



Improve public safety and engagement with HPE Private Cloud AI

Accessible AI solutions for the public sector



Transform public services with AI

Artificial intelligence (AI) is <u>driving significant progress</u> in the public sector as governments, cities, educational entities, and other federal agencies operationalize their data for the well-being of society. Protecting and serving the public is a massive undertaking. Budget constraints, staffing shortages, talent gaps, safety concerns, and cybersecurity threats are common challenges in our highly digitized world. Compounding these problems is the need for public and private organizations to collaborate to deliver connected services, which means sharing ideas as well as utilizing data to make faster, smarter decisions. Al is the key to unlocking the value of data to improve citizen experiences and enable greater efficiency through automation and dynamic forecasting — capabilities that can make daily life safer and easier.

As demand for public services continues to rise, traditional computing and data analysis are no longer enough to meet the modern needs of the public sector. The ability to streamline routine tasks, accelerate response times, and reduce public risks are just some of the benefits that real time intelligence can deliver. The following use cases are just some of the ways that AI can enable better public services to a large and diverse population:

• Chatbots for citizen engagement: Transform communication between citizens and government organizations using Al-powered chatbots to provide information, assistance, and



guidance related to government processes and public services (such as drivers license renewals, passport applications, event information, and more). Chatbots simulate conversations to quickly facilitate public inquiries 24/7 and save time and resources needed to field requests.

- Automated public safety: Al can automate many aspects of public safety including law enforcement, traffic management, and emergency services. Public sector organizations are using applications such as computer vision, weather forecasting, and disaster management to gain real time insights that help prevent crime, respond to incidents faster, and mitigate the impact of disasters.
- Cybersecurity threat analysis: Al techniques are used to enhance cybersecurity threat detection and risk management by leveraging large datasets to identify patterns that indicate vulnerabilities or possible attack surfaces. Al accelerates data analysis, allowing organizations to rapidly respond to cyberthreats and prevent attacks before they occur, ensuring the protection of their data and digital systems.

The possibilities of AI for the public sector are truly limitless. To enable the power and flexibility that are necessary to support these AI applications, the public sector must invest in technologies that can meet all of today's requirements and evolve quickly for tomorrow's challenges.

Keep the public safe and citizens engaged

Many organizations are at the beginning of their AI journeys and therefore struggle with where to start, how to manage risks, and how to control costs while driving outcomes. As many as <u>80% of AI projects</u> fail before reaching production.

Public sector organizations can benefit greatly from a solution that gives them the ability to experiment and grow in a low-risk way while having the visibility and control to protect sensitive data and models. The right type of solution can create an environment that is purpose-built for the AI lifecycle — from collecting massive data generated by connections between people and things, extracting important insights, and using them to address public needs.

To realize these benefits, organizations need an end-to-end approach to AI that encompasses AI technologies, use case objectives, and ethical considerations. It must allow them to consider how AI can deliver against business targets overall, but also what resources and security measures are necessary across the distinct stages of the lifecycle.

Public cloud solutions (while feature-rich) can expose data and models to threats. Instead, the public sector is increasingly embracing a hybrid cloud approach to AI with data privacy and control as key factors. A full-stack private cloud simplifies the management of fragmented technologies and boosts the productivity of AI users.

This turnkey solution, known as HPE Private Cloud AI (PCAI), supports the entire AI development lifecycle and provides consistent experiences as AI infrastructure changes over time.



Figure 1. Key use cases for public safety and engagement

Why HPE Private Cloud AI?

To boost productivity and optimize essential public services, organizations are adopting <u>HPE PCAI</u>. HPE PCAI is the first co-engineered solution to come from NVIDIA® AI Computing by HPE — a new joint initiative to help organizations unlock their AI ambitions. NVIDIA AI Computing (or HPE PCAI with NVIDIA) includes AI-optimized infrastructure, networking, software, and foundation models that accelerate the entire AI workflow, so projects reach production faster with higher accuracy, efficiency, and infrastructure performance at a lower overall cost. The goal of this initiative is to make AI accessible for more organizations and to create an experience that is entirely turnkey.

HPE PCAI is tailored to AI models and designed to scale easily with the growth and utilization of AI use cases. While many AI offerings on the market focus on Day 0 and Day 1 tasks (such as technology integration), our solution also supports Day 2 challenges (of managing, scaling, and adding AI technology) and beyond. We empower public sector organizations throughout the AI lifecycle with a rich ecosystem of proprietary and open-source tools that help you simplify infrastructure, quickly deploy AI workloads, and freely experiment and scale AI projects while keeping your data private and secure.

This is where <u>HPE GreenLake</u> comes in. HPE PCAI provides a self-service cloud experience enabled by HPE GreenLake, a single control plane with a portfolio of cloud services for users and data across hybrid environments. Choose to manage your workloads on-prem, colocation, or in the cloud. You can start small with a single AI pilot and ramp up for multiple use cases, while keeping costs down.

Unlike full-stack AI solutions based on reference architectures that can take months to plan, build, and deploy, HPE PCAI is ready to use out of the box. You can expect exceptional value from HPE PCAI:

- 45% reduced total cost of ownership for infrastructure
- <u>43%</u> lower three-year cost of operations
- 100% data availability for all mission-critical tiers¹

Explore the technologies of NVIDIA AI Computing by HPE

We know that getting started with AI can be daunting. That's why HPE PCAI is a fully curated solution including purposebuilt infrastructure, tools for each stage of AI development, plus a library of models that are most applicable to your use cases. Your environment benefits from NVIDIA AI computing, networking, and software with robust <u>HPE ProLiant Gen12</u> inferencing servers, HPE AI storage, and HPE GreenLake cloud — all through a common experience and user interface. This flagship offering from NVIDIA AI Computing by HPE can make AI more streamlined than ever before, for organizations of every size.

Al-optimized hardware is delivered as a single rack in small or medium configurations. Small configurations are ideal for basic large language model (LLM) inference (i.e., chatbots for citizen engagement), while medium configurations can support retrieval augmented generation for LLMs (i.e., automated public safety). Additionally, large multi-rack configurations are available for fine-tuning the most complex models (i.e., cybersecurity threat analysis).



The software layer features <u>NVIDIA AI Enterprise software</u> along with a set of AI tools that are user-friendly and designed for your long-term AI needs. In smaller configurations, HPE AI Essentials Software allows you to expedite data pipelines and use cases. In large configurations, <u>NVIDIA NeMo services</u> enable you to deliver enterprise-ready models with precise data curation, customization, RAG, and accelerated performance. We also provide enterprise-grade tools to open up collaboration across your organization, giving you role-based access control, data versioning and lineage, and development capabilities. <u>NVIDIA NIM inference microservices</u> are included with configurations of any size.

Al innovation for a highly digitized world

Al will play a growing role in the IT estate for decades to come. A private cloud environment delivers all the necessary tools and capabilities to succeed with Al right now and in the future.

HPE and NVIDIA understand the immense responsibility of the public sector to ensure the safety and sovereignty of citizens and their data. We also know that innovation can be daunting — but it doesn't have to be. HPE PCAI makes the path to AI simple and intuitive. With a scalable, pretested, AI-optimized and fully accelerated private cloud, your AI and IT teams can gain the freedom to develop and deploy AI applications to support all your critical initiatives (while maintaining control over costs and other risks).

Engage with our experts for an advisory session to jumpstart your AI journey. <u>HPE AI Services</u> are available globally to help you to plan, launch, and manage your AI environment. Services include developing a roadmap, technology selection, design, and proof of concepts to deployment and management.

Discover how a private cloud solution for solution for AI can transform your performance in the public sector.



Learn more at

NVIDIA AI Computing by HPE HPE Private Cloud AI



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