

WRONG-WAY





A pioneering force in the industry, TAPCO has been bringing cutting-edge traffic safety solutions to communities nationwide since 1956. We specialize in manufacturing, servicing and distributing an expansive portfolio of traffic and parking safety solutions, leading the way when it comes to expertise and innovation. Safety is at the heart of all TAPCO innovations — and our mission to save lives prospers in each of our products, from our LED-illuminated LegendViz® technology and Wrong-Way Alert Systems to our groundbreaking pedestrian safety solutions.



Unmatched Expertise

Our team has worked alongside traffic professionals for more than 60 years, providing us with an exclusive, knowledgeable perspective on the needs of the traffic safety industry: past, present and future.



Innovative Technology

Traffic safety evolves — and so do we. We continue to be at the forefront of the industry by embracing cutting-edge advancements and tailoring our solutions to meet our customers' needs.



A Nationwide Presence

Our reach spans all 50 U.S. states — plus some regions of Canada, giving us valuable insight and an in-depth understanding of a range of community safety concerns and challenges.



Award-Winning Culture

At TAPCO, we have cultivated a collaborative culture that fosters innovation and instills a sense of pride. Our commitment to excellence is evident in our recognition as a repeat recipient of the Top Workplaces award.



WHY TAPCO'S WRONG-WAY TECHNOLOGY?

Leveraging state-of-the-art technology across our entire wrong-way portfolio, TAPCO's wrong-way offerings are manufactured as a holistic approach, creating a streamlined and smooth installation process for every customer.

TAPCO has led the industry in wrong-way solutions for the past fifteen years — as well as the traffic safety industry in innovation since 1956. Visibility to wrong-way driving events has become more critical in recent years, especially with wrong-way collisions being some of the most deadly on the road.

Today, our measures do much more than they did fifteen years ago — from increased visibility to self-correction methods. In fact, some of our systems detect wrong-way incidents in near-real time and notify concerned parties, including TMCs, DOTs, law enforcement agencies and maintenance contractors.

With in-house experts available to consult every step of the way when it comes to any wrong-way concern, TAPCO is one of the best-equipped wrong-way experts in the industry to help communities mitigate wrong-way driving.

Ö	WRONG-WAY MITIGATION PORTFOLIO	6-7
	AI DETECTION & NOTIFICATION	8-9
	ACTIVATED HIGH VISIBILITY	10-11
	HIGH VISIBILITY	12-13
U	CAMERA AND LLUMINATOR	14-15
	CVI	16-17
B))	BLINKLINK®	18-19
*	PREVENTATIVE MAINTENANCE	20-21
	PROCUREMENT/CONSULTATIVE HELP	22-23

 $\mathbf{1}$

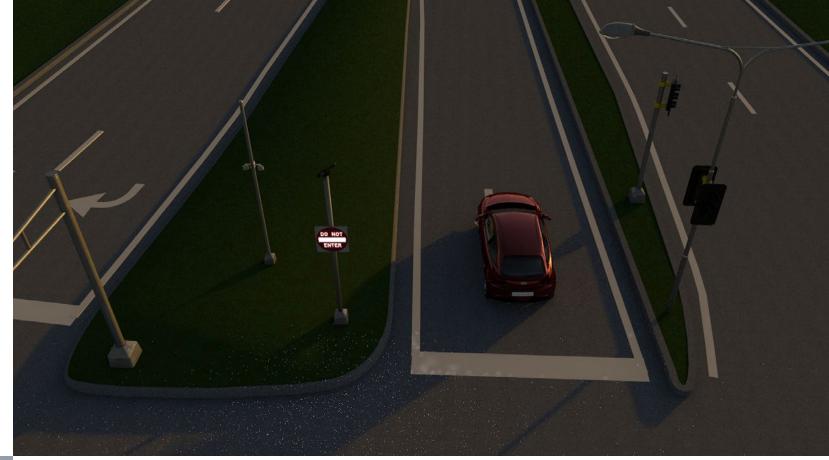
WRONG-WAY MITIGATION PORTFOLIO

For any wrong-way safety concern your community is facing, TAPCO is the industry's go-to expert to help agencies maximize resourcing and impact more areas to mitigate wrong-way driving.

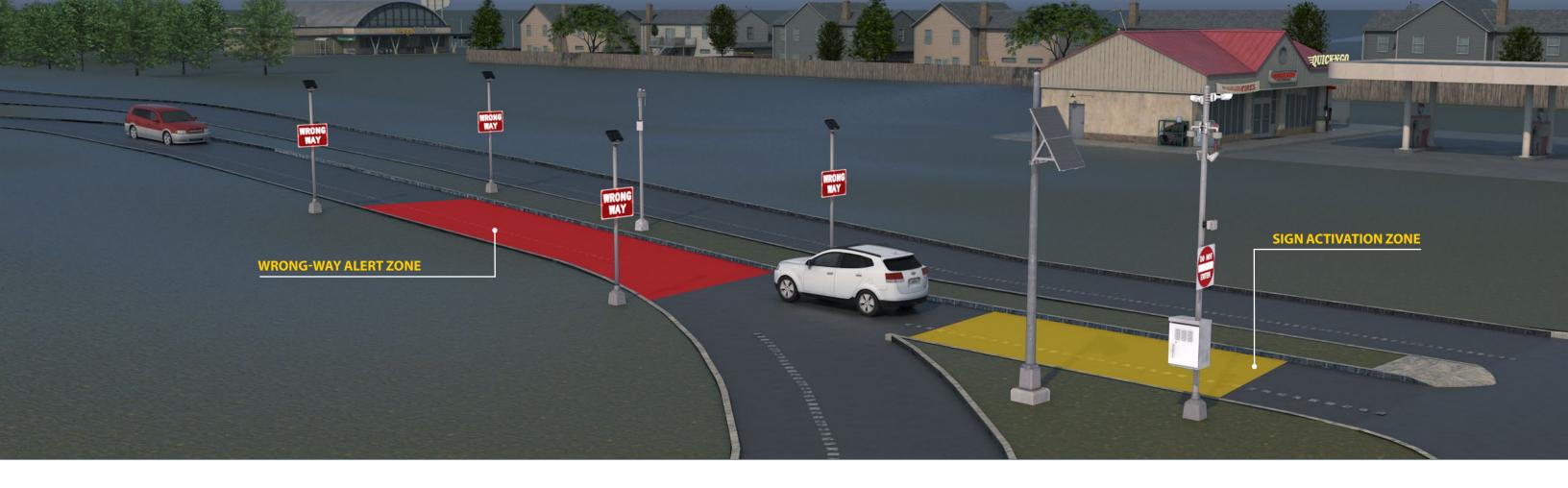
TAPCO provides varying treatment levels aligned with NCHRP guidance that are proven to improve the safety of any ramp and roadway, including our flagship Al Detection and Notification Wrong-Way system equipped with detection and real-time alerting.

No matter the severity of your wrong-way concerns, TAPCO experts will work with you every step of the way to assess and customize a right-sized system based on the unique needs of your community and available resources — whether that's LED-enhanced signage or Alenhanced alert systems.





	High Visibility	Activated High Visibility	Al Detection & Notification
24/7 or Dusk-to-Dawn	✓		
LED-Enhanced Signage	✓	✓	✓
In-House Expert Asisstance	✓	✓	✓
Solar or AC Power	✓	✓	✓
LED-Illuminated Legends (LegendViz®)	✓	✓	✓
System Health Updates	✓	✓	✓
Activation		✓	✓
Detection		✓	✓
Real-Time Notifications			✓
Image Capture and Video Streaming			✓
CVI			✓





TAPCO's Al Detection & Notification Wrong-Way works to mitigate wrong-way driving by encouraging self-correction and further escalates any wrong-way driving incidents to concerned parties to make quick live-saving decisions. The system provides agencies with the tools needed to address wrong-way driving, especially when it comes to notorious problem locations like highway entrances and exit ramps.

By leveraging state-of-the-art detection technology, the system quickly detects wrong-way drivers, activating highly visible, flashing signage to capture their attention and encourage self-correction. In the event a driver fails to self-correct, connected capabilities like real-time alerting make it possible to act quickly, with high priority alerts sent to key stakeholders.

The system is designed for seamless integration with existing infrastructure, elevating wrongway safety at any location — no matter the layout. From mitigating wrong-way events to enhancing situational awareness, TAPCO's AI Detection & Notification Wrong-Way strives to



TAPCO's AI Detection & Notification Wrong-Way is proven to reduce wrong-way events by 38%

[According to the Texas Transportation Institute: Assessment of the Effectiveness of Wrong-Way Driving Countermeasures and Mitigation Methods]

deliver the reliability needed to reduce and respond to wrong-way driving events.

Uniquely engineered to fit any ramp configuration, TAPCO's Al Detection & Notification Wrong-Way utilizes a two-zone configuration that meets the needs of individual deployments, no matter the variable. With flexibility of design setup, TAPCO customizes each system to maximize wrong-way detection effectiveness.

Sign Activation Zone:

The Sign Activation Zone is designed for initial detection of wrong-way drivers, using detection technology. When a wrong-way driver is detected, various triggers are activated to create awareness for the driver and encourage a self-correction.

Wrong-Way Alert Zone:

If the driver fails to self-correct, the system captures footage of the vehicle and triggers a BlinkLink notification for TMCs, DOTs, law enforcement agencies or other key stakeholders in order to make near real-time safety decisions.

 $\mathbf{3}$





TAPCO's Activated High Visibility Wrong-Way takes wrong-way safety a step further by adding vehicle detection to mitigate wrong-way driving at critical locations.

Equipped with highly visible LED-enhanced warning alerts, the signs activate upon detection of approaching vehicles to alert and encourage drivers to self-correct. And, it's possible for agencies to stay informed of sign uptime with the ability to remotely view health and activations at anytime, anywhere.

At TAPCO, experts are available every step of the way to assist with customization and layout of wrong-way signage — as well as selecting the vehicle detection technology that best fits your needs.

To further enhance wrong-way safety, supplemental enhancements like in-road markers and lane delineators are available, providing a simple, efficient boost to driver awareness and compliance.



Actual wrong-way event captured by sensor



When testing the wrong-way technology of 10 manufacturers, TAPCO's sign activation technology was 100% accurate.

11

[According to Texas A&M's Evaluation of Wrong-Way Driving Detection Technologies]





TAPCO's High Visibility Wrong-Way elevates wrong-way safety, creating a safer environment for all drivers. With the ability to flash 24/7 or dusk-to-dawn, the signs provide a boost over static signs, immediately enhancing awareness and visibility at notorious wrongway locations.

Depending on the wrong-way safety needs of your community, TAPCO offers various sign enhancement options to help agencies mitigate wrong-way driving by encouraging drivers to turn around — including highly visible, flashing LED signs and LED-illuminated legends.

BlinkerSign®: Designed to command motorists' attention and increase roadway compliance, BlinkerSigns® are edge-lit with flashing LED warning lights. The highly visible perimeter lights bring enhanced visibility to any system and can be seen up to a mile away.

LegendViz®: Add next-level visibility to any wrong-way or do not enter sign with LegendViz® technology. The LED-illuminated legends offer unmatched visibility during lowlight or low visibility conditions — without the need for retroreflectivity or headlights.

BlinkerBeacon™: Provide real-time warning to wrong-way drivers in any roadway setting with LED beacons. With a variety of arrangement options available, the beacons can be added to any sign or system based on each your activation needs.

RFB: Capture the attention of motorists at common wrong-way entry points with RFB light bars. A step above the industry standard, the extra-large rectangular flashing beacons are highly visible to wrong-way drivers.

DID YOU KNOW?

LegendViz® BlinkerSigns increase legibility distance by 267% compared to standard signs.

[According to the Texas A&M Transportation Institute]

BlinkerSign® Data Sheet LegendViz® Product Brief

BlinkerBeacon™ Data Sheet

RFB Data Sheet





CAMERA AND ILLUMINATOR

Each Al Detection & Notification Wrong-Way system is equipped with a camera and illuminator to capture each wrong-way event. Upon system activation, the camera and illuminator work in tandem to provide high-quality visual verification.

Designed to flood the Wrong-Way Alert Zone with bright, high-performance light, the LED illuminator enhances visibility of the vehicle and roadway, providing optimal lighting conditions for the camera to capture vital information.

The system's camera works seamlessly with the illuminator, capturing real-time imagery of the event. These images allow key stakeholders to review wrong-way events with accuracy.



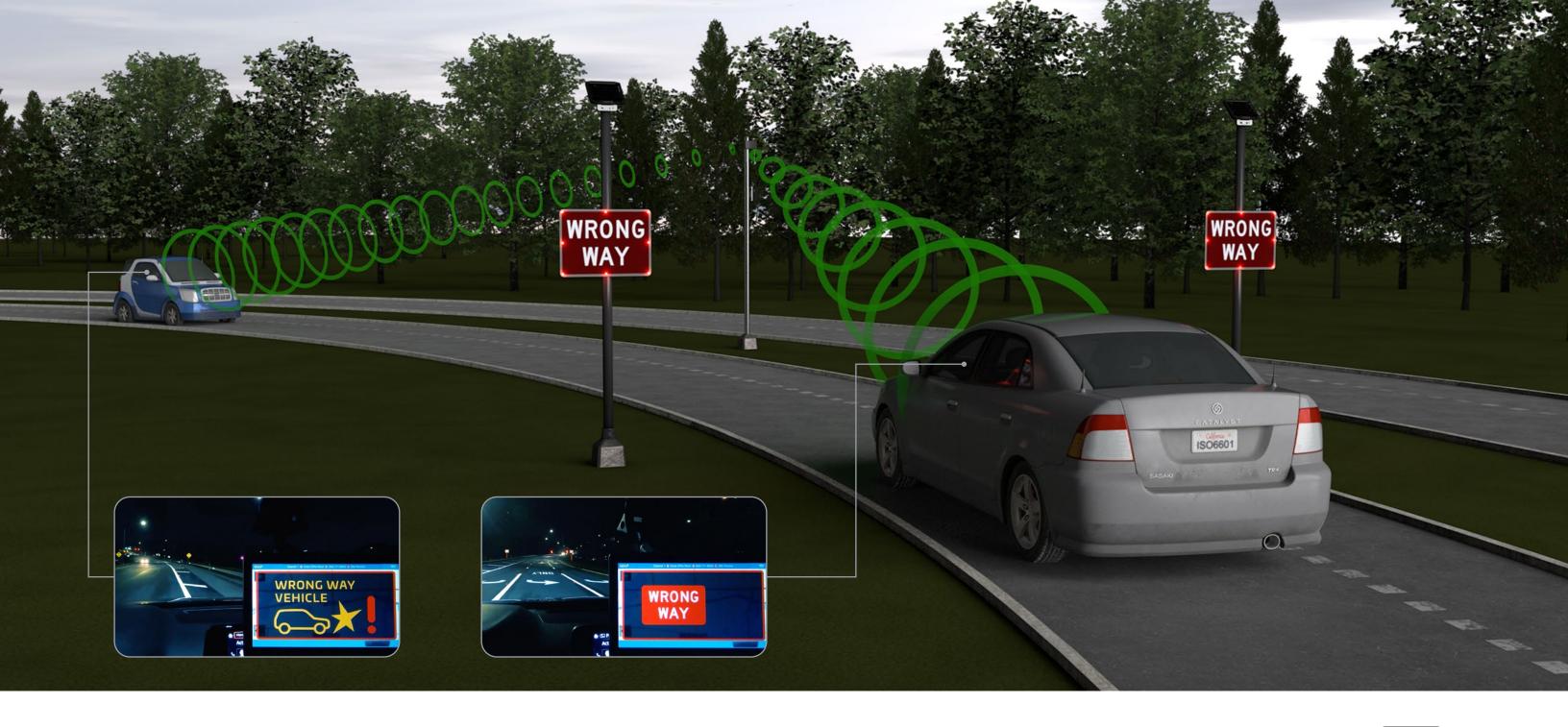
Camera Data Sheet



With BlinkLink®, you can receive notifications and footage of any wrong-way event



Illuminator Data Sheet





TAPCO's Connected Vehicle Interface (CVI) is designed to seamlessly connect with any Intelligent Warning System to deploy in-vehicle alerts. Once the system is triggered, the CVI establishes communication between the warning system, the road-side unit (RSU) and the vehicle's on-board unit (OBU) to activate the approaching motorist's in-vehicle alert. By providing another level of warning, TAPCO's CVI elevates situational awareness and driver response to create a safer roadway experience for all.



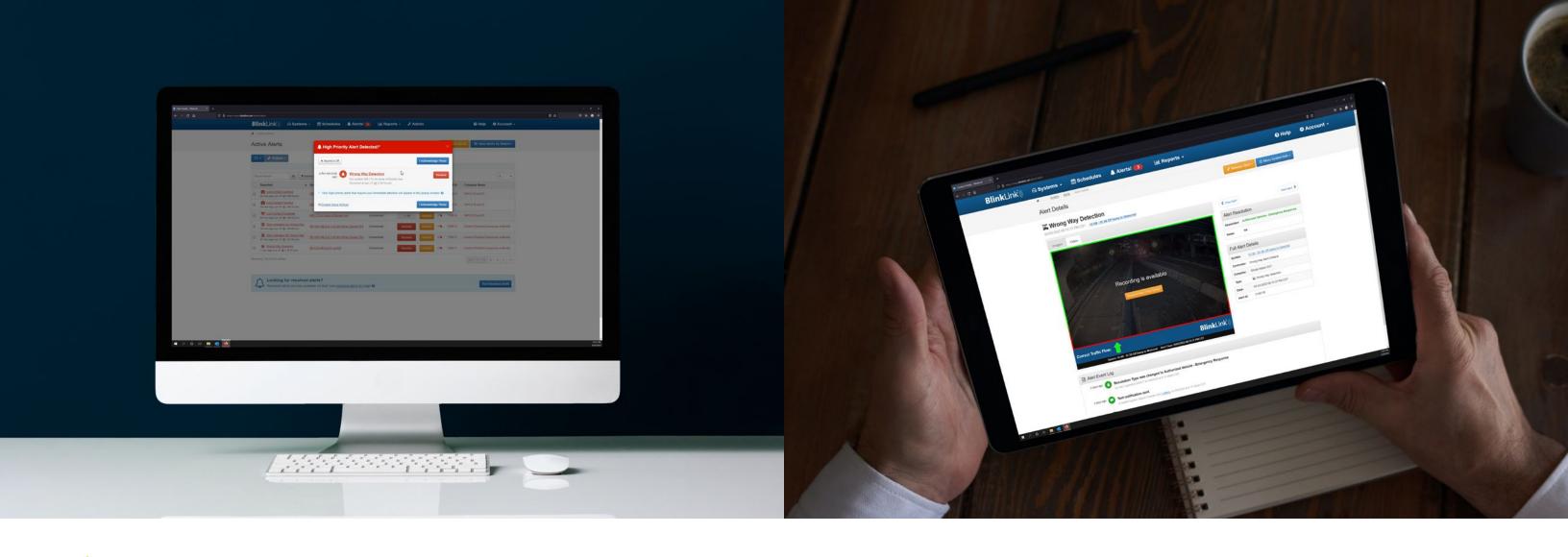




TAPCO's CVI won the 2019 New Products Innovation Award, presented by American Traffic Safety Services Association (ATSSA)



Product Brief





Managing a network of wrong-way systems can be a drain on time and resources.

Smart city platforms like BlinkLink® are designed to make traffic management easier — and when it comes to wrong-way events, necessary. Wrong-way collisions have potential fatal outcomes, making timely decision-making critical. BlinkLink® not only sends wrong-way event alerts to TMCs, DOTs and law enforcement agencies, but they provide livestreaming abilities to view the event and trigger other mechanisms such as overheard message board warnings and connected vehicle alerts.

By providing near real-time data in one place, networks also help users quickly identify system issues, maintenance needs and activation trends. Once a problem is identified, the platform immediately notifies transportation officials via voice, email or SMS alerts.





The cool thing about BlinkLink® is that it has its own diagnostics that will come through and send emails. I don't even have to go to BlinkLink®, it comes to me.

– Buck Hodgkinson, Senior Field Service Technician at RIDOT



With additional capabilities such as image/video capture and livestreaming, platforms like BlinkLink® provide vital data to not only act quickly in the event of an emergency, but also identify future infrastructure improvements through activation trends.

BlinkLink® is preprogrammed with all TAPCO Al Detection & Notification Wrong-Way systems with the option for premium upgrading.

TAPCO experts are readily available to navigate connectivity options and concerns.



Brochure Video 19





Caring for a wrong-way system extends beyond procurement and installation. Servicing a system can optimize performance and extend lifespan, making it a vital step in maintaining any community's systems. TAPCO offers service agreements to accompany any wrong-way installation or supplement existing deployments.

TAPCO's preventative maintenance plans provide continued care of any traffic system, including scheduled visits, warranty extensions and record-keeping. Once a system is installed, TAPCO customers can "set it and forget it," with experienced service technicians available to provide next-level service for years to come.

Preventative maintenance packages are available for any TAPCO system. Additionally, TAPCO offers customized packages to supplement resources for non-TAPCO traffic systems and equipment, ensuring peace of mind for any deployed system. Standard services include scheduled visits to perform inspections and/or testing, plus complete system updates, with comprehensive documentation provided after each visit.

Other benefits of a TAPCO service agreement include:

- Discounted BlinkLink® subscription
- Discounted equipment packages
- Maintenance contractor technical support
- Customizable agreements



Video Video





TAPCO ensures the buying process is as easy and fair as possible. By offering the option to purchase products through purchase agreements, TAPCO ensures that communities nationwide can access high-quality traffic safety solutions at an affordable price.

<u>Purchase agreements and contracts</u> offered by TAPCO include national cooperative contracts through <u>Omnia Partners</u> and federal contracts through <u>GSA</u>. These partnerships are designed to streamline the purchasing process, allowing transportation officials to obtain the solutions they want. Not only do purchase agreements save time and money, but they also provide transparency and peace of mind throughout the buying process.

Additionally, TAPCO has partnered with select programs to provide contracts on a state level. By offering solutions that adhere to regional standards, these programs simplify the procurement process for state agencies and give them the ability to enhance safety in their communities.



Each community's roadway network is set up differently — and it can sometimes be difficult to identify the most suitable fit for a roadway. TAPCO offers consultative help to communities seeking the best solution for the problem facing their roadways. During the consultation process, TAPCO's experts gather information about specific needs, infrastructure characteristics and more to assess the situation and recommend a right-fit solution.

TAPCO understands that the one-size-fits-all approach isn't always suitable, which is why engineered-to-order options are available to address specific wrong-way needs. TAPCO's deep understanding of the industry paired with 60+ years of experience ensures our team of experts is equipped with the knowledge to select the optimal technology for any solution, carefully considering factors such as accuracy, reliability and compatibility for the best possible fit.





((800) 236-0112 ⊕ TAPCOnet.com







