Number of Vehicles: 6

- 68 MPH ↓ WEST
- 72 MPH ↑ WEST
- 76 MPH ↓ EAST
- 75 MPH ↑ EAST
- 71 MPH ↑ EAST
- 73 MPH ↓ WEST
**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.

**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.

**Features**

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

- Uses existing traffic camera infrastructure
- Auto-recalibration support eliminates need for presets

<table>
<thead>
<tr>
<th>Capability</th>
<th>Description</th>
<th>ATMS Integrations</th>
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<th>ATMS Integrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong-Way Driver</td>
<td>Detected when present in a configured road lane.</td>
<td>• Events (Wrong-Way Driver) • Reporting</td>
<td>Collisions/Stalled Vehicle</td>
<td>Detected when present in a configured road lane or shoulder.</td>
<td>• Events (Stalled Vehicle) • Reporting</td>
</tr>
<tr>
<td>Traffic Speed</td>
<td>Detected when vehicles are present.</td>
<td>• Traffic Sensors • Reporting</td>
<td>Traffic Classification</td>
<td>Detected when vehicles are present.</td>
<td>• Traffic Sensors • Reporting</td>
</tr>
<tr>
<td>Traffic Volume</td>
<td>Detected when vehicles are present.</td>
<td>• Traffic Sensors • Reporting</td>
<td>Debris</td>
<td>Existing vehicle tracking capability will be enhanced when section of road is being avoided by vehicles, indicating road obstruction. This detection method relies on reasonable traffic flow.</td>
<td>• Events (Road Debris) • Reporting</td>
</tr>
<tr>
<td>Traffic Occupancy</td>
<td>Detected when vehicles are present.</td>
<td>• Traffic Sensors • Reporting</td>
<td>Congestion/Slow Traffic/Queue</td>
<td>Existing speed detection capability will be enhanced to report slow traffic based on configured speed threshold.</td>
<td>• Events (Abnormal Congestion) • Reporting</td>
</tr>
</tbody>
</table>

We welcome your inquiries.  
For more information, please contact:

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