
We've all experienced it—that sudden jolt when you hit a pothole on your morning commute. You pull over, check your tire pressure and wonder what kind of damage might be lurking beneath the surface. Potholes and roadway damage can pose serious safety risks, especially on heavily traveled routes. Add in Florida's unpredictable weather, and keeping every road in perfect condition becomes a daunting challenge.

To tackle this challenge, the City of Altamonte Springs teamed up with Robocist, Inc., an innovative tech company, to rethink how road repairs are identified and managed.

## The Road Triage Program

Robocist is revolutionizing transportation infrastructure with cutting-edge technology, and its innovative solution—Road Triage—is changing how cities identify and manage roadway damage.

The system leverages computer vision, machine learning and artificial intelligence to identify, locate and evaluate City roads, which empowers the City to detect cracks, potholes and surface wear with greater accuracy and speed than traditional inspection methods.

By spotting issues early, City staff can schedule repairs before minor problems become major hazards. That means safer roads, fewer complaints and faster response times—all without waiting for residents to report damage.

The benefits go beyond safety. Traditional inspection programs cost the City hundreds of thousands of dollars annually, requiring staff, equipment and time. Road Triage performs the same job faster, at a fraction of the cost—allowing your tax dollars to go further.

## Real-Time Data, Real Results

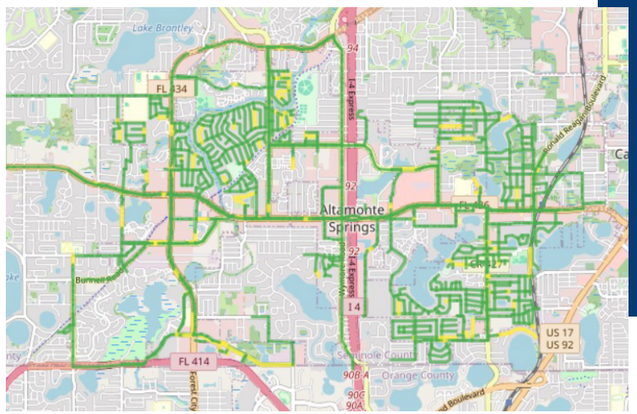
The Road Triage system is being deployed across all 80 miles of Altamonte Springs roads. It delivers real-time data that helps prioritize maintenance and optimize resources. The system proves especially valuable during hurricane season, when knowing the condition of roads before and after storms can make a major difference.

With rapid, data-rich reporting, Road Triage empowers the City to respond faster, repair storm damage more efficiently and even support emergency aid requests with documented evidence.

This forward-thinking use of technology supports Altamonte Springs' broader mission of creating a modern, resilient and sustainable city. Through the Altamonte Global Innovation Lab (AGiL), the City has already introduced AI to assist employees who are armed services veterans in accessing their VA benefits and launched the autonomous vehicle program, CraneRIDES. Road Triage is the latest addition to a growing portfolio of tech-driven solutions.

## Partnering for Progress

Robocist's Road Triage isn't just a clever idea—it's changing the way local government tackles road maintenance. This partnership demonstrates that bold, strategic investments in technology can improve services while reducing long-term costs.




*A Robocist-generated map with green lines indicating good City road conditions.*

By embracing AI in practical ways, Altamonte Springs is positioning itself as a leader in the smart city revolution. As Road Triage evolves, the City will continue analyzing the data to guide future road projects, streamline budgeting and enhance emergency response.

## Paving the Way Forward

Altamonte Springs is choosing to provide better services through innovation, efficiency and smart collaboration. Road Triage represents the City's commitment to leveraging technology for long-term impact, showing how a smarter approach to infrastructure can build a stronger, safer community—one road at a time.

### Road Triage Features

- **Roadway Evaluation:** Evaluates 80 miles of roadway to assess overall pavement condition
- **AI-Powered Pavement Distress Assessment:** Uses AI to detect and assess various types of pavement distress, including: lateral, longitudinal, fatigue or sealed cracks, potholes, patches and repairs and overall ride quality
- **Actionable Insights for Maintenance:** Generates actionable insights to inform maintenance strategies and prioritize repairs
- **Interactive Tools:** Provides interactive maps, detailed data files and high-resolution images to support decision-making and reporting