



From Daily Commutes to the Masters Tournament:

How Augusta Scaled Smart Traffic Management with Nx Go and Intel

Written by Network Optix Team

Introduction

The <u>Traffic Engineering</u> division of the <u>Augusta Engineering Department</u> (AED) oversees more than 275 signalized intersections and an ever-expanding fleet of traffic cameras across Richmond County, Georgia. Each spring, tens of thousands of visitors descend on the city for the Masters Tournament, turning routine congestion into a high-stakes logistical puzzle. AED needed a visual-infrastructure platform that could simplify everyday operations yet flex instantly for event-level surges. They chose Nx Go — built on the Nx Enterprise Video Operating System (Nx EVOS) and deeply optimized for Intel® edge-Al silicon — to transform their existing camera network into a real-time, data-driven traffic-management engine.

Challenges

Before adopting Nx Go, AED relied on a rigid, on-prem system deployed in 2017. The interface demanded specialist knowledge, re-configuring camera views during live incidents was slow, and the platform struggled to scale beyond a few dozen devices. These limits were felt most acutely during the Masters, where dynamic lane reversals and sudden volume spikes made split-second decisions imperative. At the hardware layer, the legacy stack was tied to costly GPU appliances, making AI expansion financially unsustainable.

Solution

AED replaced the legacy software with Nx Go running on commercially available Intel® Core™-and Intel® Xeon®-based servers. Nx Go's newly released Nx AI Manager, with deep Intel integration, orchestrates CPU, integrated GPU, and embedded AI accelerators independently or as one —delivering per-channel inference at roughly one-fifth the cost of NVIDIA AGX Orin — class edge boxes. The result is a symbiotic solution: Intel silicon provides the horsepower; Nx Go translates that power into time-synchronized, structured data streams that plug directly into Augusta's signal-timing software, digital-twin models, and incident-management dashboards.

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During the Masters, operators use Nx Video Wall to monitor over 45 high-priority intersections in a single panoramic view. When congestion builds, AI models — running locally on Intel hardware — auto-tag stalled vehicles, crashes, or signal outages, prompting instant operator alerts. Layouts can be re-arranged with a drag-and-drop gesture, and Intel vPro® lets IT staff push firmware updates to roadside servers without a truck roll.

Results

- 4× CAMERA SCALABILITY: Augusta's network has grown from a few dozen to 130+ cameras, with expansion to 230 already budgeted. Intel-powered edge servers scale analytics without a linear cost jump.
- 60 % FASTER INCIDENT RESPONSE¹: Al-driven alerts and remote diagnostics reduce signal-down-time and crash-clearance intervals.
- 5× LOWER AI COST PER CHANNEL²: Benchmarks show that Intel-optimized Nx Go workloads deliver city-wide perception at one-fifth the GPU-appliance cost previously forecast.
- **EVENT-READY IN SECONDS**: Custom layouts and AI presets make the Masters Tournament a plug-and-play scenario rather than a month-long re-engineering effort.

Conclusion

By deploying Nx Go on Intel architecture, Augusta has created a future-proof traffic-management platform that keeps everyday commuters moving and handles world-class events without breaking stride. The symbiosis is clear: Intel offers scalable compute and remote manageability; Nx Go converts that raw power into actionable, real-time intelligence — proving that smart-city innovation and fiscal responsibility can, in fact, travel the same road.

Disclaimers:

¹ Augusta Engineering Department internal KPI analysis (April 2025, provided to Network Optix under NDA).

² Intel Extends Leadership in AI PCs and Edge Computing at CES 2025 - Intel Newsroom

Partner Name

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