



SOUTHWEST RESEARCH INSTITUTE



Wrong Way Driver Detection

The Wrong Way Driver (WWD) detection framework developed by Southwest Research Institute® (SwRI®) is the low-cost solution for transportation departments to increase awareness and the overall safety of vehicles on highways.

Our single-unit, easily deployable system consists of a single thermal camera, in-house computing, an AC-DC voltage regulator, and an Ethernet switch. The small number of components makes deployment and operating costs extremely low.

The system is ready for integration into any existing transportation management system. Our robust solution highlights capabilities such as:

Performance Metrics

- 99% detection rate (one false positive per week)
- Up to 40 meter detection distance
- High-speed vehicle detection

Operating Conditions

- Day/night operation
- Operable in adverse weather
- Robust to vibrations
- Overcomes nuisance false alarms

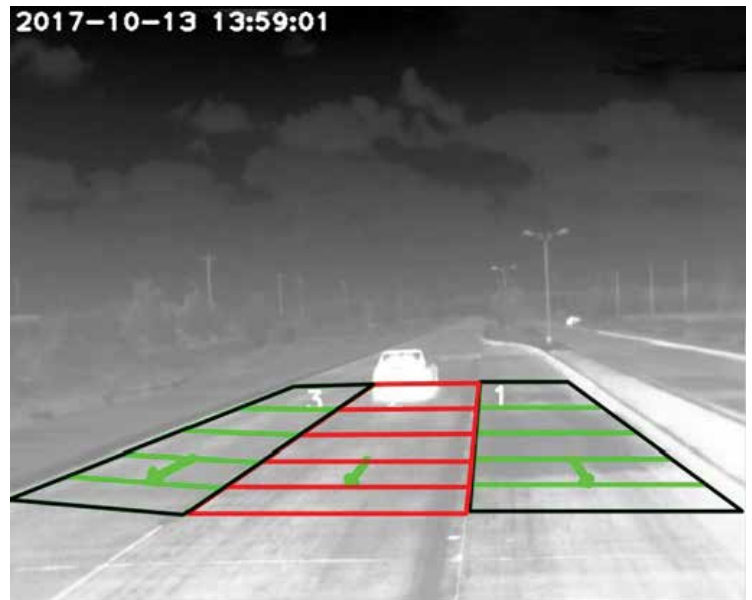
DOT Ready

- Low-cost solution (< \$5K)
- Single-unit technology
- Event logging and messaging for existing ITS infrastructure
- Multi-lane monitoring (up to four lanes)



D022726

Single-unit technology for easy deployment



D022724

Detection of wrong way driver event

Camera / Sensor-Based System – Wrong Way Driver Alert

Traditional Infrastructure

LEGEND

- 1 Advanced wrong way driver detection system
- 2 Vehicle detected going the wrong way by camera tracking system
- 3 Wrong way driver alert interfaces with existing ITS infrastructure



We welcome your inquiries.
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SOUTHWEST RESEARCH INSTITUTE

Southwest Research Institute is a premier independent, nonprofit research and development organization using multidisciplinary services to provide solutions to some of the world's most challenging scientific and engineering problems. Headquartered in San Antonio, Texas, our client-focused, client-funded organization occupies 1,200 acres, providing more than 2 million square feet of laboratories, test facilities, workshops, and offices for nearly 2,700 employees who perform contract work for government and industry clients.

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Benefiting
government,
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public through
innovative science
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