

**NTT DATA**

Trusted Global Innovator

A police officer is shown from the back, wearing a black peaked cap with a checkered band and a high-visibility yellow vest with reflective silver stripes. A blue rectangular patch with the word "POLICE" in white capital letters is on the back of the vest. The officer is holding a set of keys in their right hand. The background shows a blurred street scene with people and buildings.

**POLICE**

# Justice and Safeguarding at NTT DATA

# Contents

03

**Introduction to  
NTT DATA**

04

**Our Public  
Sector Work**

05

**Our work in  
Policing**

05

**Intelligent  
Safeguarding**

08

**Police National Legal  
Database (PNLD)**

09

**Home Office**

11

**Crown Prosecution  
Service (CPS)**

13

**Las Vegas  
Smart City**

# Introduction to NTT DATA

NTT DATA is a top-ten global consulting and IT services provider.

Our mission is to use information technology to create new paradigms and values that contribute to a more affluent and harmonious society.

## Who we are

NTT DATA can help you navigate today's world of fast-growing technological complexity, ever-rising customer expectations and rapidly changing business environments. Through innovation, in-depth industry expertise and dedicated onshore and offshore teams of experts, we provide the capabilities, resources and experience to guide your digital development. We offer strategic yet practical advice, from blueprint to delivery and beyond.

## A heritage of excellence

With over 118,000 local experts based in over 90 countries, NTT DATA has the diversity and reach to tackle any challenge, in any market.

Across these global operations however, we always stay true to our Japanese heritage by focusing on enduring relationships, elegant solutions and a culture of innovation and improvement.

We are guided by shaping the world's most advanced technologies into elegant experiences – and these extend to our dedication to quality and excellence, and the respect and care we have for our clients.

## Creating value – through global innovation

To help achieve your goals and create value for your organisation, we offer specialist expertise and a passion for outcomes – supported by our best-in-class partner network and a £2.8bn global investment in R&D.

## Guiding you to Greatness

Our vision as a Trusted Global Innovator reflects our unwavering commitment to working with you as a long-term partner to combine inventive ideas with cutting-edge technologies.

We don't prescribe solutions; we investigate new possibilities and improvements with you, and share your challenges and successes as if they are our own.

That might be about delivering more value from technologies like AI and blockchain. Or removing costs from your business. Or monetising the value that exists within your data.

We'll go on that journey of change with you: from working side by side to develop your vision, to co-creating imaginative solutions, through to seamless implementation and continual improvement.

# Our Public Sector Work

NTT DATA guides public service organisations in embracing the latest technologies to create innovative services that utilise data and intelligence to provide a world-class user experience for UK citizens.



## Our Vision

Our vision is to make a positive contribution to UK society by helping our clients improve the lives of citizens through maximising the potential of technology and data to enable great experiences.

## Our Focus

We focus our services to public sector clients based on 3 key themes:

- **Enhance the experience:** Users are at the heart of everything we do. We design secure, accessible services that empower citizens and engage employees, helping to deliver on our clients' missions.
- **Apply the Intelligence:** We guide departments to become data-driven. We work with complex, national scale data to generate insight, automate decisions and manage risk.
- **Escape from Legacy:** We make agile work at scale, move project-thinking to product-thinking and accelerate the move of government systems to modern, cloud-based, secure, and open architectures.

## Our Engagements

Demographic and budget pressures mixed with a demand for consumer-like services continue to drive transformation. To meet those challenges, we're partnering closely with organisations in healthcare, central government and the third sector to improve outcomes and modernise their operations. For example –

At **University Hospital Leicester**, we've created a better environment for staff in the Emergency Department with screens showing key information on wait times, computer terminals that allow instant logging in by swiping an ID badge and on-demand printing that cuts paper wastage.

For the **Charity Commission for England and Wales**, we led a transformation programme that included the implementation of a digital registration process and online trustee services, resulting in reduced costs and more effective fraud detection.

Customers of the **Met Office** can now use a web-based tool or mobile app to access critical weather data and insight in real time. We developed a rich, visual interface that enables quick and easy interpretations and decision making by non-scientific users.

# Our Work in Policing

NTT DATA work with the police and broader agencies across the criminal justice system to help them deliver on the National Policing Digital Strategy's ambitions. We are also a Strategic Innovation Partner of Police ICT, enabling us to collaborate together on non-commercial projects to develop and promote innovation for the sector.

Here are five projects that illustrate the work that NTT DATA has done in this area.

## Intelligent Safeguarding

Intelligent Safeguarding is NTT DATA's solution for the National Police Chiefs' Council, powered by Microsoft technology and delivered in partnership with Police ICT, to better protect some of our most vulnerable citizens through a more efficient and effective approach.

In the current process, the routing of Protection Orders for Forced Marriage (FM) and Female Genital Mutilation (FGM) from Family Courts is **very lengthy, stressful and reliant on the applicant**. As a result, **less than 70%** of the total granted Protection Orders for FM/FGM are delivered correctly to the designated police force. Where failures occur, the police are left unable to enact the actions required by the Protection Orders to safeguard young people and prevent potential crimes.



## How it works today

After the Family Court issue a Protection Order, the current process means that the onus lies with the person at risk's representative to inform the relevant local police force via email. From receiving an out-of-office auto reply, they then have to calculate Force boundaries and personally email the Protection Order to a specific police force. Where this is not possible, they may need to ask a police officer for assistance – an incredibly challenging task to protect a young person in a timely fashion.

## The future

Under the new process, the Family Court will submit the Protection Order directly to Intelligent Safeguarding without any required input from the applicant. On receipt of the Protection Order, Intelligent Safeguarding uses Microsoft's artificial intelligence and automation technology to determine the required actions. The Protection Order is then sent automatically to the correct local police force to ensure they are able to act upon the order.

This new automated solution is more efficient and cost effective. Thanks to the Intelligent Automation technology used, we can now ensure **100% of Protection Orders delivered to the appropriate police force instantly**, so that victims can be protected without delay. This solution allows the police to safeguard victims in minutes rather than days, meaning that early notification enables police to protect victims before perpetrators are aware of the Protection Order.

A further benefit is that anonymised data is collected which can be analysed using Microsoft Power BI dashboards to give a centralised view of the Protection Orders issued. This allows police officers to better understand trends and areas most at risk, ensuring resources are deployed where they are needed. Police can then work with charities and the community to safeguard young people by, for example, undertaking bespoke campaigns targeting those affected communities in specific areas to educate them about Protection Orders. This will not only ensure the safety of the vulnerable but help prevent crime before it happens.



NTT DATA have been brilliant throughout the entire project; your entire team deserves to be applauded for their sterling efforts and can-do helpful attitude.

This Intelligent Safeguarding Solution is not only the future – thanks to your teams' efforts – it shall be the present. Many victims will be better safeguarded by this solution once it comes into force.

Thank you for your flexibility and understanding throughout the project. I am sure that this initiative will be built upon to protect other areas of vulnerability."

**Detective Sergeant PAL SINGH**

*Commander Ivan Balhatchet's Private Office National Police Chiefs' Council lead on Honour Based Abuse, Forced Marriage & Female Genital Mutilation*

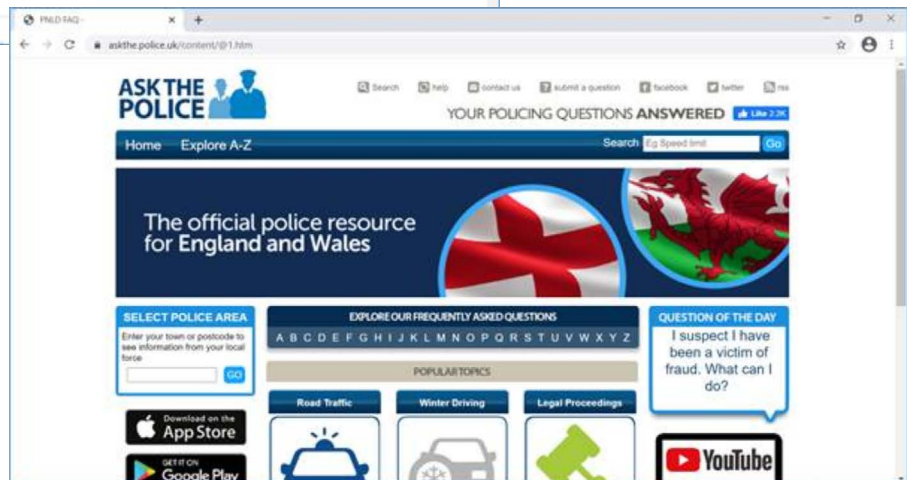
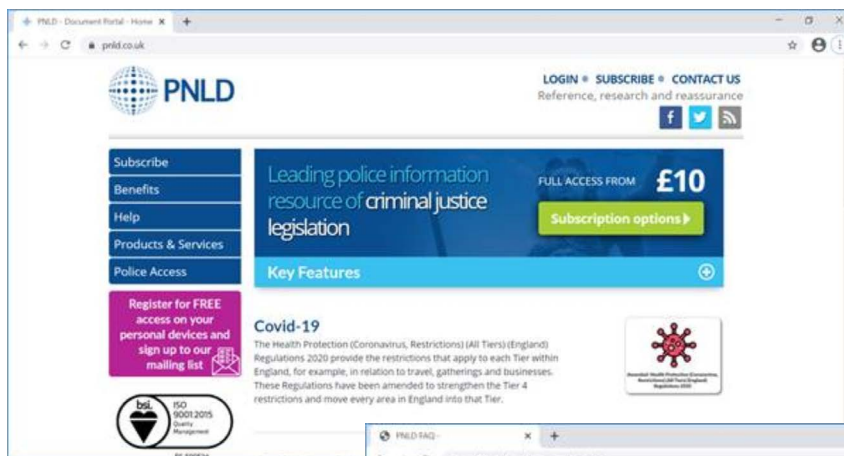
The Intelligent Safeguarding solution has the potential to be applied more widely, for example through the rollout of further Protection Orders such as domestic abuse and restraining orders which, once in place, will protect even more of our most vulnerable citizens.

# Police National Legal Database (PNLD)

PNLD have provided a legal database and other legal products to the 43 Home Office Police Forces in England and Wales and the British Transport Police for over 25 years. During this time the customer base has extended to include policing partners and other law enforcement agencies across the criminal justice

system, such as the Crown Prosecution Service.

The legal database is available as a subscription service, supporting over 250,000 users across the country and receiving approximately 7.5 million hits per annum.



PNLD created and continue to manage the free public Q&A websites, Ask the Police (ATP) ([www.askthe.police.uk](http://www.askthe.police.uk)) and Ask the Scottish Police ([www.askthe.scottish.police.uk](http://www.askthe.scottish.police.uk)), which together receive an additional 6 million hits per annum.

NTT DATA are working with PNLD to provide a modern Microsoft cloud-based replacement IT solution for all of the existing PNLD platforms, enabling unified content management and providing an enhanced user experience. We recently completed our Discovery phase together and are on schedule to deliver the new solution in the Summer of 2021.



## Home Office

Following a competitive procurement via the Digital Marketplace and the award of a two-year contract, NTT DATA will be working the Police and Public Protection Technology (PPPT) Chief Technology Officer (CTO) function at the UK Home Office to deliver a Project Outcome that will aid the UK Home Office as it works closely with policing, to define PPPT's national police technology systems reference architecture.

The NTT DATA team of experts team will deliver the necessary skills, models and techniques to define the reference architecture, thereby shaping the future delivery of national policing technology. The outcomes encompass delivery of architectures, principles and patterns to be used in assessing technical designs and to aid communication and governance. NTT DATA will work in a blended fashion within the PPPT CTO Function to deliver the defined outcomes pursued over the course of the two-year contract.

The PPPT CTO and NTT DATA have now co-created a vision for the Project stating that by defining and continuously evolving a clear architectural strategy for Police and Public Protection national services, the reference architecture will provide direction for solution delivery in alignment with wider Home Office and Policing in order to realise efficiency across the technology estate and improve delivery velocity, whilst ensuring maximised value to protect and safeguard the public.

## Our Deliverables

The NTT DATA team in the course of the contract will deliver architectural artefacts and outputs including:

- An As-Is Assessment of architectural artefacts within the PPPT CTO Function;
- A Reference Architecture for PPPT;
- The selection of strategic tooling for the portfolio and the definition of strategic technology choices to be enabled for the programmes;
- An Initial assessment of the suitability of PPPT systems to deliver National Policing Systems through a System of Systems approach;
- A high level roadmap to enact any necessary changes to deliver the technology solutions to support the capability model.

The deliverables under this contract will support PPPT Project delivery and its Architects through objective assessment and governance, help provide clarity on principles and standards, as well as clarity of a 'target state' against which strategic investment can be aligned.

Ultimately the outcome will ensure PPPT Projects build the required capabilities and the outcomes then fully underpin the five digital ambitions and priorities in the National Digital Policing Strategy.



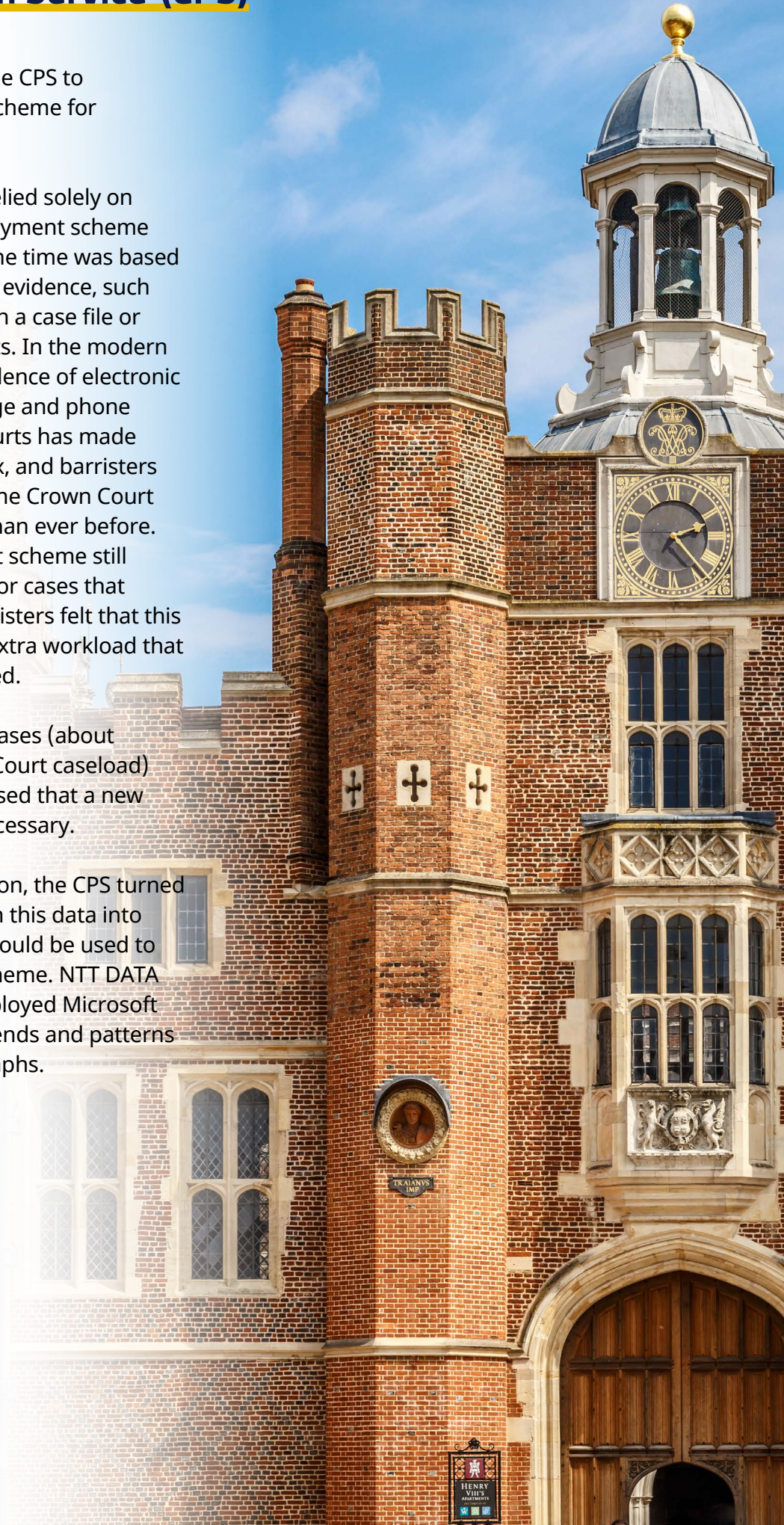
## Crown Prosecution Service (CPS)

NTT DATA worked with the CPS to modernise its payment scheme for barristers.

Historically, legal cases relied solely on physical evidence. The payment scheme that was put in place at the time was based on metrics related to this evidence, such as the number of pages in a case file or the number of defendants. In the modern day, the increasing prevalence of electronic evidence like CCTV footage and phone records being used in courts has made legal cases more complex, and barristers representing the CPS in the Crown Court face greater workloads than ever before. Despite this, the payment scheme still relied on 'uplifts' to pay for cases that required extra work. Barristers felt that this scheme failed to reflect extra workload that electronic evidence caused.

The CPS reviewed 3,000 cases (about 5% of the annual Crown Court caseload) and immediately recognised that a new payment scheme was necessary.

Following its data collection, the CPS turned to NTT DATA to transform this data into usable information that could be used to remodel the payment scheme. NTT DATA refined the data and employed Microsoft Power BI to transform trends and patterns into useful tables and graphs.





The results were somewhat surprising, showing that the number of pages in a case file continues to accurately represent the amount of work required, despite the influence of electronic material.

The most important finding to influence the scheme was that uplift payments were often inadequate and additional payments were necessary to compensate for the extra time barristers spent working with evidence that doesn't reach the court.

This evidence served to overhaul the payment scheme and NTT DATA's insights were used to create an interactive financial model to ensure affordability. As a result, the CPS has secured value for money for the taxpayer whilst ensuring that barristers are paid in accordance with their hard work.

“The data analysis and business intelligence provided by NTT DATA gave us real insights into the working of our payment scheme. This helped us achieve improvements that provide better value for the taxpayer and a fair outcome for members of the Bar Council.”

**Keith Milburn**

*OBE Head of the Counsel Fee Review Project*

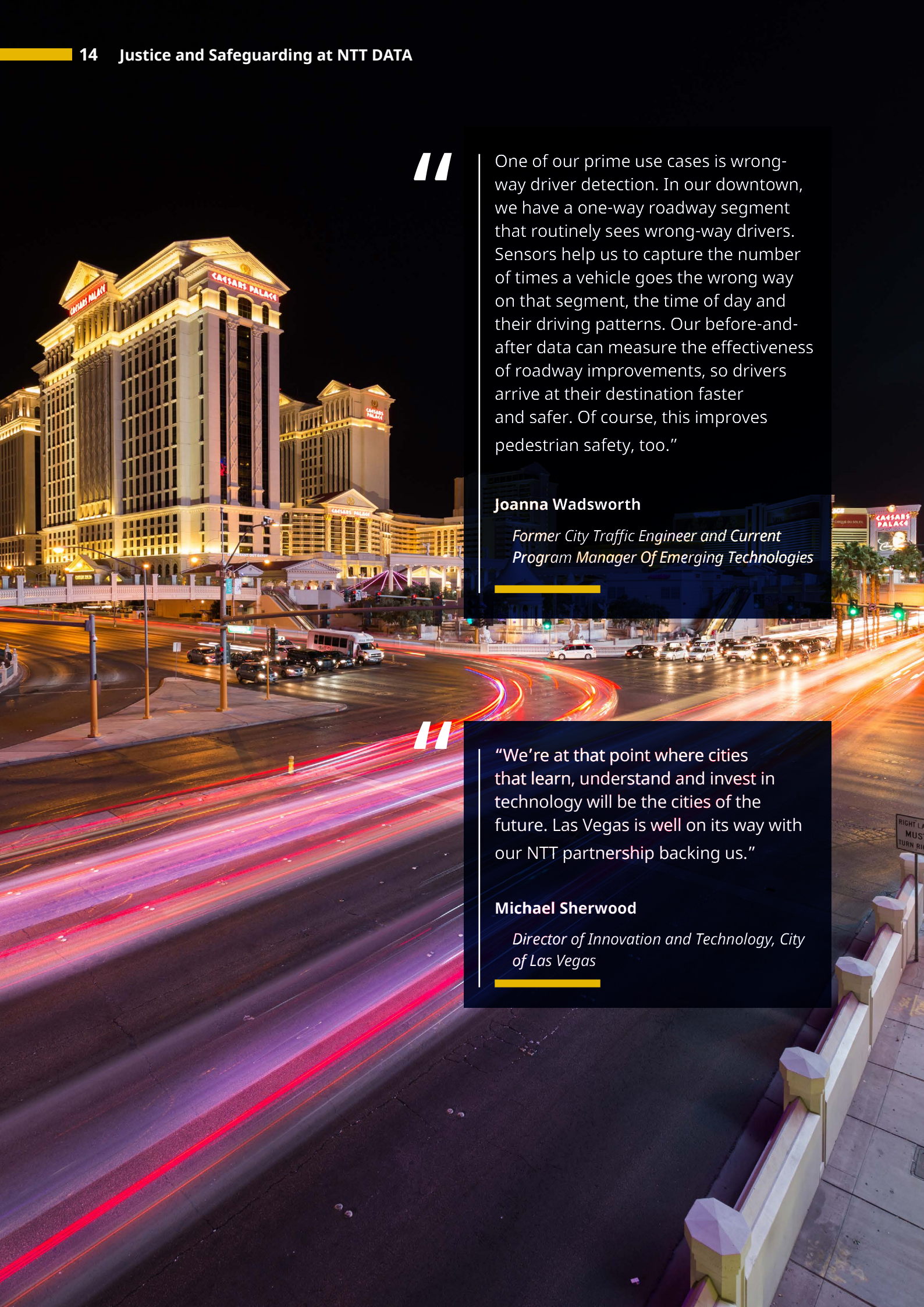
## Las Vegas Smart City

The City of Las Vegas is the second fastest-growing city in the US and as a result is expected to add one million residents to its population by 2045. This huge residential surge combined with large numbers of visiting tourists demanded a radical rehaul of urban planning and a new approach to services and public safety issues.

The city partnered with NTT to deploy a secure, smart edge-network of HD optical sensors, sound and motion sensors, IoT devices and micro data centres. These analytical technologies are both reactive and predictive. It uses machine learning to understand the regular, day-to-day patterns of the city so that any abnormalities, such as gunshots or more mundane examples such as a driver travelling the wrong way down a street, can be detected whilst considering other data sources like historical crime data, weather data and social media updates.

This data is used to make real-time situational decisions such as alerting emergency services to better combat crime and improve public safety.





“

One of our prime use cases is wrong-way driver detection. In our downtown, we have a one-way roadway segment that routinely sees wrong-way drivers. Sensors help us to capture the number of times a vehicle goes the wrong way on that segment, the time of day and their driving patterns. Our before-and-after data can measure the effectiveness of roadway improvements, so drivers arrive at their destination faster and safer. Of course, this improves pedestrian safety, too.”

**Joanna Wadsworth**

*Former City Traffic Engineer and Current Program Manager Of Emerging Technologies*

“

“We’re at that point where cities that learn, understand and invest in technology will be the cities of the future. Las Vegas is well on its way with our NTT partnership backing us.”

**Michael Sherwood**

*Director of Innovation and Technology, City of Las Vegas*

## For further information



**Chris Jones**  
*Head of Government  
& Social Enterprise Sector*  
chris.jones@nttdata.com



**Ryan Moore**  
*Solutions Lead for Government  
& Social Enterprise Sector*  
ryan.moore@nttdata.com



**Phill Akers**  
*Vice President  
Public Sector Sales*  
phillip.akers@nttdata.com

NTT DATA UK  
1 Royal Exchange  
London  
EC3V 3DG  
020 7220 9200

NTT DATA is a leading consulting and IT services provider, combining global reach with local expertise in over 50 countries. Whether it's business transformation, enabled by digital, data and technologies, safeguarding against security breaches, improving operational efficiency or driving new revenue streams, our vision as the Trusted Global Innovator can help organisations navigate the ever-changing digital landscape and deliver outstanding results.

NTT DATA offers a portfolio of best-in-class consulting services and innovative enterprise solutions tailored to suit the entire life cycle of IT investment. Supported by our international Centres of Excellence, our team of local experts can deliver on a wide range of services from transformation to agile development and intelligent automation for industries across manufacturing / automotive, banking, insurance, telecommunications, media and public services.

For more information about NTT DATA please visit [uk.nttdata.com](https://uk.nttdata.com)

**NTT DATA**