Enhancing Traffic Monitoring in the City of Centennial

Introduction

The City of Centennial, Colorado, operates a state-of-the-art Traffic Management Center (TMC) to monitor regional traffic conditions. Serving a population of over 108,000, Centennial's TMC ensures smooth traffic flow, supports city operations such as snow management, and engages the public with initiatives like Centennial 101, which provides residents with a behind-the-scenes look at city departments.
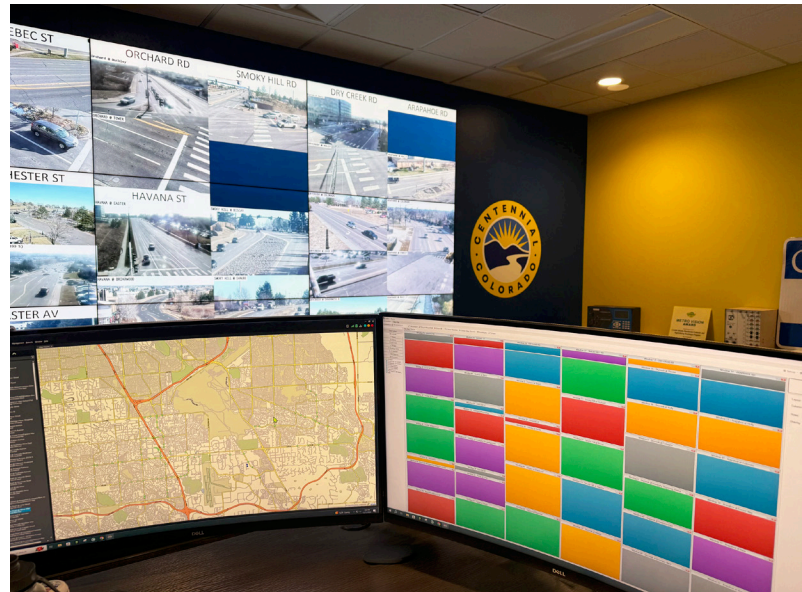
In August 2023, Centennial installed RGB Spectrum's *Galileo®* video wall processor to address its operational needs. The city sought a solution that would enable operators to monitor live feeds from 60 CCTV cameras, improve situational awareness, and facilitate content management for real-time operations and training purposes.

The Challenge

Centennial's Traffic Management Center required a reliable, flexible system capable of displaying numerous video streams simultaneously. Operators needed the ability to monitor critical intersections and road conditions in real time. Beyond daily operations, the TMC needed a tool to support public presentations and internal reviews, offering intuitive control of the video wall through a desktop interface.

Planning for the new operational center began in 2021. After evaluating various options, Centennial chose to follow the example of neighboring Douglas County, which had successfully implemented RGB Spectrum's *Galileo* system in its TMC. This decision was influenced by positive feedback on *Galileo's* reliability, flexibility, and performance.

The city collaborated with the Momentum Group, a nationally recognized and award-winning manufacturer's representative firm in the Rocky Mountain region. The Momentum Group provided exceptional service and support throughout the project.

"We've been very happy with the system reliability and functionality. The *Galileo* allows us to monitor real-time traffic and engage with the public — all in one powerful platform."

LIBBY NORDEEN, TRAFFIC MANAGEMENT CENTER OPERATOR, CITY OF CENTENNIAL

Why RGB Spectrum

RGB Spectrum's *Galileo* video wall processor met Centennial's needs on multiple fronts. It offered a seamless solution for monitoring multiple video streams in real time and allowed operators to move content effortlessly between a desktop interface and the video wall. The city appreciated *Galileo's* robust design, which ensures 24/7 reliability, and its scalability to accommodate future operational growth.

Libby Nordeen, Traffic Management Center Operator, described the decision: "We really liked that Douglas County uses *Galileo* and has been happy with it. It made sense for us to go with RGB Spectrum to align with our region and ensure seamless communication with other jurisdictions."

How the City of Centennial Uses RGB Spectrum

At the heart of Centennial's TMC is RGB Spectrum's *Galileo* processor, which powers a Planar display that showcases live video feeds from 60 CCTV cameras. Operators, including Nordeen and her team, use the system daily to monitor traffic conditions and enhance citywide situational awareness. This capability has been especially beneficial during inclement weather, allowing snow crews to assess road conditions and prioritize their efforts using live video feeds.

The *Galileo* processor also supports Centennial's broader goals of public engagement and education. During events like Centennial 101, a program designed to familiarize residents with city operations, the TMC uses the video wall to demonstrate how the department monitors traffic and supports real-time operations. The ability to move content from the desktop to the video wall enables operators to create dynamic and engaging presentations for visitors and city officials alike.

Looking ahead, Centennial plans to expand the TMC's capabilities to include enhanced incident management and greater system-to-system communication with neighboring jurisdictions such as Englewood, Greenwood Village, and Littleton, all of which use the same traffic signal platform.

Results and Benefits

Since installing RGB Spectrum's *Galileo* video wall processor, the City of Centennial has seen significant improvements in traffic monitoring operations. Operators now benefit from enhanced situational awareness and streamlined decision-making. *Galileo's* seamless integration with desktop control has simplified workflows, enabling more efficient management of daily monitoring and presentations.

Libby Nordeen highlighted the system's impact: "We've been very happy with the system reliability and functionality. *Galileo* allows us to monitor real-time traffic and engage with the public — all in one powerful platform."

The TMC's enhanced operations provide a solid foundation for future growth. As Centennial expands its capabilities to include incident management and regional collaboration, the *Galileo* processor will continue to be a cornerstone of efficient traffic monitoring and control.

About RGB Spectrum

RGB Spectrum is a leading designer and manufacturer of mission-critical, real-time audio-visual solutions for civilian, government, and military client bases. The company offers integrated hardware, software, and control systems to satisfy the most demanding requirements. Since 1987, RGB Spectrum has been dedicated to helping our customers achieve *Better Decisions. Faster*.™ Learn more at www.rgb.com.