 Empower the private sector	We will strengthen our relationships with the private sector to empower it to appropriately share in public safety responsibilities. The private sector, and the users of its services, have always shared responsibility for elements of public safety and, as technologies become easier and more accessible, there are new ways to safely empower those with an active desire to help.	

NPCC and APCC Futures Framework – List of Technologies

	CS Crowd- sourcing	API Application Programming Interface		XR Extended Reality	BC Blockchain	AGI Artificial General Intelligence	NAI Narrow Artifical Intelligence	ML Machine Learning	BF Behavioural Forecasting
	DSO DevSocOps	DE Digital Ethics	AV Autonomous Vehicles	D Drones	IOT Internet of Things	MM Mobile Money	BT Bluetooth 5.0	5G Sth Gen Wireless Systems	NFC Near-Field Communi- cation
				CB Co-bots	PA Personal Analytics	B Biometrics	W Wearables	NT Neuro Technology	BCI Brain Computer Interface
				BD Big Data Analytics	GIS Geographic Information System	VSP Virtual Scenario Planning	BIM Building Information Modelling	DV Data Visualisation	DT Digital Twinning
(ey Enabling technolog Combinatorial technolog Comms and mobility	nologies		PaaS Platform as a Service	CYS Cyber Security	CC Cloud Computing	EC Edge Computing	MDM Master Data Management	QC Quantum Computing	BAS Breach/ Attack Simulation
technologies Personal data Data modelling and							Philippi	y Futures Frame	