The City of London is one of 33 local authorities in the UK capital. Also known as the Square Mile, being the financial district and historic centre of London, it is arguably the most high-profile.

As a local authority, the City of London faces the same challenges as any other in the UK. It must work with tight budgets, drive a digital transformation agenda, and develop new ways of working. Yet some challenges are unique to the City.

The Square Mile itself has a residential population of 7,500, but almost 500,000 people commute in every day. It is home to some of London’s most notable landmarks, including St Paul’s Cathedral and the Millennium Bridge, and welcomes more than 8.8 million tourists a year. It also operates out of some unique buildings: the Guildhall dates back to 1411, the Mansion House opened in 1758.

“We actively promote London as being a great place to live, work and visit. It’s vital that we present a modern face to the world,” says director of IT, Sean Green. “And that includes how we operate as an organisation.”

**DRIVING SECURE, DIGITAL TRANSFORMATION**

To facilitate remote working and greater collaboration, the City planned to roll-out Office365 to 4,000 employees across 120 locations. The project, part of a broader digital transformation, was given greater emphasis by the plan to consolidate IT across the Police and Corporate operations at the City of London. For the consolidation to be effective both the Police and Corporation would need a single network architecture, but with clearly defined, separate network infrastructure, management and security for both parties.

“Security is absolutely key,” says Kevin Mulcahy, assistant director of IT Projects and Programmes. “It’s important we maintain confidence and trust, particularly in how we manage data and network access. We have to comply with strict Home Office standards around data security.”

Mulcahy wanted the same network and connectivity experience for all users, in all locations, but the priority was being able to manage this efficiently and effectively. In addition, he wanted to monitor network usage at a granular level. To help develop more useful applications and use cases, the City wanted to know who, how and why the network is being used.

“Really, we saw this as an opportunity to consolidate our wired and wireless estate,” he says. “Clearly, having a single vendor creates common tools and delivers cost and management efficiencies.”

Undoubtedly there will be opportunities in the future to do much more with mobile applications. There’s an opportunity to incorporate IoT, possibly around smart building solutions or air quality sensors. We’ll be better at monitoring, managing and proactively improving the City environment.

**SEAN GREEN**
DIRECTOR OF IT, CITY OF LONDON CORPORATION AND CITY OF LONDON POLICE

**REQUIREMENTS**
- Consolidate wireless and wired network estate
- Establish a solution and toolset from single vendor
- Meet strict data security regulations
- Encourage a forward-looking organisation, better able to promote London as a place to live, work and visit

**SOLUTION**
- Aruba 802.11ac Wi-Fi access points
- Aruba campus core and edge switches
- Mobility controllers
- AirWave Network Management
- ClearPass Secure Network Access
- ClearPass OnGuard for advanced endpoint security

**OUTCOMES**
- Enabled 70% of employees to work from mobile devices
- Transformed productivity with greater use of mobile applications, from video calls to digital stock control to fingerprint scanning
- Strengthened network security with single pane of glass managing access for diverse user groups
- Delivered network insight to better inform future usage
- Inspired culture of innovation, creating a service-led approach to IT

**UNIFIED ARUBA NETWORK ARCHITECTURE UNDERPINS MOBILE INNOVATION AND SMART MANAGEMENT AT CITY OF LONDON**

The City of London is one of 33 local authorities in the UK capital. Also known as the Square Mile, being the financial district and historic centre of London, it is arguably the most high-profile.
Seamless management across a consolidated network
The solution involves more than 1,000 Aruba Wi-Fi access points and almost 400 switches across the 120 sites, from Tower Bridge to Epping Forest to the Animal Reception Centre at Heathrow Airport. Aruba ClearPass manages secure and policy-based network access and endpoint integrity, across both wired and wireless infrastructures, whether you’re an employee, architect or zoologist. Aruba AirWave then proactively monitors and manages the performance and availability of the network and applications.

“This approach enables us to link our wired and wireless estate in a seamless manner through the management tools available to us,” says Mulcahy. “A common tool set reduced the training required and the time to deploy. Plus, having real granular detail on how our users are consuming the service, will enable us to drive more value out of the investment.”

Consistent performance transforms user expectations
The immediate impact has been to ensure consistent, high-performance connectivity across all locations. There is no drop in performance between wired and wireless. This has enabled employees to make best use of their new mobile hardware – to date, around 70% have been issued with new laptops and mobile devices.

“We’ve completely changed the dynamics of the workplace,” says Mulcahy. “Staff are now coming to us, looking at new ways of working and exploring new technologies. In particular, we’re focused on how we might use Microsoft® Skype for Business video conferencing more effectively across the organisation. The unified comms aspect gives us a really powerful tool to use across our user base.”

“This is a long-term play,” says Green. He recognises that change is as much cultural as technological. “There are three types of worker: Static, those that want to Work from Anywhere, and those that have to Work Remotely. We have a solution that adapts to all three.”

GREATER USE OF NEW MOBILE APPLICATIONS
The effectiveness of the solution has allowed Green to rethink the whole approach to IT: “We’ve changed our organisational structure. We now have business analysts, communication experts and mobile technology experts – people that can understand a business problem and apply a solution quickly. Nowadays we spend a lot more time talking to users.”

This reliability, flexibility and dynamism will translate into more mobile applications and accelerated innovation. Remote working may allow the City to consolidate its fixed offices; greater productivity will allow resources to be directed at new services.

Green says the City of London Police are already using an app to scan fingerprints and improve suspect identification. There is an app to report graffiti and pot holes. Another app manages stock control at Smithfield Market, London’s largest meat market.

“Undoubtedly there will be opportunities in the future to do much more with mobile applications,” says Green. “We run a diverse property portfolio. There’s an opportunity to incorporate IoT, possibly around smart building solutions or air quality sensors. We’ll be better at monitoring, managing and proactively improving the City environment.”

Changing the workplace, inspiring employees
“What excites me is what this technology taken together can do,” says Mulcahy. “When you look at the network side of things and the desktop and the application estate, and the use of cloud services, it completely changes what work traditionally means to people.”

He adds, “Work is no longer just a location people go to. It can happen anywhere through the use of these technologies.”

Green sees the network as an enabler of further transformation, and that the City has barely begun its digital journey: “We can layer on new services to the network. We can easily control access, and then explore the usage insight. It’s a step change.”