

SOUTHWEST RESEARCH INSTITUTE®

Active-Vision



Number of Vehicles **6**

58
MPH
↓WEST



62
MPH
↓WEST

66
MPH
↑EAST

65
MPH
↑EAST



63
MPH
↓WEST



61
MPH
↑EAST



Overview







For over 15 years, SwRI has leveraged computer vision and machine learning to develop advanced sensing algorithms supporting vehicle autonomy for military and commercial vehicles navigating on- and off-road terrain and traditional roadways. SwRI's Active-Vision uses these same perception techniques along with patent-pending technology for vehicle location to make existing traffic camera video streams into advanced traffic monitoring sensors.

Features

Active-Vision™ is a camera-agnostic software system which provides real-time actionable insights based on traffic camera video feeds.

Capabilities

Active-Vision provides advanced detection capabilities to analyze from your agency's existing camera network. The algorithms handle low-light conditions, camera obstruction, headlights shining directly into the camera lens, and other corner cases that can challenge other video analytics systems. The following existing and near-term capabilities enable transportation agencies to be consistently aware of roadway conditions in real time.

Capability	Description	ATMS Integrations	Capability	Description	ATMS Integrations
	Wrong Way Driver Detected when present in a configured road lane.	<ul style="list-style-type: none">• Events (Wrong-Way Driver)• Reporting		Traffic Volume Detected when vehicles are present.	<ul style="list-style-type: none">• Traffic Sensors• Reporting
	Traffic Speed Detected when vehicles are present.	<ul style="list-style-type: none">• Traffic Sensors• Reporting		Traffic Occupancy Detected when vehicles are present.	<ul style="list-style-type: none">• Traffic Sensors• Reporting
	Collisions/Stalled Vehicle Detected when present in a configured road lane or shoulder	<ul style="list-style-type: none">• Events (Stalled Vehicle)• Reporting		Congestion/Slow Traffic/Queue Exciting speed detection capability will be enhanced to report slow traffic based on configured speed threshold.	<ul style="list-style-type: none">• Events (Abnormal Congestion)• Reporting

We welcome your inquiries.
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SOUTHWEST RESEARCH INSTITUTE

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