

Government | United States

# Enhancing public safety with AI

The City of Brownsville

To help law enforcement get the edge on criminals and enhance services for residents, the City of Brownsville is working with Lenovo, SHI, NVIDIA, and Centific to deploy an AI-powered video monitoring solution running on the Lenovo Hybrid AI 285 Platform.



Lenovo



NVIDIA

# 1

## Customer background

---

# Who is the City of Brownsville?

The largest city in the Rio Grande Valley, the City of Brownsville was founded in 1848 and covers nearly 150 square miles. Located on the western Gulf Coast in South Texas, adjacent to the Mexican border, the city has a population of approximately 185,000 and welcomes thousands of tourists each year.



# 2

## The challenge

---

Every day, City of Brownsville employees aim to deliver outstanding services to residents: from public education and libraries to policing and emergency response.

Jorge Cardenas, CIO at the City of Brownsville, says: “As a small city, the challenge is always to offer the best possible service to the public while ensuring efficient use of taxpayer funds. As the smart city concept matured, we saw a big opportunity to use new technologies to achieve our goals.”

# 2

## The challenge

---

For the City of Brownsville, the journey to becoming a smart city is part of a far-reaching digital transformation. “It’s hard to believe now, but just a few years ago our city was one of the lowest ranked in the nation for high-speed internet connectivity,” notes Cardenas. “To turn that result on its head, we started by investing in brand-new fiber and 5G networks and modernizing our data center infrastructure.”

As the City of Brownsville laid solid foundations for a smart city, it also began mapping out AI automation opportunities for innovative public safety and resident service delivery use cases.

# 2

## The challenge

---

“We have thousands of cameras across the city, but with so many video feeds, real-time monitoring just wasn’t feasible,” says Cardenas. “If we could use AI to proactively alert teams to in-progress incidents such as wrong-way driving, vandalism of public spaces, or the illegal dumping of waste, we knew we could reduce costs for the city and foster a cleaner and safer environment for residents.”

“

“Our partners Lenovo, SHI, NVIDIA, and Centific have been with us from the very beginning of our smart city journey. Each company has brought deep expertise and a shared commitment to our success.”

Jorge Cardenas

CIO, City of Brownsville

# 3

The  
solution

## Deploying AI infrastructure

To achieve its smart city objectives, the City of Brownsville worked in collaboration with its trusted technology partners SHI and Centific. Together with Lenovo, SHI and Centific supported the city in developing the technological infrastructure required for an extensible AI-driven platform supporting Smart City initiatives.

### Hardware

[Lenovo 285 Enterprise AI Platform](#)

[Lenovo ThinkSystem SR635 V3](#)

[Lenovo ThinkSystem SR675 V3](#)

[NVIDIA H200 NVL 141GB PCIe GPU](#)

[Gen5 Passive GPU](#)

NVIDIA SN2201 1GbE Managed Switch with Cumulus (PSE)

NVIDIA SN3700V 200GbE Managed Switch with Cumulus (PSE)

### Software

[Centific VerityAI](#)

NVIDIA AI Enterprise

# 3

## The solution

The infrastructure for the smart city solution is based on the [Lenovo Hybrid AI 285 Platform](#), which combines high-performance [Lenovo ThinkSystem SR675 V3](#) and [SR635 V3](#) servers accelerated by NVIDIA H200 NVL GPUs and NVIDIA AI Enterprise software tools, libraries, and frameworks. This platform, along with SHI's extensive solution capabilities and Centific's state-of-the-art VerityAI platform, allows the City of Brownsville to deliver positive outcomes for the local community and beyond.

# 3

## The solution

# Surfacing actionable intelligence

To transform raw video streams into actionable intelligence for law enforcement and first responders, the city worked with SHI to deploy Centific's agentic vision platform, VerityAI, on the Lenovo Hybrid AI 285 Platform. By using modern infrastructure and AI-driven intelligence to process thousands of feeds in real time, the city will be able to automatically detect road traffic accidents, criminal activity, and service delivery challenges—and dispatch resources immediately to the right location.

“We are building a solution that is secure and private by design,” comments Cardenas. “One of the ways we achieve this is by not retaining copies of video data on the platform after processing. We further enhance our security posture by using our own private fiber and 5G networks for video feeds.”

“

“All cities struggle with similar challenges, and one of the biggest is that we only know about most illegal activity after the fact. By working with Lenovo, SHI, NVIDIA, and Centific, we’re creating a smart city platform that will enable real-time detection of crime, a capability we will be able to offer as a service to other neighboring cities and towns in the future.”

Jorge Cardenas

CIO, City of Brownsville

# 4

## The results

---

As it prepares to go live with its first real-time monitoring use cases, the City of Brownsville is anticipating major benefits for residents.

“Every year, the City of Brownsville spends more than \$100,000 clearing up illegally dumped waste,” comments Cardenas. “By catching people in the act, we’ll be able to recover costs of the cleanup from the perpetrators themselves. That’s going to be an excellent result for the taxpayer, and make Brownsville a cleaner and more desirable place to live and visit.”

# 4

The  
results

## Accelerating investigations

AI-powered video analysis also promises to speed up law enforcement investigations. “We’re confident that our new platform will cut the time that police spend analyzing video footage of crime by 50% or more,” says Cardenas. “In phase one, we’re planning to use around 300 cameras to support five different AI-detection use cases. Looking further ahead, we’re aiming to ramp up to over 1,000 real-time video feeds and move toward a truly agentic approach to incident response.”



Up to 1,000 video feeds analyzed in real time



Support for dashcam, bodycam, and resident video inputs



Up to 50% faster police investigations



\$100K/year in potential savings



“Throughout this project, Lenovo, SHI, NVIDIA, and Centific have worked together seamlessly. It feels like we’re a single team, and we couldn’t have achieved our smart city goal without them.”

Jorge Cardenas

CIO, City of Brownsville

# Why Lenovo and NVIDIA?

To deliver the new AI solution within budget, the City of Brownsville needed to balance raw performance with operational cost-effectiveness. With the Lenovo 285 Enterprise AI Platform, the city can harness ultra-efficient NVIDIA H200 NVL GPUs and NVIDIA SN3700 switches within a fully validated, scalable, and robust AI infrastructure solution stack.

“Lenovo, SHI, Centific, and NVIDIA checked all the boxes: cost, customer service, and innovation,” confirms Cardenas. “The Lenovo 285 Enterprise AI Platform delivered exactly what we were looking for.”

# How can cities tackle crime while keeping budgets lean?

Working with Lenovo, SHI, Centific, and NVIDIA, the City of Brownsville is creating a real-time monitoring platform for surveillance video, powered by AI.

[Explore Lenovo Hybrid AI](#)

