



# VULNERABLE ROAD USER



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 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 aim to continue at the forefront of the industry by embracing cutting-edge advancements and tailoring our solutions to meet our customers' needs.



#### A North American Presence

Our expansive 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.



# OUR PEDESTRIAN SOLUTIONS









With pedestrian fatalities at heightened levels, there has been a greater need for effective measures to keep vulnerable road users safe over the past several years, with basic measures like static signs not enough to help pedestrians cross safely — especially at night.

At TAPCO, we've always been dedicated to improving vulnerable road user safety. In fact, our smart crosswalk portfolio was designed in-house by our safety experts specifically to address the issue of nighttime pedestrian visibility.

Our vulnerable road user portfolio has evolved over the years to fit current needs, with our teams constantly working tirelessly to adapt to ever-changing conditions to offer the best technology available.

From smart crosswalk enhancements that illuminate vulnerable road users to passive detection designed to activate a system anytime a pedestrian approaches the crosswalk, our measures today help create the safest environment possible for vulnerable road users, both responding to the growing need for more robust measures and combatting the rise of pedestrian collisions.

We offer options that are MUTCD compliant in both the U.S. and Canada. And, with in-house experts available to assist every step of the way, TAPCO is one of the best-equipped industry experts to help communities everywhere protect their vulnerable road users.

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Canadian crosswalk shown here



## SMART CROSSWALK PORTFOLIO

### Create a safer environment for vulnerable road users at any crosswalk.

TAPCO's Smart Crosswalk Portfolio is designed to provide motorists with real-time warning of vulnerable road users in or entering the crosswalk by capturing driver attention and encouraging drivers to stop or yield through activated LED-enhancements. Each customizable system comes equipped with an LED enhancement, push button, AC or solar power options, as well as the ability to connect to our smart city platform, TAPCO Smart Hub.

With Smart Hub, agencies can remotely manage their network of systems to maximize uptime and system performance. With capabilities like monitoring system health, collecting data and scheduling crosswalk alerts, the platform streamlines system management by offering system-wide visibility in one place.

### DID YOU KNOW?

**RRFBs are proven to increase driver yield rates by as much as 98%**

[FHWA]

Built to MUTCD standards, TAPCO's smart crosswalk portfolio is suitable for any area, from mid-block locations to school zone crossings. Available LED-enhancements to supplement any system include:

#### RRFB-XL2

Elevate the safety measures of any crosswalk system with TAPCO's extra-large RRFBs. MUTCD-approved and highly visible, the RRFBs help increase yield rates at locations like uncontrolled and mid-block crosswalks.

#### BlinkerSign®

Command the attention of motorists at any crosswalk location with the BlinkerSign®. Edge-lit with flashing LED lights, the signs help draw attention to pedestrians and are visible up to one mile away.

#### BlinkerBeacon™

Provide real-time warning to drivers with the BlinkerBeacon™. Highly visible with a variety of arrangement options available, the beacons can be added to any crosswalk system to enhance safety and increase compliance.



Video



Our crosswalk portfolio includes options that are compliant with U.S. and Canada MUTCD standards.



## ENHANCED SMART CROSSWALK

### Take vulnerable road user safety a step further with smart crosswalk capabilities.

Combining passive detection, smart activation and crosswalk illumination, TAPCO's Enhanced Smart Crosswalk makes it easier than ever for communities to protect their vulnerable road users. With low-cost, energy-efficient enhancements, it's possible to detect pedestrians approaching a crosswalk and activate the system's safety measures — without the push of a button.

Plus, each Enhanced Smart Crosswalk seamlessly connects to TAPCO Smart Hub, offering a variety of remote capabilities to streamline system management, including the ability to track system health and activations, schedule system activations, adjust lighting enhancements and view image capture of crosswalk events.

The system utilizes three layers of smart technology to create a safer, smarter crosswalk environment for all road users:

**DID YOU  
KNOW?**

**76% of pedestrian  
fatalities occur at night.**

[FHWA]

### Detect

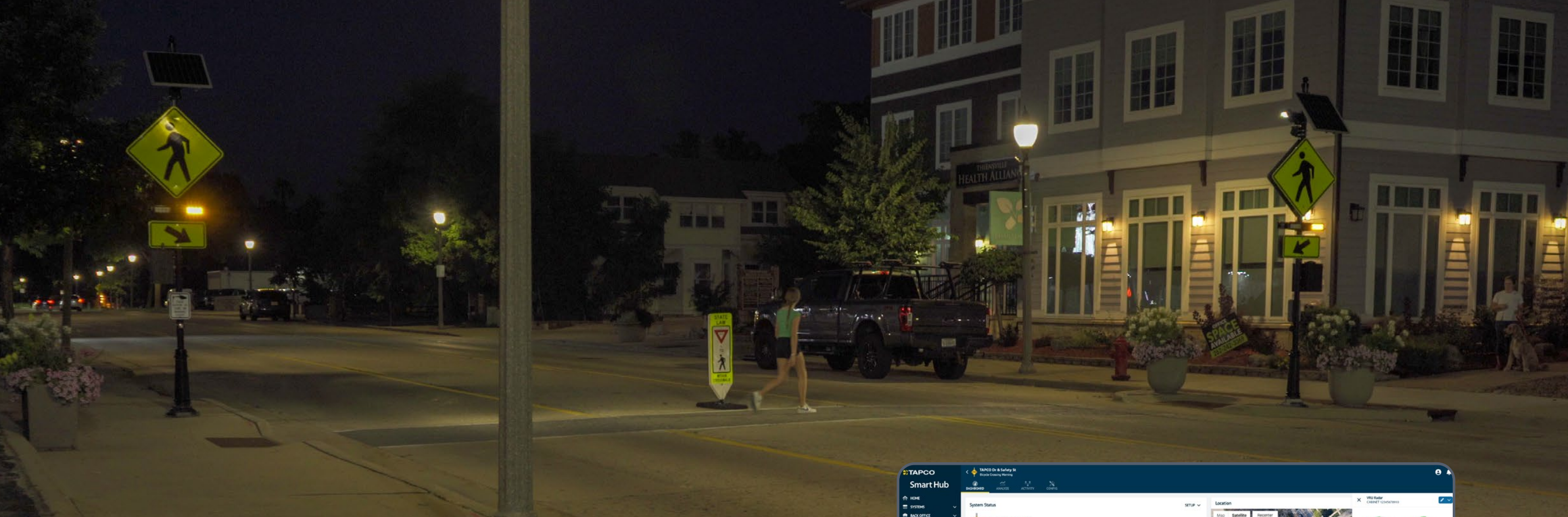
When a pedestrian enters the crosswalk, the system's utilizes passive detection capabilities to sense their approach and differentiate between a vehicle and vulnerable road user, with custom-drawn zones to determine where a pedestrian is detected.

### Activate

Upon detection of a vulnerable road user, the system automatically activates its safety measures, immediately alerting approaching drivers of crossing pedestrians with highly visible LEDs — including a crosswalk illuminator from dusk-to-dawn.

### Capture

After the system is activated, the equipped camera begins capturing the crosswalk event to provide users with still images and downloadable video clips in Smart Hub, equipping agencies with vital data to inform future decision-making.

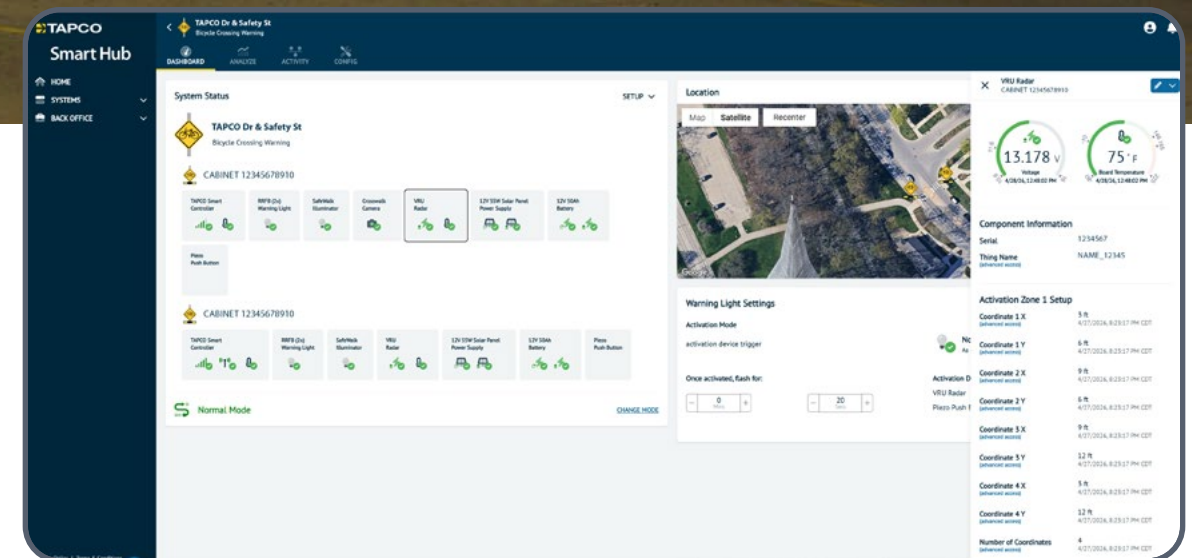


## PASSIVE DETECTION

**Add an extra layer of crosswalk protection for vulnerable road users in any community.**

TAPCO's passive detection technology creates an environment where crosswalks detect approaching pedestrians, working with the system's smart activation technology to automatically activate the crosswalk's safety enhancements. The radar-equipped detection differentiates between vulnerable road users and vehicles for enhanced accuracy.

By removing the need for vulnerable road users to push a button, passive detection provides hands-free system activation, ensuring that the enhancements activate to notify approaching drivers anytime a pedestrian is in the vicinity of the crosswalk.



**DID YOU KNOW?**

**On average, only 28% of pedestrians press the push button at a crosswalk.**

[NACTO]



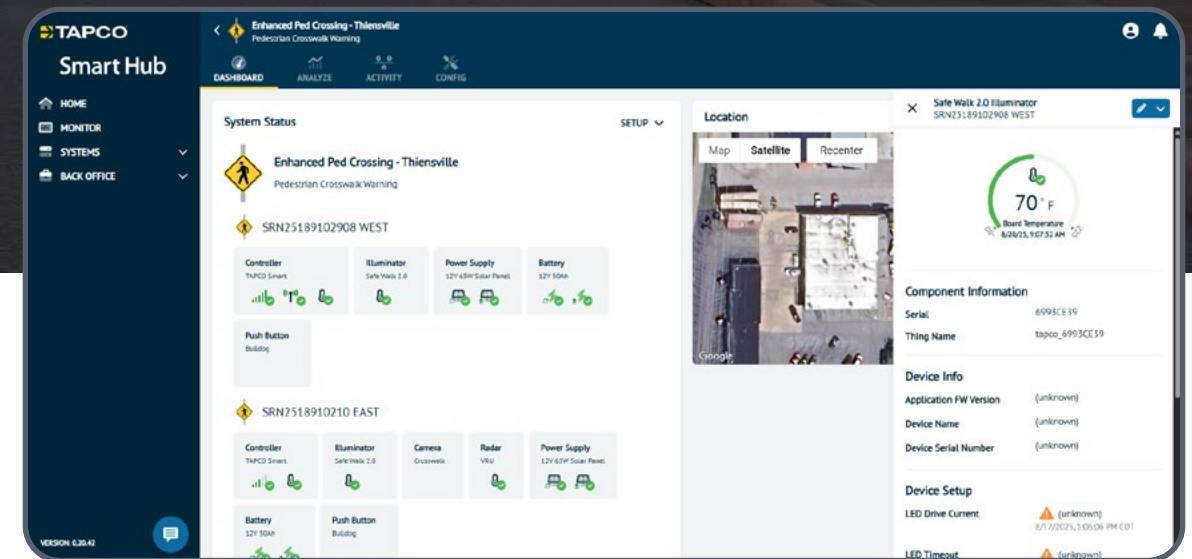
## ILLUMINATION SAFEWALK® AND VIZMARK®

**Immediately boost vulnerable road user safety by adding enhancements to target nighttime visibility.**

Crosswalk enhancements like SafeWalk® and VizMark® can provide an extra layer of visibility to any crosswalk and are ideal for locations with heavy foot traffic at night, such as parks, libraries and schools.

### SafeWalk® Crosswalk Illuminator

With the SafeWalk®, it's possible to drastically improve vulnerable road user safety by providing a high visibility environment to safely cross the road. The technology behind SafeWalk® has been proven to illuminate vulnerable road users in low-light conditions beyond traditional street lighting, as well as increase driver yield rates.



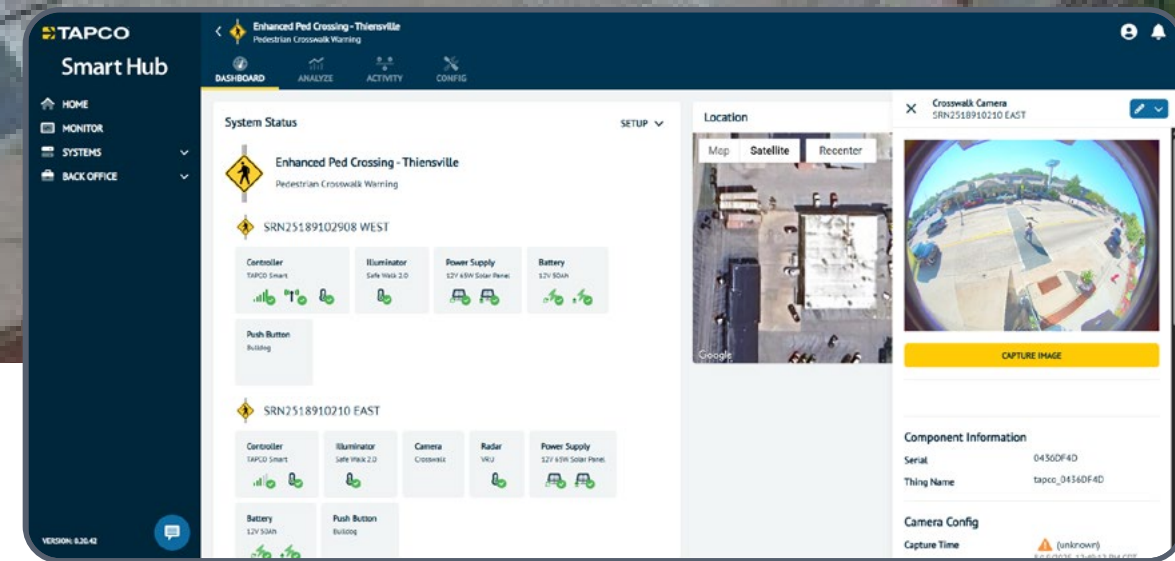
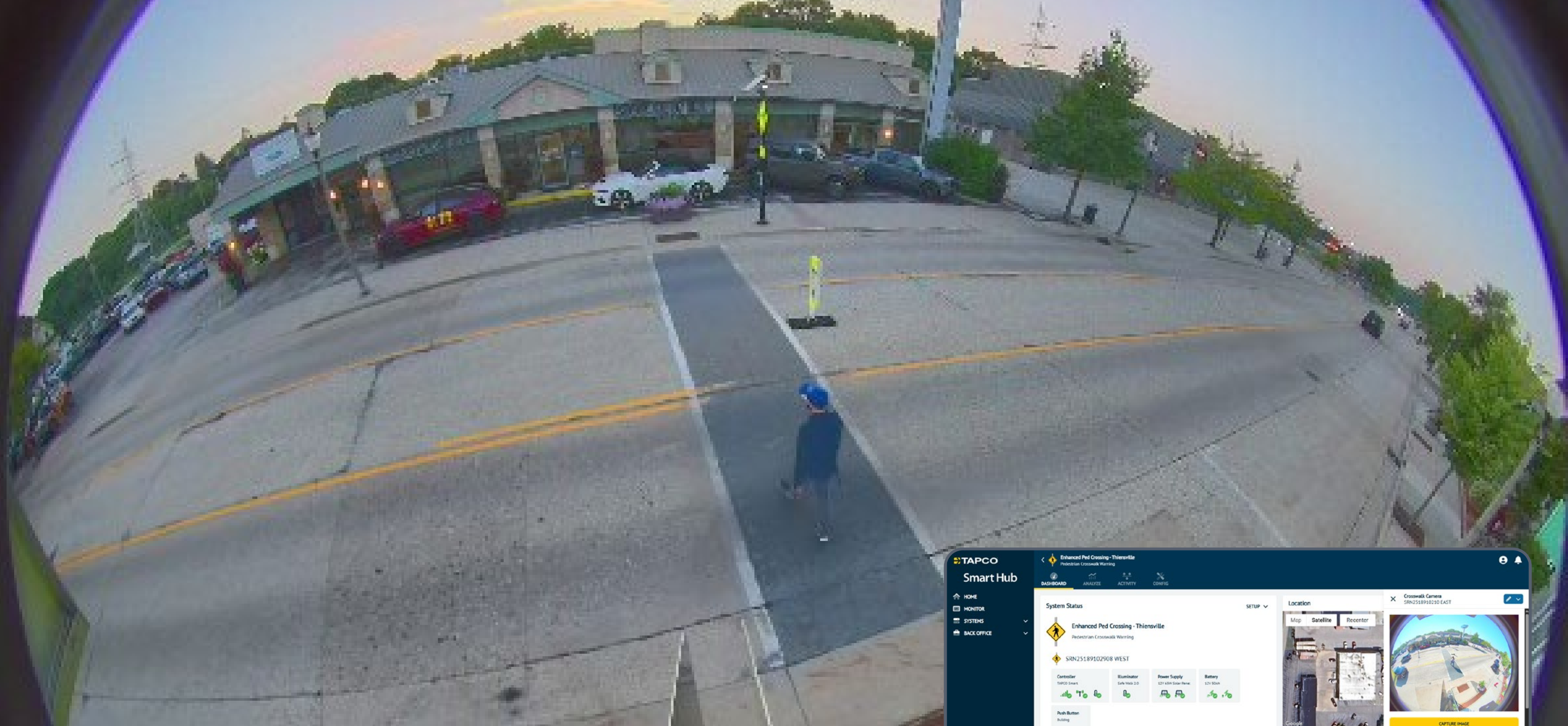
## DID YOU KNOW?

**High visibility crosswalks can reduce pedestrian crashes by as much as 40%**

[FHWA]

### VizMark® Pavement Marking Enhancement

Designed to maximize safety at night, VizMark® illuminates crosswalk and advance stop/yield lines, boosting awareness of upcoming crosswalks. By providing an extra layer of visibility, the enhancement provides important context to motorists and helps them identify where to safely stop for vulnerable road users.

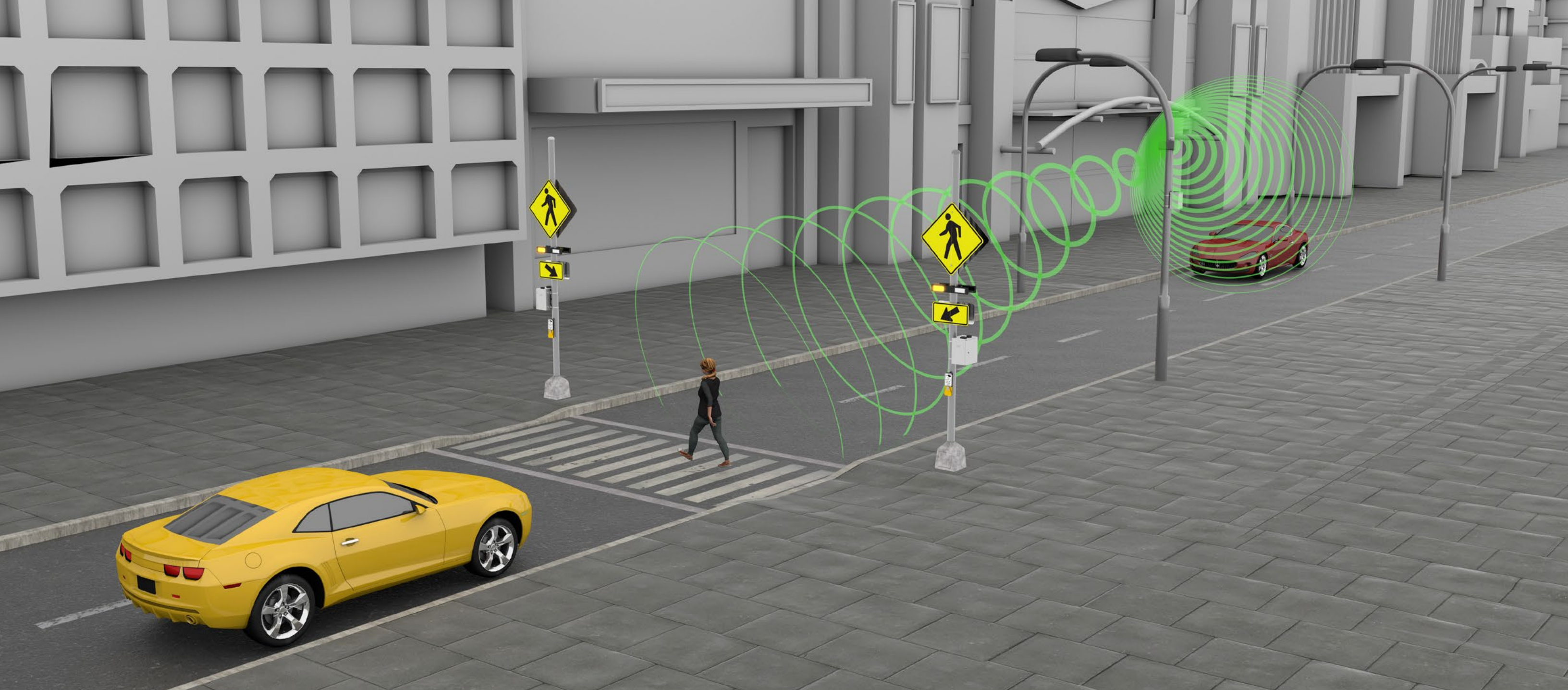


## CAMERA

**Each Enhanced Smart Crosswalk automatically comes equipped with a camera to capture crosswalk events.**

When the system activates and vulnerable road users are present, the camera begins to capture visual verification of each crosswalk event, allowing agencies to validate the effectiveness of their crosswalk system(s).

The camera captures both still images and downloadable video clips, which can be easily viewed and downloaded from TAPCO Smart Hub to help support data-informed decisions.



## CONNECTED VEHICLE INTERFACE (CVI)

TAPCO's Connected Vehicle Interface (CVI) is designed to seamlessly connect with any Enhanced Crosswalk to deploy in-vehicle alerts. Once the system is triggered, the CVI establishes communication between the crosswalk system, the 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.

## DID YOU KNOW?

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



Video



Product Brief



## MOBILE RRFB CROSSWALK

**Temporarily transform any mid-block location into a safe crossing environment.**

TAPCO's Mobile RRFB Crosswalk is a rapid-deploy solution that increases driver awareness of vulnerable road users at mid-block locations. With quick one-person setup and weeklong solar-powered runtime, the Mobile RRFB Crosswalk delivers a safe, highly visible temporary crossing environment wherever it's needed. Applications can include large community events, facility construction areas and locations where stationary crosswalk RRFBs have been knocked down.

**DID YOU  
KNOW?**

**RRFBs have proven to reduce pedestrian  
crashes by as much as 47%**

[FHWA]

Deploy the carts together on either side of a mid-block or unmarked crossing to immediately create a clear, safe path for pedestrians to cross the street. The Mobile RRFB Crosswalk includes two carts, both equipped with:

- Smart Controller
- RRFB
- Push Button
- Solar Panel
- Battery
- Static Pedestrian Crossing Sign with a Down Arrow



Product Brief



## SMART SCHOOL ZONE

### Enhance student protection throughout school zones in your community.

When it comes to school zone safety, protecting students starts with implementing the proper safety measures. Alerting drivers of approaching school zones through hand-picked safety countermeasures can help boost awareness and compliance.

Smart school zone measures like crosswalk systems and speed calming signs are designed to create a safer environment for students, with LED-enhancements like the BlinkerSign®, BlinkerBeacon® and RRFBs available to maximize visibility. By promoting awareness and compliance, our smart school zone offerings make it easier to protect students in crosswalks and reduce speeding in any school zone.

Any smart school zone systems can be seamlessly connected to TAPCO's smart city platform, Smart Hub, providing officials with a variety of remote management capabilities, including the ability to schedule system activations, check system status and health, collect data and much more.

## DID YOU KNOW?

**Between 2013 and 2022, there were an average of 108 school-transportation-related fatalities each year.**

[NHTSA]

Plus, when used in tandem with smart city software, any system's enhancements can be programmed to activate during custom timeframes — such as when students are most likely to be present:

- Beginning and end of school days
- Early release hours
- Before and after extracurricular activities



Video



## SPEED RADAR IN SCHOOL ZONES

### Encourage motorists to adhere to posted speed limits in any active school zone.

TAPCO's speed calming measures combat drivers speeding through school zones, with a variety of offerings to meet any need. Offerings range from radar-equipped speed feedback signs to more robust systems, such as our BlinkerRadar™ Driver Feedback System, which combines driver feedback signs with LED enhancements, alerting drivers of approaching school zone speed limits. Plus, customizable LED options like BlinkerSigns and BlinkerBeacons are available to help elevate compliance in any school zone.

When static signs fail to slow down motorists, the attention-grabbing signage is designed to be easily installed alongside posted school zone speed limits to add an extra layer of awareness. The signage is ideal for locations like:

- School zone speed limit transitions
- Pick-up and drop-off areas
- Schools on high-speed rural roadways

The systems offer a variety of activation options, including 24/7, and radar detection, as well as custom scheduling through Smart Hub. When utilized with our smart city platform, activations can be scheduled for when students are likely to be present — plus, it's possible to adjust in real-time to adapt to scheduling changes as needed.

**DID YOU KNOW?**

**Speed feedback signs have been proven to reduce speeds by two to 10 mph**

[FHWA]



## PREVENTATIVE MAINTENANCE

**Caring for crosswalk systems 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 — especially when vulnerable road users safety is involved. TAPCO offers service agreements to accompany any system installation or supplement existing deployments.

TAPCO's preventative maintenance plans provide continued care of any traffic system in the U.S. or Canada, 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 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 software subscriptions
- 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 vulnerable road user safety needs. TAPCO's deep understanding of the industry paired with 70+ 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.



Canadian crosswalk shown here



(800) 236-0112 TAPCO.net.com

