Aeva Reveals CityOS, an AI-Powered Platform for Real-Time Traffic Intelligence with NVIDIA AGX

March 17, 2026

New Platform Combines 4D LiDAR Sensors and Edge AI to Improve the Safety and Efficiency of Urban Infrastructure

MOUNTAIN VIEW, Calif.--(BUSINESS WIRE)--Mar. 17, 2026-- Aeva® (Nasdaq: AEVA), a leader in next-generation sensing and perception systems, today announced the introduction of Aeva CityOS™, an AI-powered Intelligent Transportation Systems (ITS) platform for real-time traffic intelligence built on NVIDIA's AGX Orin. The platform digitizes intersections and roadways to improve safety, efficiency, and data-driven transportation planning in cities worldwide.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20260317082915/en/

Aeva announced CityOS, an AI-powered Intelligent Transportation Systems (ITS) platform for real-time traffic intelligence.

CityOS represents a fundamental shift in how cities perceive and manage mobility by combining automotive-grade 4D LiDAR sensors with edge AI processing and market-leading perception and analytics software in collaboration with industry leaders including NVIDIA. It transforms static infrastructure into intelligent, continuously aware systems capable of understanding not just where objects are but how they move and interact.

With CityOS, transportation agencies can now deploy intelligent infrastructure that delivers continuous, high-resolution perception of vehicles, pedestrians, cyclists, and other road users—enabling safer streets, smarter signal timing, and data-driven urban planning.

"As cities confront rising congestion, Vision Zero goals, and increasing multimodal complexity, the need for precise, real-time infrastructure intelligence has never been greater," said Eric Gannaway, Director of Business Development for ITS at Aeva. "By combining 4D LiDAR sensors with edge AI, CityOS enables cities to understand movement with precision, detect and remove risk before accidents occur, and optimize traffic flow in real time."

From Passive Sensors to Comprehensive Intelligent Transportation Systems

Traditional intelligent transportation systems rely on cameras, radar, or inductive loop sensors that depend on ambient lighting, provide limited spatial detail, or detect only an object's presence within fixed zones. CityOS introduces a new intelligent architecture built on Aeva's 4D LiDAR technology, equipping each intersection with Aeva Atlas™ Orion sensors together with perception and analytics for full coverage and comprehensive situational awareness.

Rather than replacing existing infrastructure, CityOS enhances it with high-resolution 4D perception that:

- **Operates in all lighting conditions**: including direct sun glare and pitch darkness.
- **Measures instant velocity directly**: like radar, but with dramatically higher camera-like resolution.
- **Provides full intersection coverage**: beyond the stop-bar detection zones of inductive loops.
- **Enables precise object classification and trajectory tracking**: not just presence detection.
- **Preserves privacy by design**: without reliance on cameras that capture personally identifiable information.
- **Future-proofs intersections**: by providing valuable insights for V2X communication platforms.

Real-Time Intelligence at the Edge

CityOS performs local edge processing of 4D LiDAR data using the NVIDIA AGX Orin platform, delivering low-latency AI inference without dependence on cloud connectivity. AI-powered perception software continuously detects and classifies road users, while advanced analytics software powers dashboards, alerts, and reporting tools for traffic engineers and operators. The result is a scalable intelligence layer that turns raw perception data into actionable operational insight.

CityOS enables applications including:

- Vulnerable road user safety analytics
- Wrong-way driving detection
- Real-time traffic flow monitoring
- Near-miss and conflict analysis
- Intersection performance optimization
- Long-term mobility and infrastructure planning

- A scalable platform for the future of smart cities

CityOS is available today for deployment across urban corridors, intersections, and transportation networks worldwide. For more information about CityOS, visit aeva.com/cityos.

About Aeva Technologies, Inc. (Nasdaq: AEVA)

Aeva's mission is to bring the next wave of perception to a broad range of applications from automated driving, manufacturing automation and smart infrastructure, to robotics and consumer devices. Aeva is accelerating autonomy with its groundbreaking perception platform that integrates lidar-on-chip technology, system-on-chip processing, and perception algorithms onto silicon leveraging silicon photonics. Aeva 4D LiDAR sensors uniquely detect velocity and position simultaneously, allowing automated devices like vehicles and robots to make more intelligent and safe decisions. For more information, visit www.aeva.com, or connect with us on X or LinkedIn.

Aeva, the Aeva logo, Aeva 4D LiDAR, Aeva Atlas, Aeries, Aeva Eve, Aeva Omni, Aeva CityOS, Aeva Ultra Resolution, Aeva CoreVision, and Aeva X1 are trademarks/registered trademarks of Aeva, Inc. All rights reserved. Third-party trademarks are the property of their respective owners.

Forward-looking statements

This press release contains certain forward-looking statements within the meaning of the federal securities laws. Forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "intend," "strategy," "future," "opportunity," "plan," "may," "should," "will," "would," "will be," "will continue," "will likely result," and similar expressions. These forward-looking statements include, but are not limited to expectations about our product features, performance, potential applications, and market adoption. Forward-looking statements are predictions, projections and other statements about future events that are based on current expectations and assumptions and, as a result, are subject to risks and uncertainties. Many factors could cause actual future events to differ materially from the forward-looking statements in this press release, including, but not limited to:(i) the fact that Aeva is an early stage company with a history of operating losses and may never achieve profitability, (ii) Aeva's limited operating history, (iii) the ability to implement business plans, forecasts, and other expectations and to identify and realize additional opportunities, (iv) the level of market acceptance and actual purchases of the new product, (v) unforeseen manufacturing issues or defects, (vi) Aeva's ability to scale production if the product achieves commercial success, (vii) market acceptance of LiDAR technology and autonomous driving and other applications, (viii) general economic conditions and other material risks and other important factors that could affect our financial results. Please refer to our filings with the SEC, including our most recent Form 10-Q and Form 10-K. These filings identify and address other important risks and uncertainties that could cause actual events and results to differ materially from those contained in the forward-looking statements. Forward-looking statements speak only as of the date they are made. Readers are cautioned not to put undue reliance on forward-looking statements, and Aeva assumes no obligation and does not intend to update or revise these forward-looking statements, whether as a result of new information, future events, or otherwise. Aeva does not give any assurance that it will achieve its expectations.

View source version on businesswire.com: https://www.businesswire.com/news/home/20260317082915/en/

Media:
Michael Oldenburg
press@aeva.ai

Investors:
Andrew Fung
investors@aeva.ai

Source: Aeva Technologies, Inc.