Part 2

Scenarios

college.police.uk

Part 2: Scenarios

A limitation of an exclusively trend-based analysis is that it can give too linear a view of the future, resulting in an over-emphasis on continuity and an under-emphasis on potential shocks, surprises and disruptions (eg, a pandemic). One of the best methods for seeing beyond a linear projection of the future – and considering the range of possibilities the future may hold – is scenario thinking.

Scenarios are descriptions of plausible alternative futures: they help us explore how certain trends, choices and uncertainties might play out over multiple pathways, as told through a series of short stories. Scenarios are not predictions – they are explorations. We don't construct scenarios expecting to 'get the future right' or with the aim of 'picking a winner'. Rather, we construct them with a view to describing a range of possible futures that we can step into, explore and learn from.

This section describes four possible scenarios for policing's operating environment out to 2040. While no single scenario can describe the entirety of policing's operating environment over a 20-year timeframe, multiple scenarios can go some way to portraying how key issues, trends and events might characterise a specific period – much like 'austerity' was a defining feature of the 2010s. We hope the scenarios we have created stimulate thinking and discussion about the future.

Contents

The scenarios were generated in two stages:

1. Data from the stakeholder interviews were combined with key insights from the futures literature to construct four 'raw' scenarios for policing's operating environment out to 2040[78]. The raw scenarios were based on the concept of 'alternative futures', which uses the metaphors of 'growth', 'collapse', 'conserve' and 'transformation' to imagine and construct four alternative future worlds (see Figure 3)[79]. This allowed us to develop high-level summaries and key features for each scenario.

2. To add depth and detail to the raw scenarios and develop their narratives, a workshop with 25 police officers, crime analysts, social scientists, 'futurists' and technologies was held[80]. Participants at the workshop considered which trends would be most influential in bringing each scenario to pass, what impact they might have on the UK (in terms of society, technology, economy, the environment and politics) and what implications they might have for crime and policing. This resulted in a number of outputs which we then used to create the full scenarios described in this report.

---

78 'Operating environment' was defined at the contextual level, meaning that the focus was on describing how macro-level trends, issues and events (ie, broad, contextual factors largely beyond policing's control) might interact and intersect to shape policing's operating environment.

79 Dator, J. (2009) 'Alternative Futures at the Manoa School', Journal of Futures Studies, 14(2), pp. 1-18.

80 This approach to scenario generation is known as 'incasting'. It explores specific details of a possible future based on a generic scenario description.

Figure 3: Alternative futures framework

1

Continued growth

describes a future in which the basic values and institutions of the present prevail in the future. That is to say, the growth-oriented, consumerist, technologically progressive, culturally diverse and liberal society that characterises the UK today will continue to hold sway in the future.

2

Societal collapse

describes a future in which the pursuit of continuous economic growth has become unsustainable, leading to widespread social, economic and environmental decline. Collapse futures are not about end of civilisation but rather seek to describe the possible consequences of systemic breakdown.

3

Conserver society

describes a future in which society rejects the privileging of economic growth above all else. A conserver society arises from deep concern for the ways in which current policies, lifestyles and behaviours may cause severe and irreversible impacts in the long run.

4

Transformation

describes a future in which technological advances bring about fundamentally different values, behaviours and forms of organisation to those that currently exist. In a transformation scenario, new technologies help to address a number of societal problems but also create new ethical and social dilemmas.

How to read the scenarios

The scenarios that follow are not meant to be exhaustive. Rather, they are designed to be both plausible and provocative, to engage readers' imaginations while also raising new questions about what the future might look like.

As you read the scenarios:

- Remember that the future doesn't exist yet. Scenarios are designed to spark new thinking about the future – not predict it.

- Focus on the reasons why the scenario might happen and what it would mean for current police goals, strategies and capabilities if it did.

- Focus on the overall direction and conditions each scenario creates rather than on the likelihood of specific details.

- Ask 'what do we need to be prepared for even if we think it unlikely', rather than trying to pick a favourite or most likely scenario.

We encourage readers to use these scenarios to begin a strategic conversation about preparing for the challenges and opportunities that might lie ahead. The scenarios should be re-evaluated as new developments emerge.

"The objective [of scenario thinking] is not to get a more accurate picture of the world around us but to influence decision making inside the mind of the decision-maker. The objective of good scenarios is better decisions, not better predictions"
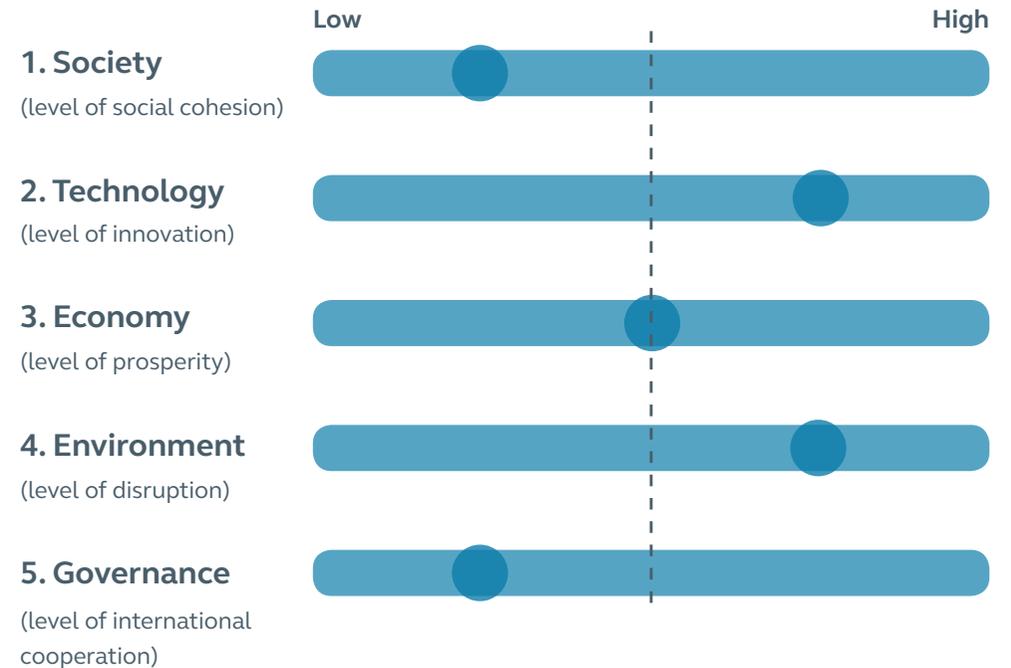
Peter Schwartz[81]

---

81 Schwartz, P (1996) The Art of the Long View

Scenario 1
Fragile Seams

This scenario **explores** a world growing increasingly fragile in the face of rising inequality, global warming and disruptive technologies. The scenario **highlights** the difficulties in responding to future demands for security (both virtual and physical) as societal tensions increase, new technologies create new threats and efforts to tackle divisive issues make limited headway. The scenario **underscores** the difficult choices policing might face in the context of global and domestic conditions that cause inequalities to widen, crime levels to increase and climate change to become increasingly disruptive.

Low   **High**

1. Society
(level of social cohesion)

2. Technology
(level of innovation)

3. Economy
(level of prosperity)

4. Environment
(level of disruption)

5. Governance
(level of international cooperation)

Scenario 1 description

The first few years after the pandemic were tough. The health crisis soon turned into an economic and social crisis, generating upheaval in domestic and international politics and creating a more fragile, unequal world. Many of the worst aspects of the late 2010s intensified: international relations deteriorated and a new wave of nationalism swept across the globe. From Britain to Brazil, public demands for greater protection from market volatility, disruptive technologies and future disease outbreaks put massive pressure on governments to turn inwards and focus on domestic concerns.

It took a monumental effort – as well as several political casualties – to stop those who had lost faith in globalisation and international trade from pulling down the entire system. Ultimately the pandemic didn't fundamentally alter the global economy; instead it only accelerated a number of changes that had already begun, including a shift in economic, political and cultural power towards China and an increase in the reach and power of global technology companies. By 2022 the economy was growing again (thanks in part to a number of unprecedented bailouts) and a new type of pragmatic internationalism was starting to take shape. New international institutions were created to prevent 'contagion' and manage interdependencies.

And it was lucky that they were: organised crime, resource shortages and large-scale migration triggered by global warming were all getting worse and needed cooperation at every level of government – both domestically and internationally – to solve. But progress was slower than it needed to be. In the UK, climate change became the defining – and most divisive – issue post-2025, as carbon emissions continued to increase beyond safe levels and rising consumerism meant that demand for natural resources grew ever-more unsustainable. The impact on policing grew with time: protests increased in number, scale and disruptiveness; more frequent extreme weather events required crisis management; organised crime groups exploited water supply deficits and food shortages; and by the late-20s there were growing calls for policing to do more to identify and hold responsible the agents of anthropogenic change.

Meanwhile, the spread of artificial intelligence and automation technologies disrupted far more jobs and industries than economists expected, leading to large numbers of displaced workers and creating a mainstream political movement that increased pressure on the government to protect British workers. To tackle rising unemployment, a new form of 'corporate workfarism' started to emerge, with people – mostly low-skilled – paid minimum living wage for socially useful work such as maintaining parks, sweeping streets and working as school assistants – all of which was outsourced to private companies. This was set against further concentration of wealth in the richest households.

These conditions exacerbated societal tensions and led to a steady rise in crime. Poverty (especially in-work poverty) and populism proved a toxic mix, generating new forms of identity-based hate crime, extremism and protest. At the same time, advances in AI allowed organised criminals to automate large-scale scams, with the elderly, many living alone and making greater use of new technologies which provided virtual companionship, popular targets. And with more people staying home – working, learning, playing – the majority of crime now happened inside the home: domestic violence, child abuse and elder neglect were major issues. Burglary, though, had fallen, as had traffic collisions and assaults at (formerly) crowded bars. Drug deals were conducted almost exclusively through online sales and delivery platforms.

Meanwhile, sustained investment in AI, 'smart' cities, teleworking and remote learning had massively extended the reach and influence of global 'tech' companies. Their enhanced role in public services such as health, defence and transportation meant that some were even classified as critical national infrastructure – a position which allowed them to easily block regulation despite their lack of transparency and accountability. As digital surveillance expanded and AI matured, the access these companies had not just to people's 'digital footprints' but to their verbal and physical cues meant that practical opportunities for maintaining privacy became almost impossible – a situation which shaped the balance of power in ways that many overlooked but others found unacceptable. While most voiced their objections through legitimate protest, there was a significant minority whose 'Neo-Luddism' mutated from individual frustration to collective resistance – both virtual and physical.

How did we get here?

Key developments that brought us here

- **The Covid-19 pandemic hit the economy hard** but ultimately proved to be a passing storm. With governments across the world coordinating their response and taking steps to protect incomes, jobs and businesses, the economy started to grow again – albeit tentatively – in 2021.

- **The perceived need to dedicate resources** to rebuild at home led to reduced commitment to tackling global problems, including climate change, large-scale migration and transnational organised crime.

- **'Big tech' gradually expanded** its reach and influence, providing new services in telehealth, remote learning, transportation and urban infrastructure. **Government regulation struggled** to keep pace with technological change.

- **Business and government deferred action** on climate change in the hope of future technological 'fixes'. **Greenhouse gas emissions** continued to increase beyond safe levels and demand for resources continued on a 'business-as-usual' trajectory.

- **Technologies on the horizon in the late 2010s** matured into a variety of personal, commercial and government applications. **The spread of AI** and automation technologies displaced more jobs than economists expected but over time led to new pockets of economic strength and prosperity.

Early signs that signal a shift to this future

- **Income inequality** continues to grow and there is further concentration of wealth in the richest 10% of households.

- **Industries under pressure** from Covid-19 are bailed out by government. Business regulations are cut to get the economy moving again.

- **The employer-employee balance of power** shifts further towards employers. Many businesses treat Covid-19 as an opportunity to expand automation.

Police Constable MARCELA:
"I feel quite worn out by it all. There's only so much we can do when the tech companies just ignore the harm that happens on their platforms."

Chief Constable SARAH:
"Climate change has really stretched us. We're providing disaster management, dealing with organised crime, enforcing new environmental protections – it's one of our biggest sources of demand."

Gang leader ALBERT:
"We saw these water shortages coming and got ourselves stocked up. We're giving it out for free at the moment but we'll be back for payment."

Privacy activist TARIQ:
"All that data means they hold all the power - that's not how democracy should work. We need to fight fire with fire."

Key events and shifts in Fragile Seams

- **Between 2020 and 2025:** International rivalries and rising nationalism put globalism under intense pressure.

- **2021:** UK airline industry receives biggest ever state bailout.

- **Between 2020 and 2030:** UK economy grows at a moderate rate but begins to struggle in the face of increasing energy prices and growing resource constraints.

- **2029:** Water shortages in London, the midlands and the north-west trigger civil unrest and clashes with the police.

- **Between 2030 and 2040:** Global warming drives mass migration to Europe from sub-Saharan Africa.

- **2037:** Global food shortage as Indian monsoon fails for third straight year.
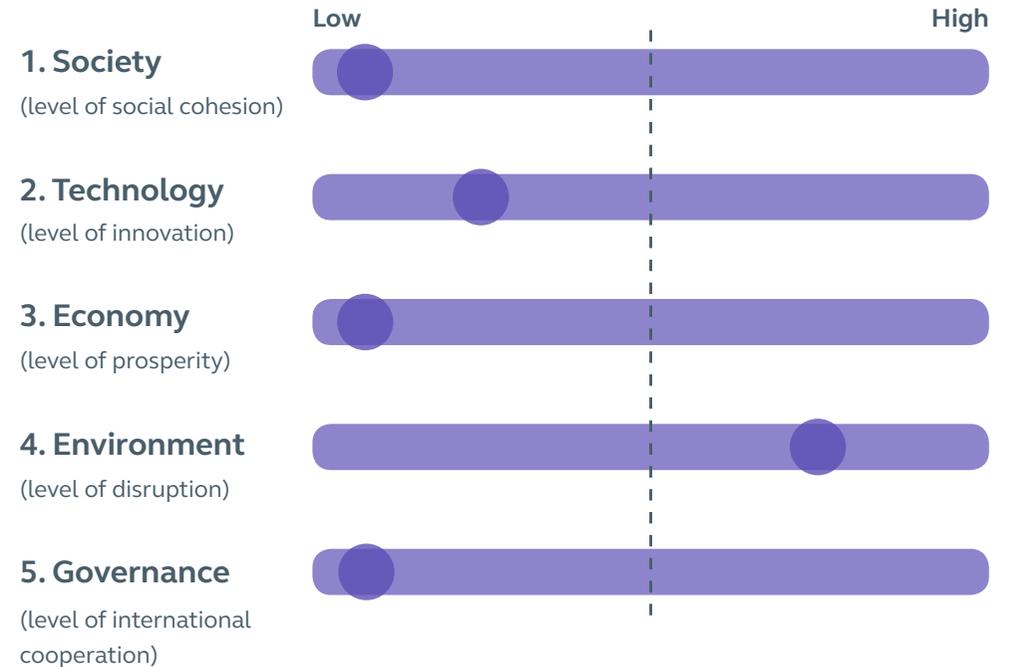
Implications for crime and policing

- If society continues to fracture along political, socio-economic and/ or ideological lines, societal divisions are likely to become even more pronounced, with the police caught somewhere in the middle. It seems reasonable to question whether some traditional policing approaches, which have historically contributed to strained police-community relations and mistrust in the police, are capable of sustaining public trust under such conditions.

- In this scenario, the underlying drivers that have made the world increasingly fragile over the last several decades are left unaddressed, with serious implications for many people's security, prosperity and wellbeing. Without significant intervention, issues such as inequality, automation, climate change and resource scarcity will increase the likelihood of societal upheaval, political grievances and violent disorder.

- In instances of food, water and other resource shortages (eg, fuel), counterfeit goods may be sold by organised crime groups, making buyers vulnerable to health and safety risks. Attempts to ration access to scarce resources could lead to tensions and outbreaks of disorder and/or violence.

- In this scenario, private sector investments in connectivity infrastructure (eg, 5G, 'smart cities', the internet of things) and AI systems put powerful resources – particularly data – in the hands of individuals and small groups, making their interests, actions and values more consequential than ever before. With such actors unencumbered by the burdens of accountability, transparency and regulation, policing, working with government, will need to find more effective ways of working with – and influencing – the security agendas of such actors.

Scenario 2

Pandora's Box

This scenario **explores** a shock-prone world in which economic and environmental disasters compound and feed each other, pushing the economy into recession, putting the social contract under strain and creating favourable conditions for criminals. The scenario **highlights** the possible consequences of systemic breakdown, including weak governance, widespread job loss and high levels of paranoia and mistrust. The scenario **emphasises** the pressure that such conditions would put on the police and highlights the choices that would either bring stability or exacerbate tensions.

Low   **High**

1. Society
(level of social cohesion)

2. Technology
(level of innovation)

3. Economy
(level of prosperity)

4. Environment
(level of disruption)

5. Governance
(level of international cooperation)

Scenario 2 description

The pandemic hit everyone and everything. Currencies plummeted; businesses went under; supply chains collapsed; millions were left unemployed. The resulting recession was far worse than the financial crisis 12 years earlier. While the situation in the UK, Europe and the United States was especially dire, every part of the globe was affected. Many countries couldn't afford their locked-in costs, let alone compensate victims, repair damaged infrastructure or satisfy public demands for better healthcare and more security.

To protect themselves from future disease outbreaks and other global threats, countries turned inwards. Protectionism debilitated international trade and rampant nationalism made global governance almost impossible, preventing international cooperation on challenges such as organised crime, resource scarcity and migration driven by global warming. Traditional alliances crumbled and a number of international institutions – including the World Trade Organisation – collapsed. By 2030, the liberal, rules-based system that had governed international cooperation since the Second World War was a distant memory.

The collapse of multilateralism emboldened states to step up their cyber offensives. Disinformation campaigns and acts of cyberterrorism went into overdrive as more countries realised that cyber power was key to getting ahead in a competitive and digitally connected world. Data breaches, electoral interference and denial-of-service attacks became widespread, with the effects often spilling over into local communities. Conspiracy theories regularly worked their way into the mainstream, leading to an increase in xenophobia, hate crime and vigilantism. Meanwhile, many of the technologies of disinformation became widely available, providing criminals (even those with little technical 'know-how') with a powerful weapon to commit online fraud, blackmail and harassment on a massive scale.

The escalation in cyberattacks occurred in parallel with turmoil in the natural world. Crop failures in Africa were followed by an extreme, early summer heat wave which caused deadly wildfires across Spain, France and Italy, resulting in billions worth of economic damage. The UK was not spared its own environmental disaster: in November 2025, torrential rain and a storm surge in the North Sea combined to overwhelm flood defences in Lincolnshire, Norfolk and Suffolk. It was the UK's biggest environmental disaster since the North Sea flood of 1953 and another blow to the country's economic recovery.

These bleak conditions put the social contract under enormous strain. Hundreds of thousands of jobs disappeared for good as some businesses went under and others sought to stay afloat by replacing their low-skilled workers with technology. The lack of retraining programmes meant those who were cast aside were left without work for years at a time. Meanwhile, dozens of local authorities lost control of their finances, forcing deep cuts to welfare services which still hadn't recovered from the austerity of the 2010s. While initially citizens believed the government when it said there was little it could do in the face of a deep global recession, it wasn't long before the

mood changed and those left hopeless, jobless and without assets started to push back – some violently.

With opportunity frozen and safety nets dissolving, growing numbers of people turned inwards to their families, communities and traditional cultures. Trust was afforded to those who engendered a sense of security or belonging – both online and offline. While some turned to religion, spiritualism or extremism, others sought the protection of organised crime groups. Right wing groups gained momentum, emboldened by a sense that nationalism (which they called patriotism), xenophobia and racism were now socially and politically acceptable. As divides deepened, public discourse became dominated by abuse, scapegoating and misinformation, making it even harder for people to find common ground and heal the divisions.

Organised crime groups also extended their influence, reaching into communities where unemployment, mistrust and alienation had led to a sense of desperation. By the mid-2030s, drugs, weapons and counterfeit products were being moved through underground channels with such ease and at such scale that many states could no longer protect their borders or guarantee the security of their people.

How did we get here?

Key developments that brought us here

- **Governments around the world turned inwards** to protect their populations in the face of economic decline and future disease outbreaks. **Protectionism created fierce international competition** and diverted attention and resources from a number of urgent global problems.

- **A synchrony of economic, environmental and humanitarian** disasters pushed an already overheating global economy into a deep and prolonged recession. **Government finances collapsed** in many countries and failed states became more prevalent.

- **Widespread job displacement, frozen opportunity and evaporating safety nets** created the conditions which allowed crime – and criminals – to thrive. Many low-level crimes started to be seen as more socially acceptable.

- **As the rules-based international order crumbled**, digitally capable nations stepped up their attacks on the political, economic and informational assets of their adversaries. **Widespread access to technologies** which allowed people to create highly convincing but fake videos, audio and text led to an exponential rise in crimes based on deception and manipulation.

- **Rising nationalism and a polarised information and media environment** created a perception that racism and xenophobia were socially acceptable.

Early signs that signal a shift to this future

- **The aftermath of the Covid-19 pandemic** is dominated by 'blame games' and political recriminations. Several governments refuse funding for international institutions.

- **A proliferation of easy-to-use 'deep fake' apps** leads to an increase in fake yet convincing videos of celebrities, politicians and other public figures.

- **Unemployment hits 10%** and the government struggles to meet an increasing welfare burden.

Police Constable NAOMI:
"Just last week I saw a video of a colleague which had been doctored to make it look like he had racially abused a young boy."

Chief Constable MARTIN:
"Disinformation has become mainstream. Politicians, celebrities, victims of abuse, my officers – they're all being targeted. We're swimming in a sea of stuff we don't understand."

Hacker MOLLY:
"These 'deep fake' apps have made my job 10 times easier. I can make three or four videos in a single day; it used to take me a week to make just one."

Gang member VICTOR:
"I'm flat out. The market for synthetic drugs, fake food and 3D-printed masks is huge and extremely lucrative."

Mum RAHEEMA:
"I feel so anxious every time I step outside. I've been racially abused three times this week already – they feel like they can just get away with it."

Key events and shifts in Pandora's Box

- **2020:** Great Collapse occurs with most economies falling into a deep and prolonged recession.

- **Between 2020 and 2030:** Disinformation becomes an increasingly disruptive – and dangerous – part of many people's everyday lives.

- **2027:** Series of fires at UK power plants attributed to hacker group with links to foreign government.

- **Between 2025 and 2040:** Environmental disasters and extreme weather events across the world (recurring heat waves, earthquakes, flooding, etc.) put stress on an already overheating global economy.

- **2034**: Man-made virus escapes from laboratory and starts to spread around south-east Asia.
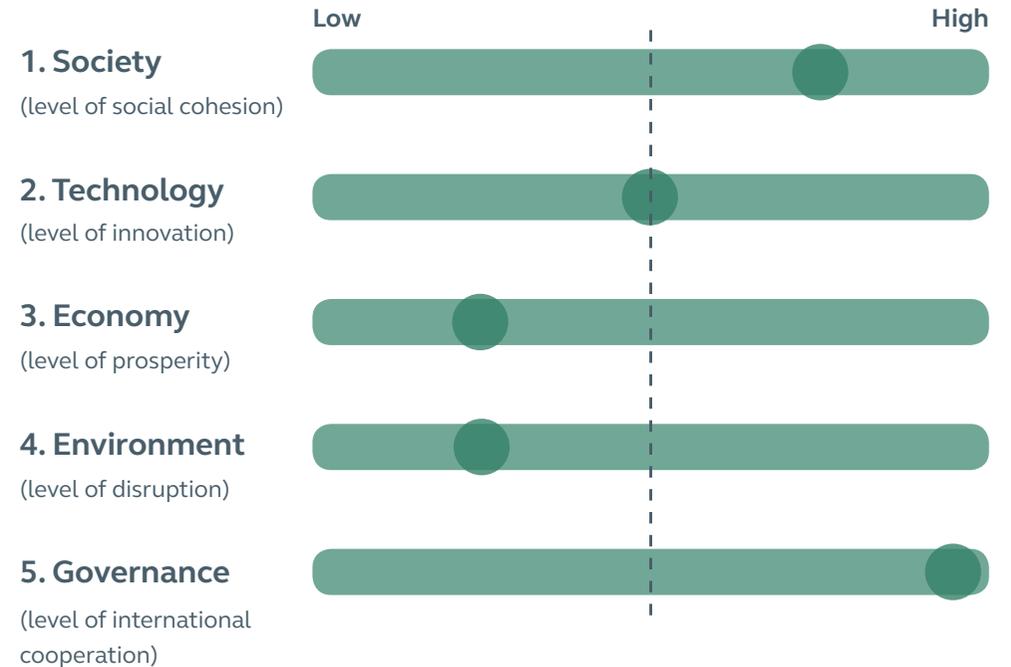
Possible implications for policing

- Disinformation and acts of cyberterrorism are common in this scenario, with their effects frequently spilling over into local communities in the form of mistrust, social tensions, civil unrest, data breaches and energy blackouts. Designing and delivering interventions that not only diminish such processes but also enable positive counter-influences will be an important component of responding to future crises.

- Individuals and communities could seek new forms of protection and security in the face of frozen opportunity, cyber-vulnerability, social fragmentation and the growing impact of climate change. Policing will have to work with a variety of actors to protect people in these contexts and to ensure that illegitimate providers of security (eg, organised crime groups) don't extend their reach and influence.

- Deteriorating economic conditions and increasing pressure on police resources (from civil unrest, organised crime, the scale of cybercrime) could lock policing into a reactive and defensive stance. The need to focus on clear and present threats would leave little time or resources for upstream prevention.

- Social, economic and environmental pressures could create human stresses that increase the prevalence of gender-based violence, including crimes such as domestic abuse, human trafficking, forced prostitution and forced marriage.

- The likelihood of large-scale protests and outbreaks of disorder is high in this scenario, as large numbers of people under significant stress seek ways to oppose the causes and consequences of social, economic and environmental decline.

Scenario 3
Green Reset

This scenario **explores** the issues surrounding a restructuring of the global economy that leads to a more sustainable and equitable world. The scenario **describes** how a shift to post-materialist values, a more interventionist state and new modes of production and consumption give rise to a new relationship between people and planet. The scenario **considers** the changing nature of the police role as this transition takes place, focusing on what new threats, challenges and demands might emerge and which old ones might recede.

Low   **High**

1. Society
(level of social cohesion)

2. Technology
(level of innovation)

3. Economy
(level of prosperity)

4. Environment
(level of disruption)

5. Governance
(level of international cooperation)

Scenario 3 description

The pandemic of 2020 signalled the start of a new future for many countries. Given the scale of economic damage, societal collapse and political turmoil the pandemic unleashed, it was little surprise that the initial response was dominated by blame games and heated attacks on international institutions. Yet beyond the rhetoric a more positive counter-current was developing, as the increasingly visible effects of inequality, discrimination and global warming pressed both citizens and governments into urgent, coordinated action. By 2025, with the global economy settling into a low growth, low productivity equilibrium and regime change taking place in many countries, a more open and progressive internationalism had taken hold.

While the global response to global challenges improved, many businesses sought to reduce their exposure to 'contagion' by shrinking their multi-step, multi-country supply chains. In the UK, greater onshoring of production, even though it meant higher prices, went some way to stabilising employment – as did government programmes which retrained those who had lost their jobs to work in green industries. Meanwhile, advances in additive manufacturing (3D printing) meant that local producers were able to create products designed by geographically dispersed communities of scientists, designers and enthusiasts collaborating over the internet. The downside was an increase in the availability of 3D-printed weapons, synthetic drugs and counterfeit products, as well as an exponential rise in the number of cyberattacks aimed at stealing intellectual property.

The shift to more inclusive and sustainable modes of production benefited both planet and people. Pollution and waste decreased as a result of less energy consumption and resource use. Stress reduced and people were generally content to accept a lifestyle plateau once a certain level of affluence had been attained. Income inequality started to decrease as a result of progressive tax policies and less pursuit of material affluence beyond what was considered a 'comfort zone'. A certain segment of wealthy consumers were unwilling to accept the compromises on their quality of life and fled to other countries where it was possible to purchase the lifestyle of choice.

By the late-2020s a more purposeful approach to reducing carbon emissions created new legal mechanisms which required robust policing. Following its successful introduction in Australia, the UK introduced a system of carbon credits, accessed through a simple app, which rewarded and sanctioned people based on their carbon footprint. The system was critical in helping the UK meet its net zero targets but was highly vulnerable to criminal activity such as fraud, identity theft and money laundering. Meanwhile, the need to manage water shortages, which were becoming increasingly frequent in major cities, led to an increase in calls to police about people wasting water.

The need to exercise – and enforce – restraint meant that crime was increasingly defined and motivated by the limits society had placed on itself. Anyone whose lifestyle exceeded those limits, from car and water usage to acting in ways that put public health at risk, became the target of 'social shaming' tactics which ranged from abuse by strangers to targeted online campaigns by environmental activists. While with time these limits became

increasingly normalised, they at first created a tension between the need to enforce new environmental and public health regulations and protect people from abuse and harassment. The limits also created a number of libertarian resistance groups (with considerable media backing) who cast the government and the police as oppressive.

Government also showed greater willingness to regulate disruptive technologies. As the harm caused by online abuse and disinformation became clearer, new laws were passed which required technology companies to do more to counter electoral interference, prevent cyberbullying and protect users' data – a move which went some way to cleaning up the online information space. At the same time, activists, labour unions and a small but influential group of tech-entrepreneurs were instrumental in ensuring that AI benefitted human interests: in 2031, more than 60 countries, including the UK, signed-up to an 'Ethical AI' accord featuring ethical use principles and intervention criteria. Meanwhile, automating someone's job was allowed only where it was shown that appropriate retraining opportunities were in place, leading business to argue that strong technology regulations had stifled innovation, pushed up costs and curbed adoption.

How did we get here?

Key developments that brought us here

- **Covid-19 undermined the basic tenets** of globalism, forcing businesses to rethink and shrink their multistep, multi-country supply chains. **Trade patterns shifted** as countries favoured regional trading blocs and bilateral trade agreements over comprehensive global arrangements.

- **Government set out to rebuild the economy** with big investments in public infrastructure (eg, schools, public housing, green-energy) and resilience. **Government became more interventionist** on a range of social, economic and technological issues.

- **Greater awareness of the societal and environmental impacts** of global warming and natural resource-use led to a new relationship between people and planet.

- **Electorates started to favour** political parties who prioritise environmental protections, progressive tax policies and stronger welfare systems.

- **Disruptive technologies** such as AI, robotics and synthetic biology were subject to tighter regulation, aligning their use with the public interest.

Early signs that signal a shift to this future

- **The downturn in global trade endures** beyond 2021 as many businesses scale down their complex global supply chains.

- **Discussions about Universal Basic Income** move into mainstream political discourse.

- **Calls for the regulation of disruptive technologies** such as AI, automation and synthetic biology start to gain traction.

- **Demands to look again** at how those who carried the country through the pandemics (eg, nurses, cleaners, carers, delivery staff) are valued and rewarded gain traction.

Police Constable SAM:
"We're doing things I never thought we'd be doing. Last week some guy called us because his neighbour had broken the hosepipe ban."

Chief Constable ANDY:
"As society has placed new limits on itself we've been drawn into policing people's lifestyles. It's a very delicate balance we have to strike".

Hacker PIOTR:
"I get approached every day about hacking the blueprints for some new product, weapon or drug. It's big business".

Libertarian activist: KENDRA:
"The state is just using the climate crisis as a cover for more surveillance and control. What's happening to all the data from the carbon credit scheme?".

Teenager NOMI:
"We've grown up with surveillance so it doesn't bother us. We're just happy it's being used to help the environment".

Key events and shifts in Green Reset

- **Between 2020 and 2025:** Political regime change in several major powers.

- **Between 2020 and 2030:** Government invests in the infrastructure needed to transition to an economy based on renewables.

- **2025 onwards:** Water rationing and individual carbon credits start to operate on an intermittent basis.

- **2030 onwards:** The UK economy has adapted to economic restructuring and entered a path of moderate growth.

- **2034:** Crime of 'ecocide' added to the Rome Statute and becomes prosecutable at the International Criminal Court (ICC).
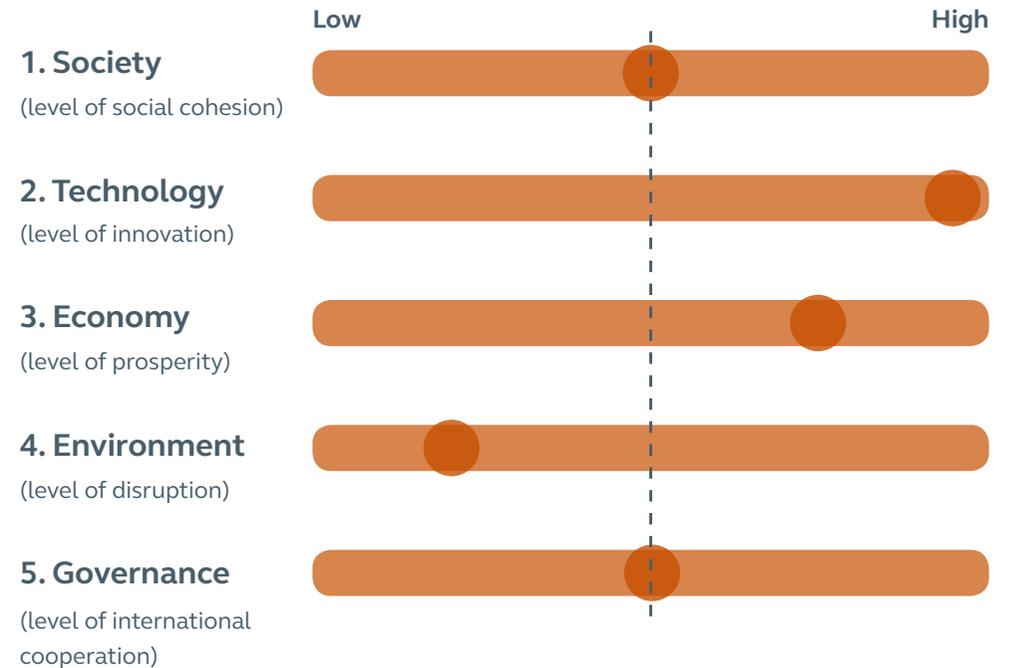
Possible implications for policing

- This scenario sees policing drawn into enforcing a number of ethical limits that society has placed on itself in an attempt to prevent and/or manage future disease outbreaks and the effects of climate change. While with time these limits become normalised, they at first create a tension between enforcing environmental and public health regulations and protecting people from abuse and harassment.

- Many of the causes of crime such as poverty, status deprivation and a lack of economic opportunity are less prominent in this scenario. This means there is less demand resulting from many traditional crimes (violence, theft, burglary) than in the other scenarios.

- In this scenario, the 'violence paradigm' that has defined most countries' definitions of national security since the Cold War is supplemented with a 'human security paradigm' focused on viral, ecological and economic threats. This would broaden the national security infrastructure and require policing to work with a more diverse range of partners to enforce environmental and public health regulations.

- Technological advances which support a shift towards a 'Design Global, Manufacture Local' paradigm for producing goods could increase access to 3D-printed weapons, synthetic drugs and counterfeit products, as well as drive an increase in intellectual property theft. Many of these illicit goods are likely to be of poor quality or downright dangerous.

- In a future where prioritising the environment is a key priority for the public, politicians and government, policing will come under increased pressure to 'play its part' through efforts to decarbonise both its estate and fleet.

Scenario 4
Black Mirror

This scenario **explores** the emergence of a high-tech world characterised by mass surveillance and high levels of technological convergence. The scenario **describes** how advances in 'next generation' technologies help to address some of society's most pressing problems but also increase the power of technology companies in ways that some people find unacceptable. The scenario **considers** the benefits and risks of operating in an emerging surveillance society as well as the challenges of keeping pace with rapid technological advances.

Low   **High**

1. Society
(level of social cohesion)

2. Technology
(level of innovation)

3. Economy
(level of prosperity)

4. Environment
(level of disruption)

5. Governance
(level of international cooperation)

Scenario 4 description

It wasn't long before the emerging technologies of the late-2010s started to blossom. The pandemic slowed things down for a while but the trillions on balance sheets that remained uninvested after the 2008 financial crisis soon poured into companies working on AI, biotechnology and 'smart' cities. The results were impressive: at times it felt like hardly a week had gone by before another breakthrough was announced on the blog of some tech CEO. The race to develop artificial general intelligence (AGI) was especially fruitful, spawning hundreds of technologies that helped address some of the world's most pressing problems, from pollution, water scarcity and crop failure to corruption and money laundering.

Much of AI's success was down to a rapidly expanding digital infrastructure, which provided nascent AI systems with the feedback they needed to learn, adapt and get smarter. The most important developments were in transport, agriculture, manufacturing and energy production – all of which benefitted from advanced data analytics and more efficient production methods. Hyperconnectivity (5G) and ubiquitous computing led to countless new products, services and experiences, including a 'sensor-cloud system' which allowed drones to improve their energy efficiency (thus becoming faster and flying for longer) by offloading computationally intensive tasks to the cloud. It didn't take long for drug traffickers to take advantage.

Fortunately, many of these technologies augmented, rather than replaced, traditional jobs. Campaigners, labour unions and a small but influential group of tech entrepreneurs worked tirelessly to ensure that AI and automation benefitted rather than hurt human workforces. Yet some disruption to jobs, work and the economy was inevitable. The reality in some sectors was that humans simply couldn't learn as fast or work as hard as many AI/robotic systems. Some jobs and industries became unviable, a reality that led to rising unemployment – and related problems of cyber addiction, mood engineering and synthetic drug use – in many parts of the country.

By the mid-2030s, the transition to a high-productivity, low-scarcity economy was reshaping work culture and social norms. Automation addressed labour and skill shortages and four-day weeks became the norm in most sectors. At the same time, the ubiquity of digital assistants, virtual/augmented reality and hologram technologies meant that most social interaction was now digitally mediated – a trend that resulted in new forms of anti-social behaviour and changes in the form and function of physical communities (the latter weakening many people's sense of civic responsibility). The long-term psychological effects of 'techno-individualisation' were also becoming clear, as psychologists started diagnosing a multitude of new anxieties, addictions, empathy deficits and social intelligence disorders.

Increased social and emotional dependency on technology was ruthlessly exploited by criminals. The symbiosis between people's bodies, the products they consumed and the (digital and physical) spaces they inhabited gave rise to novel forms of cyber 'treachery' – most of which couldn't be predicted, even by the advanced AI systems that were now part of routine, everyday police work. DNA hacking, identity theft, digital stalking and synthetic drug piracy were widespread. Digital supply chains came under regular attack, as hackers looked for vulnerabilities that would allow them to steal corporate secrets and 'hacktivists' looked for ways to spoil the profits, stock value and reputation of businesses whose values they disagreed with. Since the police had so little expertise in these types of crimes, people looked elsewhere, particularly to private actors, to resolve their tech crimes and online issues. As a result, decisions about what online harms to govern, how to govern them and who benefitted increasingly fell to profit-driven private actors rather than the state, raising important questions about policing's utility in a hyperconnected world.

By the late-2030s it was increasingly clear that unequal access to technology had increased the gap between the 'haves' and 'have nots'. While on one hand this simply added new layers of exclusion to the already marginalised (by preventing access to information, services and economic opportunities), advances in 'human improvement' technology meant that new divides started to emerge between 'pristine humans' and tribes of the enhanced, augmented and genetically optimised. Discrimination worked both ways: while those who could afford augmentation and optimisation looked down on and found new ways to discriminate against the unenhanced (eg, in recruitment), those who remained 'pristine' wore it as a badge-of-honour and became increasingly cruel and abusive towards the 'enhanced.'

How did we get here?

Key developments that brought us here

- **The pandemic sparked a vast** global exercise in collective intelligence and collaborative open science which persisted across the two decades. This accelerated the race to develop AGI, spurring major advances in medical diagnosis, energy-efficiency and national security.

- **'Big tech' grew more powerful** than ever, controlling ever-more personal data, critical to the delivery of public services and able to block or circumvent attempts at regulation.

- **To keep pace with China's growing** political, economic and cyber power, many countries embraced public-private partnerships in mass surveillance and data collection. **Practical opportunities to maintain privacy** all but disappeared.

- **The transition to 'intelligent' industry and society** reshaped the UK's economic culture. Automation addressed labour and skills shortages, four-day weeks became the norm and ways of working became hyper-individualised.

- **Unequal access to new digital technologies** led to a rise in inequality both within and between countries. **Those without access** were increasingly excluded from education, employment opportunities and access to to important services, adding a new layer of exclusion to the already marginalised.

Early signs that signal a shift to this future

- **Schools, universities and workplaces** significantly increase their use of remote learning and working.

- **Advances** in AI, biotechnology and quantum computing occur quicker than many experts expect.

- **Privacy and data security protections** are loosened under the guise of preventing and managing future disease outbreaks.

Police Constable SADIYAH:
"With so many people learning remotely and working from home we've seen a big increase in intrusion to online work and play. Some of it's been really sinister".

Chief Constable DIONNE:
"Many traditional crimes have been diminished, but what's left is really, really sophisticated. And I'm worried because we're getting left behind – most people are looking elsewhere to resolve their tech crimes".

Tech CEO ANUJA:
"Humans are biohazards – machines are not. We've worked with companies that have automated half their workforces."

Cyber-social worker ANNA:
"Cyber addiction and mood engineering have become huge problems. Social anxiety, anti-social behaviour and gaming-related deaths and suicides have all increased".

Key events and shifts in Black Mirror

- **Between 2020 and 2025:** Private investment pours into companies working on AI, renewables, biotechnology and 'smart' cities.

- **2023:** British army creates non-human resources department.

- **2025 onwards:** Technological advances drive transition to 'intelligent' industry and society.

- **2028:** 'Neo-Luddist' terror group attacks AI labs across UK.

- **2030 onwards:** Advances in crime prevention technologies mean many crimes require significant technical 'know-how'.

- **2034:** Driverless cars and lorries approved for use on UK roads.

- **2037:** Subconscious prejudices ruled admissible for police vetting.

Possible implications for policing

- Technological ubiquity could fundamentally change the relationship between citizens and the state, as education, health care, work, lifestyles and taxation models are altered. This change could occur over an extended period of time and would therefore require strategic choices that endure beyond typical planning cycles.

- As more of the demands on policing stem from the convergence of 'next generation' technologies such as nanotechnology, AI, biotechnology and cognitive science, the need for – and value of – multidisciplinary teams with a blend of 'hard' skills (eg, advanced digital forensics) and 'soft' skills (eg, creativity and collaboration) will increase.

- The growing influence of private regulators and security actors – particularly in online spaces – will make it necessary for policing to think differently about its role and its strategic alliances. New forms of cooperation will be required to achieve effective partnership working across bureaucratic, jurisdictional and disciplinary boundaries.

- Policing will need to proactively contribute to the debate on its use of new technologies (eg, AI) if it is to secure public trust and confidence. An important part of this will involve working with partners to develop frameworks – eg, technical standards, ethical use principles and intervention criteria – for the use of such technologies in a wide range of policing activities. Being left out of these debates could require policing to adapt to external regulation of technologies that it has become accustomed to using in highly specific ways.

- In this scenario the vast majority of police-community engagement takes place online. While this shift could, in principle, enable policing to engage more directly with people from diverse backgrounds, it will also create new principles and mechanisms for signalling trustworthiness that policing will need to adapt to if it is to sustain public trust.

Scenario reflections and implications

These scenarios are not predictions. Rather, they are descriptions of alternative views of the future, each of which reflects the possible workings of important trends, value systems, technological developments and socio-economic structures that are either already established or clearly emergent in the UK and beyond. It is likely that some developments that we have not considered will prove significant over the period of the scenarios.

It is important to note that the scenarios – and the challenges and opportunities they describe – are not necessarily mutually exclusive. Indeed, the future that ultimately comes to pass will likely contain elements of all four scenarios, albeit at different levels of intensity. Considering all four scenarios fairly and fully (rather than picking a 'most likely') can help ensure that the decisions we take today are rooted in a better understanding of the potential risks, challenges and opportunities that could arise in the future. Figure 4 describes the unique and common elements of the four scenarios.

In 'Fragile Seams', policing's operating environment is increasingly shaped by a lack of progress on major challenges such as inequality, climate change and technological disruption, particularly disruption caused by artificial intelligence and automation. While the impact of these issues is often more acute in other parts of the world, they increasingly affect the prosperity, security and wellbeing of people living in the UK. For

example, climate change gradually becomes a more disruptive part of many people's lives and livelihoods, in the process placing new and more pressing demands on policing, from crisis management to public order policing to the enforcement of new environmental regulations. At the same time, 'Fragile Seams' also describes a heightened version of present-day society, with its consumerist, profit-driven tendencies creating socio-economic disparities that undermine social cohesion and create the conditions for high levels of crime. Although it doesn't reach the point of systemic breakdown (as in 'Pandora's Box'), 'Fragile Seams' is arguably the scenario where social, economic and technological change is most likely to give rise to societal upheaval, political grievances and citizen pushback.

The global context is also salient in 'Pandora's Box', because it is the combination of economic, environmental and geopolitical shocks, their effects feeding and compounding each other, which exerts the main influence on policing's operating environment. While the emphasis is on how a lack of international cooperation, frequent environmental disasters and an escalation in state-led cyberattacks could put enormous pressure on an already overheating global economy, the key takeaway is that concurrent crises can create stresses which lead to systemic breakdown. Crucially, the domestic conditions this breakdown creates, such as high unemployment, weak government finances and high levels of fear, mistrust and insecurity, are key drivers of the demands and challenges facing policing. In this scenario, there is considerable pressure on policing to adopt a more reactive and defensive stance, even though this would exacerbate tensions.

In 'Green Reset', change is driven by a growing recognition among citizens and politicians that current policies, lifestyles and behaviours will have a damaging – and potentially irreversible – impact in the longer term. Societal and political concerns about socio-economic inequalities, ecological degradation and unchecked technological 'progress' drive changes in policy, regulation and behavioural incentives. The dominant ethos behind the change is one of 'enlightened self-interest', which is shared by enough countries, communities and individuals that it drives a shift towards 'post-materialist' values. While this shift alleviates some of the underlying stresses that are known to cause crime, it also draws policing into enforcing – and policing the consequences of – the new limits that society has placed on itself to halt long-term decline.

Like in 'Green Reset', change in 'Black Mirror' is largely positive in terms of its effects on people's prosperity, security and wellbeing. The causes, nature and implications of this change are, however, very different. In 'Black Mirror' there is a strong belief that innovation and advances in technology, rather than policy and/or behavioural change, will solve many of society's current and future problems. In many ways this belief is proved right, as large investments in AI, renewable energy, biotechnology and 'smart' cities lead to improvements in people's health and prosperity. While the 'high-tech' society that emerges is full of opportunities for improving crime prevention and public safety, it also creates a myriad of novel, increasingly complex crime threats which policing struggles to keep pace with. At the same time, many of the benefits of a high-tech society are unevenly distributed, with unequal access to technology driving another wedge between the 'haves' and 'have nots' and creating new forms of inequality and discrimination.

Figure 4: unique and common elements of the scenarios

Fragile Seams

Pandora's Box

Moderate (but fragile) economic growth

Rising inequality

Crime rooted in entrenched socio-economic and cultural issues

Technological change out-paces regulation

Gradual but significant increase in demand on policing from climate change

Growing reach and influence of 'Big Tech'

Prolonged global recession

Frequent economic and environment crises with cascading impacts

Weak government finances

High levels of fear, mistrust and anger

Digital surveillance used repressively

Lack of international cooperation (including law enforcement)

Xenophobia and racism seen as more socially acceptable

Common elements

Climate change has an increasingly disruptive impact on many people's lives and livelihoods

Emerging technologies create novel and complex crimes

Greater volume and resonance of digital disinformation

Increases in the surveillance capabilities of citizens, states, private companies and criminal networks

Increased use of AI and automation in most sectors

High levels of disruption to jobs, skills and business models

Growing reach and influence of 'Big Tech'

Significant challenges to police legitimacy

Downturn in global trade

Smaller and more managed economy

Less inequality and pursuit of material affluence

Definition of national security incorporates public health and environmental protection

Increased focus on people and planet leads to new ethical limits that require policing

Technology is regulated with public interest in mind

Digital economy drives economic prosperity

Emerging technologies solve some societal challenges

High levels of social and emotional dependency on technology

AI enables powerful surveillance and crime prevention tools

Unequal access to technology fuels inequality

'Big Tech' controls large parts of critical national infrastructure

Green Reset

Black Mirror

About the College

We're the professional body for the police service in England and Wales.

Working together with everyone in policing, we share the skills and knowledge officers and staff need to prevent crime and keep people safe.

We set the standards in policing to build and preserve public trust and we help those in policing develop the expertise needed to meet the demands of today and prepare for the challenges of the future.

college.police.uk

Follow us
@CollegeofPolice