

 **TAPCO**<sup>®</sup>  
Safe travels.



# OVERHEIGHT

## WARNING SOLUTION





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

Drawing from our roots as a family-owned company, we have cultivated a collaborative culture at TAPCO 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 A TAPCO OVERHEIGHT WARNING SYSTEM?

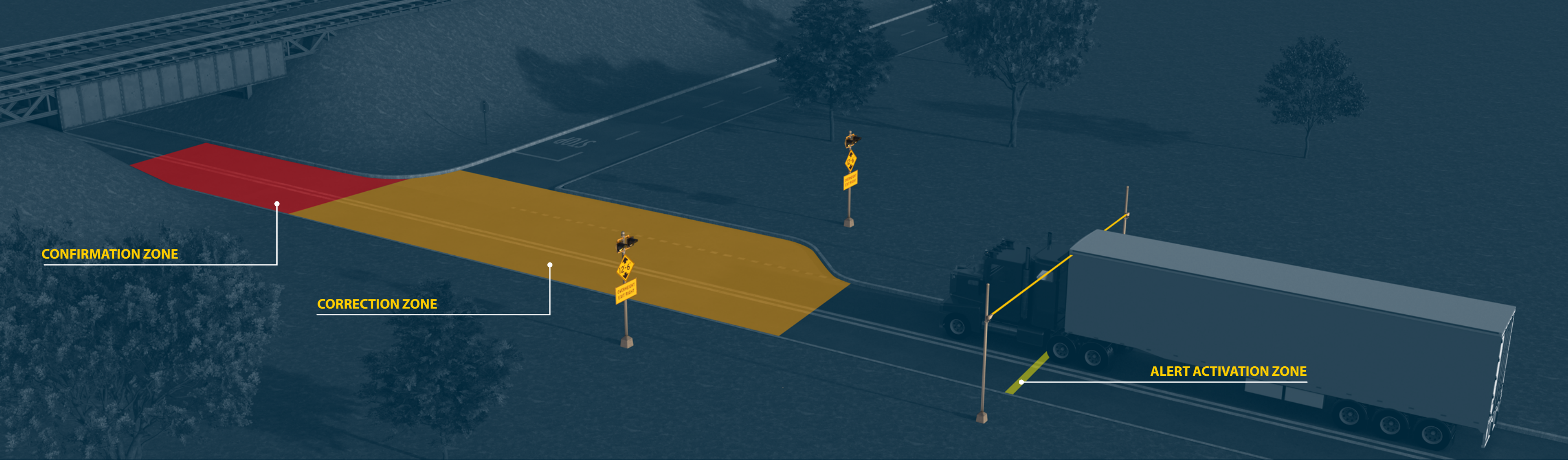
**When a vehicle collides with low-clearance infrastructure, the impact can be dangerous and costly.** Incidents like overheight collisions often require a dedicated solution to prevent them from becoming a frequent, recurring issue.

Leading the way in the traffic industry since 1956, TAPCO understands the importance of safety in all spaces — including those with low-clearance risks. Overheight collisions can result in severe injury, not to mention costly damage, which on average can range from \$200,000 to \$300,000 (TxDOT). That’s why we’ve engineered our own innovative solution: The Overheight Warning System.

Featuring a combination of infrared sensors, wireless communication and warning alerts, TAPCO’s Overheight Warning Systems are designed to mitigate the occurrence of collisions with low-clearance structures. By detecting overheight vehicles, alerting drivers of the upcoming structure and directing them to an alternate route, the system not only prevents costly vehicle and infrastructure damage, but ensures roadways remain safe and clear.

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## SYSTEM CONFIGURATION

Engineered to detect overweight vehicles approaching any low-clearance structure, the TAPCO Overheight Warning System utilizes a three-zone configuration to optimize accuracy and effectiveness. The system's configuration offers flexibility when it comes to placement and are recommended to be placed in advance of an alternative route leading up to common low-clearance locations, such as:

- Low bridges
- Weigh stations
- Tunnels
- Underpasses
- Parking structures
- Airports

### Alert Activation Zone

When an overweight vehicle crosses through the alert activation zone, the dual-beam overheight sensors instantly detect the vehicle, activating the system's LED-enhanced warning alerts to attract the driver's attention.

**Every day, [the system has] come on and done what it's supposed to do.**

– Rodney Rogers Athens-Clarke County Traffic Signal Supervisor

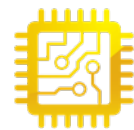
### Correction Zone

After the driver passes through the Alert Activation Zone, the Correction Zone gives drivers the space needed to safely self-correct via an alternate route and can even capture license plate information.

### Confirmation Zone

If the driver fails to proceed to an alternate route, the Confirmation Zone verifies that the vehicle has continued toward the low-clearance structure and proceeds to notify authorized personnel via BlinkLink®. The Confirmation Zone can even activate dynamic overhead message boards, effectively communicating the hazard to other motorists in the area.





## SYSTEM ACTIVATIONS

Each Overheight Warning System is equipped with state-of-the-art technology to elevate safety in the face of a potential overheight event. Each system's activation is powered by Dual-Beam Overheight Sensors, positioned on both sides of the road ahead of the low-clearance structure. The sensors transmit infrared beams over the road, and when broken by an overheight vehicle, immediately activates the system's alerts to warn drivers of the low-clearance hazard.

Offering unmatched reliability, the sensors can detect overheight vehicles traveling at low or high speeds and can even determine traffic direction when activated. Each system provides flexibility throughout the installation process, with sensors that can be easily tailored to meet the height requirements of any low-clearance structure — up to 150 feet apart.

Connectivity is available with each Overheight Warning System through TAPCO's smart city platform, BlinkLink®. In the event of an overheight vehicle proceeding toward a low-clearance structure, the system confirms the movement and notifies key stakeholders — such as TMCs, DOTs or other affiliated agencies — to take immediate action. Additionally, BlinkLink® can trigger external mechanisms like dynamic overhead message boards to warn nearby motorists.

**DID YOU  
KNOW?**

**A survey of 29 U.S. states found that 18 considered overheight collisions a significant problem.**

[According to an Evaluation of Overheight Vehicle Warning Devices]



Video



Data Sheet





## OVERHEIGHT WARNING ALERTS

Whether placed ahead of a highway overpass or a low-clearance parking structure, enhanced visibility is a necessity when it comes to your Overheight Warning System. TAPCO's LED-enhanced warning alerts are designed to command attention, increasing both roadway compliance and awareness. Alert options available with a TAPCO Overheight Warning System include edge-lit warning lights and flashing beacons.

**BlinkerSign®:** Equip any Overheight Warning traffic sign with highly visible perimeter lights. Designed to flash upon activation, the sign's warning lights are visible more than one mile away to immediately catch the attention of approaching drivers.

**BlinkerBeacon™:** BlinkerBeacon™ flashing LED beacons provide real-time warning to drivers approaching low-clearance structures. With a variety of arrangement options available, beacon alerts can be added based on each system's activation needs.

**DID YOU KNOW?**

Any BlinkerSign® can be made into a ruggedized BlinkerSign® to take on heavy winds and falling debris.



Brochure



## POWER OPTIONS

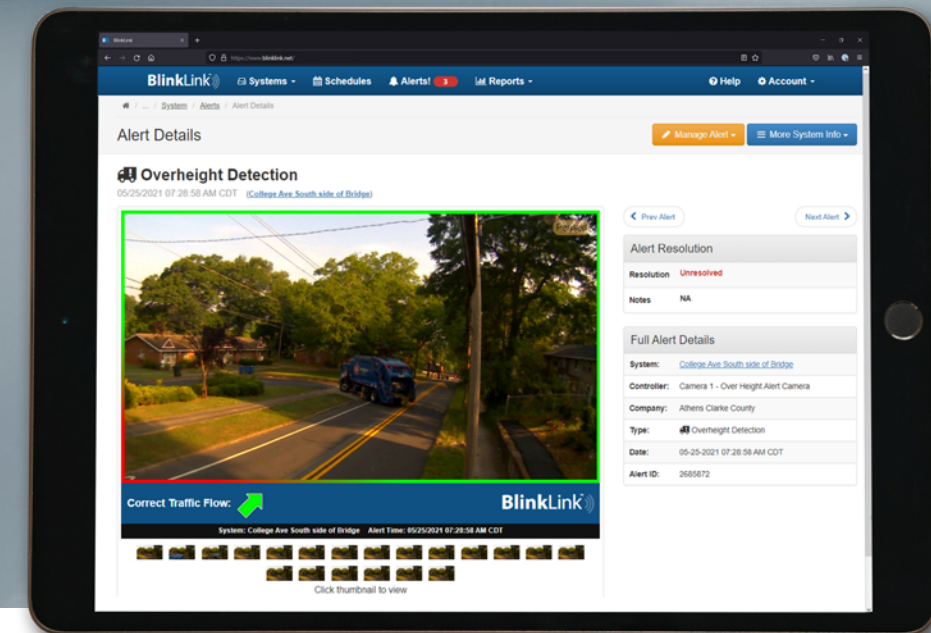
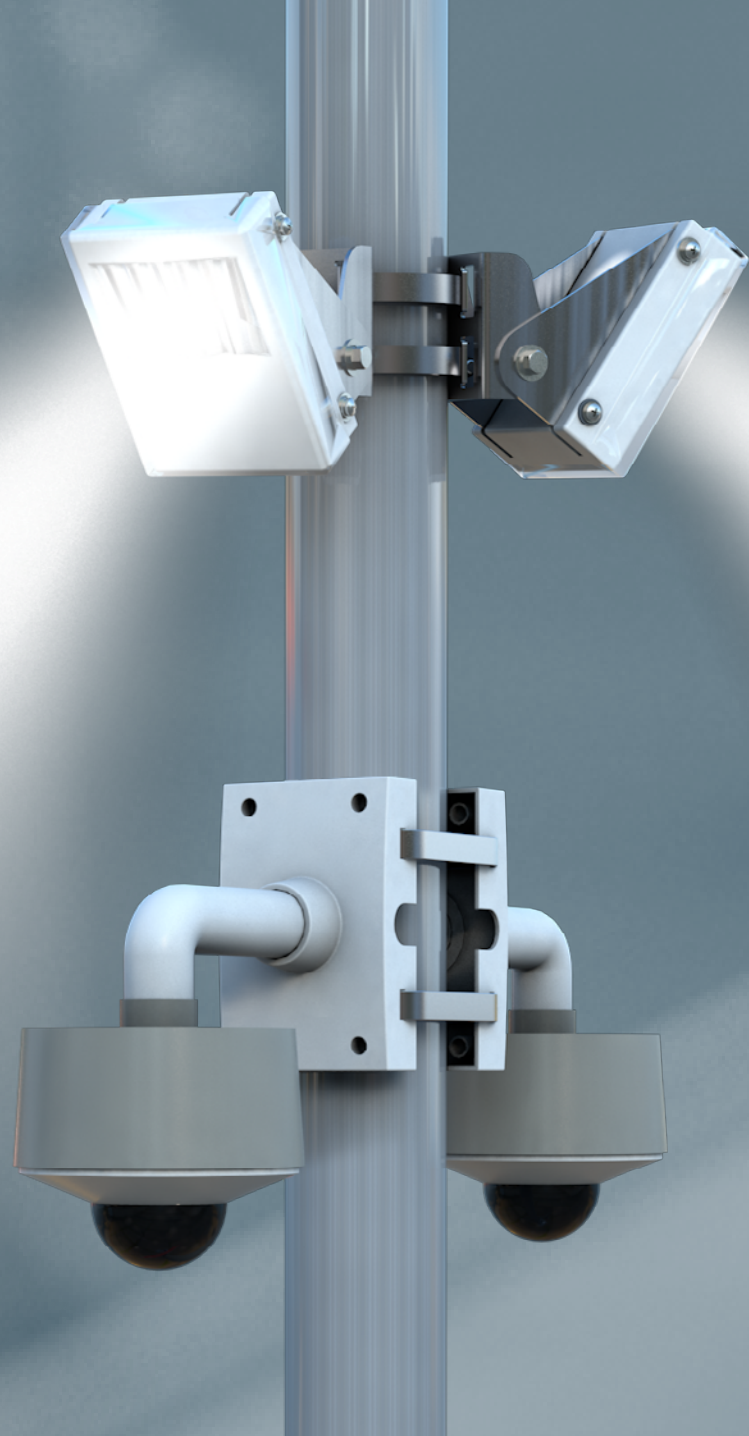
TAPCO offers various power options for flexible configuration, including Flex Power and Top-of-Pole Self-Contained Control Cabinets. Any Overheight Warning System can be designed to fit your power or environmental needs.

Flex Power offerings include AC and solar power to provide flexible system configuration for multiple applications and power requirements, while also allowing easy access to control cabinets.

Top-of-Pole Self-Contained Control Cabinets are equipped with solar capabilities. Designed for quick installation, these power options blend seamlessly into the environment and bypass the need for trenching or in-ground wiring.

Throughout the selection process, TAPCO works closely with each agency to find the best fit for their system's power needs. As solar requirements vary depending on the unique needs and geographical location of each community, TAPCO conducts solar calculations to find the optimal power configuration for each system's solar package.





## CAMERA AND ILLUMINATOR

Each Overheight Warning System can be equipped with a camera and illuminator to capture clear footage of overheight events. When the system detects an overheight vehicle, the camera and illuminator activate to ensure the highest quality visual verification and capture critical identification information, enabling key stakeholders to review the event.

### HIGH-EFFICIENCY LED ILLUMINATORS

Designed to enhance the visibility of each vehicle, the system's high-efficiency LED illuminators feature high-performance, white light to enhance camera performance — especially at night.



Illuminator Data Sheet

### HIGH-DEFINITION CAMERAS

The system's high-speed, multi-feature camera activates in tandem with the illuminator to capture high-resolution, full-color imagery of each overheight event.



Camera Data Sheet





## CONNECTED VEHICLE INTERFACE (CVI)

TAPCO's Connected Vehicle Interface (CVI) is designed to seamlessly connect with any Overheight Warning System to deploy in-vehicle alerts. Once the system is triggered, the CVI establishes communication between the system, the RSU and the vehicle's onboard 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.

**DID YOU KNOW?**

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



Video



Data Sheet





## DYNAMIC MESSAGE SIGNS

In locations where low-clearance structures are at risk of collision, additional measures are often needed. Dynamic Message Signs (DMS) enhance roadway safety by providing real-time information to all road users. In the event of an overheight collision, the signs allow officials to inform nearby motorists with easy-to-change messaging features, giving them the opportunity to take necessary precautions or an alternate route.

Our Dynamic Message Signs give officials the ability to display any message they'd like to convey to passing motorists. Equipped with ultra-bright LEDs, the signs are designed for maximum reader comprehension at high or low speeds. Additionally, the signs offer durability and versatility in a variety of roadway applications, from airports to freeways.

**DID YOU KNOW?**

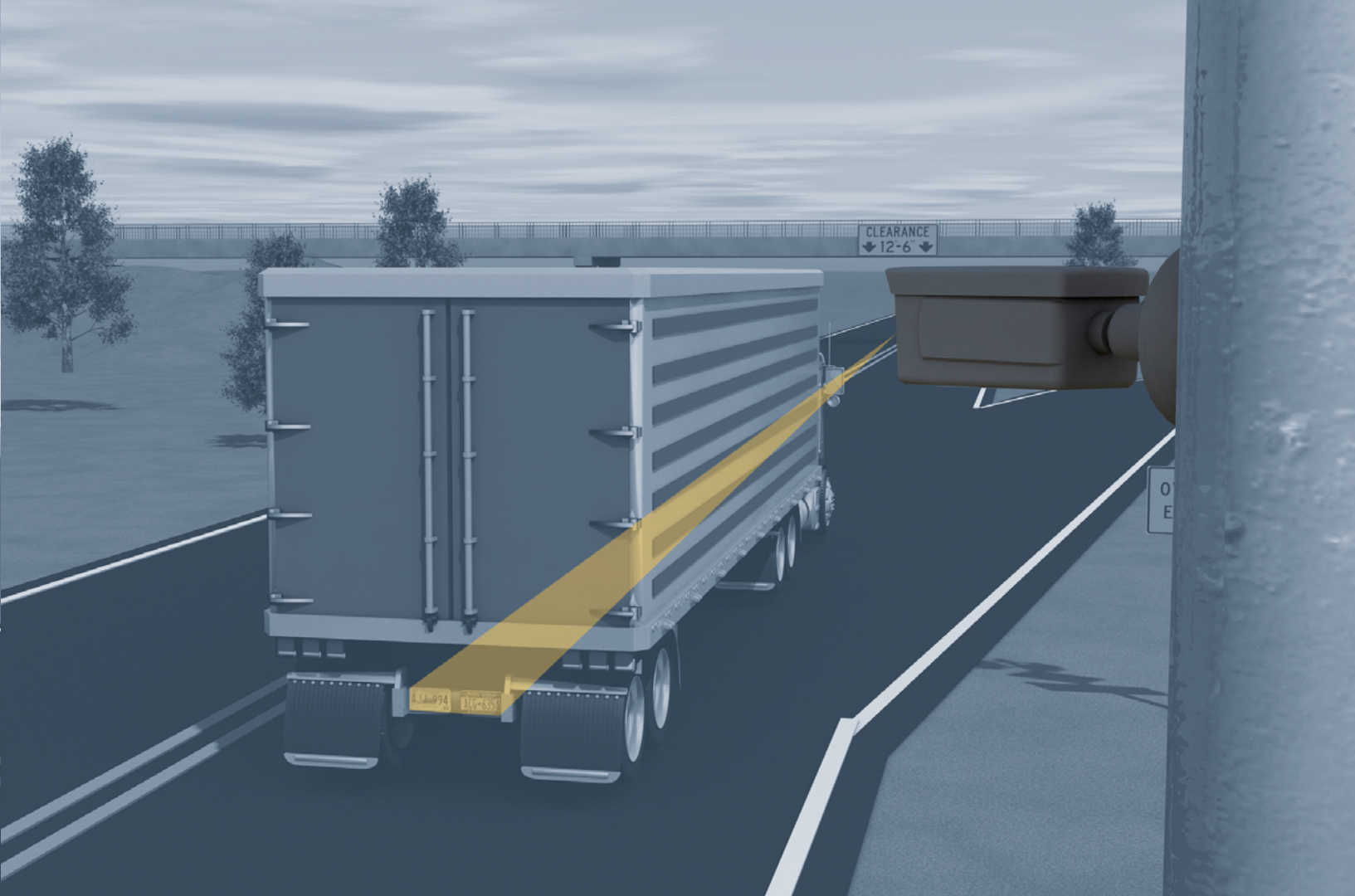
With BlinkLink®, system activations can trigger DMS to immediately warn nearby motorists of an overheight collision.



## BLANK-OUT SIGNS

When an overheight collision occurs, advance notice can help mitigate further risks by advising road users to proceed with caution. With Blank-Out Boards, it's possible to inform nearby drivers of overheight events with a fixed warning message that can be activated as needed. Blank-Out Boards can be implemented ahead of any low-clearance structure; however, common applications typically include weigh stations, toll lanes and airports.





## AUDIBLE ALERTS

Take any Overheight Warning System to the next level with audible alerts. When the system is activated, an audible alert sounds in tandem with the system's LED warning alert to provide additional warning for overheight drivers. By utilizing a combined visual and audible warning approach, this helps increase the chance of drivers being alerted to the approaching low-clearance hazards, prompting quick action to avoid a collision.



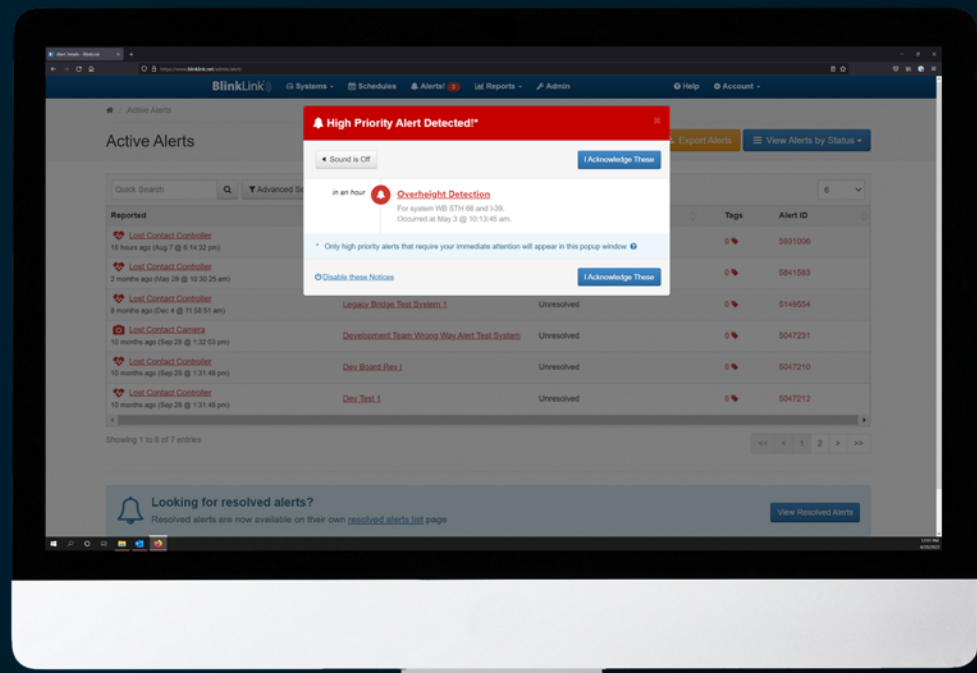
## LICENSE PLATE RECOGNITION

When an overheight collision occurs, it's not a guarantee that the driver will remain on the scene. License plate recognition (LPR) captures driver information in collisions with low-clearance structures who attempt to leave before authorities arrive. By leveraging LPR alongside any Overheight Warning System, it's possible to gather important context when assessing the aftermath of an overheight collision.



Data Sheet





# B BLINKLINK®

Managing a network of Overheight Warning Systems can be a drain on time and resources.

Software like BlinkLink® — TAPCO’s smart city platform — is designed to make traffic system management easier. The cloud-based application gives agencies the ability to remotely manage, monitor, schedule and quantify their system deployments and systemwide time clocks.

By providing real-time data in one place, BlinkLink® users can quickly identify system issues, maintenance needs and activation trends. Once a problem is identified, BlinkLink® immediately notifies transportation officials via voice, email or SMS alerts — and can even trigger other mechanisms such as overheight message boards. With additional capabilities such as image/video capture and livestreaming, BlinkLink® provides vital data to not only act quickly in the event of an emergency, but also can identify future infrastructure improvements through activation trends.



Brochure



**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



BlinkLink® is compatible with all TAPCO Intelligent Warning Systems, including Overheight Warning Systems. Other features include:

- Third-party software integration
- Controller-based mapping
- Custom reporting
- Accessibility via any web-enabled device



Video





## PREVENTATIVE MAINTENANCE

### **Caring for an Overheight Warning 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 Overheight Warning System 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.



Video

Preventative maintenance packages are available for any TAPCO Intelligent Warning 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





## PROCUREMENT

**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.**

[Purchase agreements and contracts](#) offered by TAPCO include national cooperative contracts through [Omnia Partners](#) and federal contracts through GSA. 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.



## CONSULTATIVE HELP

**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 system 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.





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