

Indiana Toll Road Detects and Redirects Wrong-Way Drivers



CUSTOMER NAME

ITR Concession Company LLC
(ITRCC)

PRODUCTS

TAPCO [Wrong-Way Alert System](#), [Service Agreement](#) and [BlinkLink®](#)

SUMMARY

As with many DOT's, ITRCC struggled with a dangerous problem familiar to many state toll roads and freeways: how to reduce high-speed and often fatal wrong-way driving collisions. They needed to quickly identify and stop wrong-way drivers, and they found their solution with the TAPCO Wrong-Way Alert System.

ORGANIZATION

Headquartered in Elkhart, Indiana, ITRCC began operational oversight of the Indiana Toll Road in 2006 through a Public Private Partnership with the State of Indiana. ITRCC is responsible for the construction, maintenance, repair and operation of the Indiana Toll Road. The Indiana Toll Road stretches 157 miles across northern Indiana and was first constructed in 1956.

SITUATION

Toll roads, like many other roadways, face the challenge of reducing wrong-way driving. These wrong-way drivers can cause potentially deadly collisions if they strike a car coming the opposite and correct direction, especially on major interstates where increased traffic volumes and higher speeds are more prevalent.

"We've seen our share of wrong-way drivers," commented Rick Fedder, Chief Operating Officer of the ITRCC. "Whether those drivers were intoxicated drivers, confused drivers or any of the other categories."

The ITRCC began workshopping alternative methods of notification, including both high and low-tech options for detecting and alerting wrong way drivers before an incident would occur. This was difficult to accomplish when relying on traditional means of awareness such as calls from witnesses or dispatch.

"Those [wrong-way driving] events unfold very fast," remarked Rick. "Upon receiving notification our team responds as quickly as possible to attempt intervention before an accident."

Rick and his team knew they needed some form of technology that could monitor their ramps and activate warning devices to turn around these wrong-way drivers. Additionally, they wanted timely event alerts sent to multiple officials whenever a wrong-way driver was detected so the necessary procedures could be taken to intercept wrong-way offenders.

"Wrong-way driving has a fatality rate 12 times greater than all other accidents on controlled-access highways."

According to a Caltrans study.



SOLUTION

ITRCC wanted to take a detailed look at the wrong-way systems installed by other toll roads, largely basing their decision of what solutions to purchase off the feedback they heard. They asked what other agencies would do differently, what systems they recommended and what, if any, issues they'd been having.

"We continually partner with our peer agencies to ensure best practices are implemented," commented Rick.

Taking into consideration the feedback they heard from other toll roads about their own wrong-way systems, ITRCC decided that a [TAPCO Wrong-Way Alert System](#) would best fit their needs. The TAPCO Wrong-Way Alert System can utilize various activation options, such as thermal, radar and inductive loop, which trigger LED-enhanced wrong-way alerts when a wrong-way driver is detected. Uniquely engineered to fit any ramp configuration, the system operates by utilizing three zones, the alert activation zone, correction zone and confirmation zone.

The initial alert activation zone is where warning alert devices are activated locally. The objective of the LED-enhanced warning alert devices is to increase conspicuity and awareness to generate a self-correction. If the offender does not self-correct and continues through the confirmation zone, a high priority alert is distributed from the local TAPCO Wrong-Way Alert System to the Traffic Management Operation Center. This proactive continuation awareness is when the threat of a fatal incident is heightened and intervention by authorities is necessary.

"TAPCO just seemed to fit better in our wheelhouse."

Rick Fedder, Chief Operating Officer of the Indiana Toll Roads Concession Company LLC



The ITRCC also invested in a subscription to TAPCO's [BlinkLink®](#) cloud-based event management software, which is accessible from any web-connected device. It provides agencies with the ability to remotely manage and monitor their Wrong-Way Alert Systems. BlinkLink® can also integrate with local Traffic Management Center's Advanced Traffic Management System via an off the shelf application programming interface (API). TAPCO's API was leveraged for ITRCC deployment to connect BlinkLink to the toll authority's third-party software, ITRCC iNet. This API enhancements helps maximize system effectiveness and communication routing by leveraging automation.

Rick and his team also wanted to invest in a preventative maintenance contract to increase the longevity of the systems lifespan and ensure optimal performance.

"A regimented, preventative maintenance schedule is key to extending the life and the effectiveness and accuracy of any system," remarked Rick.

ITRCC chose a [TAPCO service agreement](#), with Rick citing their desire to entrust the more complex care of the system to its creators.

RESULTS

Installation of the Wrong-Way Alert Systems at two sites on the Indiana Toll Road went smoothly according to Rick, who said everyone involved did well following the strict safety requirements set by ITRCC. Safety is a top priority for them, so having the compliance of all parties was pivotal.

"The overall experience was good," Rick explained. "The project would not have had the same level of success if not for the cooperation of all stakeholders."

Rick commended the system for immediately detecting multiple wrong-way incidents and triggering flashing alerts that commanded the attention of the drivers. BlinkLink® provided the immediate, customizable notifications they had needed as well.

"A regimented preventative maintenance schedule is key to extending the life, effectiveness and accuracy of any system."

*Rick Fedder, Chief Operating Officer of the
Indiana Toll Roads Concession Company LLC*

“Since we installed the system we have successfully turned around nearly 20 wrong-way driver vehicles, or potential wrong-way driver vehicles, at the two locations we have [the TAPCO system] deployed,” remarked Rick. “And in all of those cases, we didn’t detect any vehicle actually reaching the main line in the wrong direction.”

In addition to reducing wrong-way driving, Rick commented on the detailed and attentive maintenance ITRCC has seen from their TAPCO service agreement.

“We need to keep that technology state-of-the-art, and I think we’ve done that through the actions we’ve taken with TAPCO.”

With their TAPCO Wrong-Way Alert Systems and BlinkLink® in place, as well as a service agreement to keep the systems performing at their best, the ITRCC aims to continue turning wrong-way drivers around and protecting lives.



 ***Learn more about the TAPCO Wrong-Way Warning System here.***

ABOUT TAPCO

As an industry-leading innovator, TAPCO manufactures, services and distributes a wide portfolio of traffic and parking safety solutions designed to increase safe travels for all. Since 1956, we have set the standard for delivering reliable, cutting-edge traffic safety enhancements. From our world-renowned line of LED-enhanced BlinkerSign® solutions to our pedestrian crossing products and early detection warning systems, safety is at the heart of all TAPCO innovations.

Working alongside traffic professionals for more than 60 years gives our team an exclusive perspective on the past, present and future needs of the traffic and parking safety industry.

