



# AGS

An  ATS Traffic Company

## SMART CITY SOLUTIONS FOR DIGITAL INFRASTRUCTURE

*ITS Overview*



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# Your Road to a Smarter City

The rise of urban living is significantly influencing the safety and efficiency of our public transportation systems. Transformations in digital technology are opening the doorway to an advanced new roadway.

Smart technology paves the way as an innovative force, redefining how we navigate our roads and proceed through city intersections. It has ushered in a new era of intelligent urban mobility.

There are several benefits that contribute to what makes a city 'smart' in relation to traffic management. These benefits include:

- SUSTAINABILITY
- VALUABLE DATA INSIGHTS
- EFFICIENT MONITORING
- SHARING OF INFRASTRUCTURE AND INFORMATION
- SAFETY AND WELL-BEING
- CONNECTIVITY AND COMMUNICATION

Each of these elements play a crucial role in enhancing the overall intelligence and efficiency of urban transportation systems, making our cities safer, more sustainable, and better connected. Embracing smart technology is the key to unlocking a future of urban mobility that is not only efficient, but environmentally conscious and user-friendly.



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## Sustainability Revolutionized

In the pursuit of a greener world, the convergence of urban living and digital technology significantly influences decisions regarding public transportation system planning. Sustainable solutions, encompassing resilience and agility, can be implemented through investments in smarter technology and focusing on developing open data platforms that prioritize infrastructure integration. At AGS, we are passionate about bringing future-proof, turn-key solutions to you.

## A Shared Interconnected Future

Intelligent Traffic Management Systems optimize traffic flow, manage congestion, dynamically adapt signal timings, and enhance communication with surrounding infrastructure connecting to the road user. This fosters a digitally enhanced, sustainable community interconnected with efficient smart systems, ultimately improving the lives of all road users.





## Who We Are

AGS offers turn-key solutions for intelligent transportation systems that seamlessly integrate with universal smart city technology and public infrastructure. We provide safe, reliable, and cost-effective transportation options to improve communities and economic vitality for people and businesses alike. By leveraging the power of cutting-edge technology, we give municipalities the ability to manage traffic flow, enhance public transportation services, and reduce carbon emissions. Emphasizing quality, best-fit technology, and world-class customer service, our goal is to deliver the future of transportation and offer revolutionary solutions that compliment existing smart city infrastructure, vision zero initiatives, and considerations for vulnerable road users.

## Mission

As ITS and intersection technology rapidly evolves, so do we, by fostering a promising trajectory towards a safer and more sustainable transportation landscape. We keep up with the trends by contributing new research and breakthroughs to the ITS field. These trends, collectively shaping the future of traffic safety technology, hold the potential to significantly reduce accidents, protect road users, and transform the way we navigate our increasingly complex roadways. As traffic safety experts, it is our mission to provide all road users in the Pacific Northwest with a safe, sustainable, and integrated multimodal transportation system.

## Our Services

Our technicians are certified and experienced in the architecture, implementation, and support of smart city solutions, including:

- **Adaptive Systems**
- **Intelligent Access Control**
- **Advanced Warning Systems**
- **Video and LiDAR Services**
- **Municipal Asset Management and Maintenance**
- **Smart Work Zones**
- **Custom Solutions**
- **Detection, Data Collection and Analysis**
- **Technical Services and Support**



## I-SAFE Radar Speed Signs

### Increase Road User Safety and Awareness

**Quarterhill** I-SAFE radar speed signs are effective for addressing public complaints about speeding vehicles, improving the safety of roadside workers, encouraging drivers to slow down in school zones, and collecting data for traffic studies.

### Benefits

- Increased driver awareness
- Data collection and analysis capabilities
- Improved safety for roadside workers

### Features

- Tricolor numbers include green, orange, red according to the speed of the road user (U.S.-standard yellow LED is also available)
- Successive display of three messages (speed, short text or pictograms)
- Customizable tricolor pictograms (library available)
- Three power supply options
- User-friendly software for managing measurement data
- Optional 3/4G modem and online analytics platform



## SmartLinx Micro-Sensing Platform (SLX)

### Revolutionizing sustainable technology

**SLX** micro-sensors provide video surveillance, passive monitoring, real-time vehicle speed reporting and roadway safety programming, high accuracy counting and classification of vehicles at a mid-block street location, increased energy efficiency from optimized public lighting schedules, and improved city planning.

## Benefits

- Durability
- Compact size
- Installation is under two minutes
- Privacy-friendly
- Site selection support
- Automated reports
- Support and lifetime warranty
- Affordable video surveillance wherever public streetlights are located



## Features

- **Speed Mapping** - Continuous. Eliminates the need to roll assets to collect speed data. Creates data-based public safety initiatives, and generates reports
- **Traffic Flow Analysis** - Provides 24/7 measurement of traffic flow/speed. Long-term traffic trend analysis
- **Ambient Noise Sensing** - The sensor can collect acoustic data and report results based on a threshold basis
- **Air Quality Monitoring** - The sensor can collect data for PM2.5 and PM10

## ClearWay™

### Vehicle counting and detection systems enhanced

Navtech's Intelligent Transport System detects stopped vehicles in need of assistance at an efficient rate. It also delivers additional capabilities to further advance safety and improve journeys by providing vehicle count and classification, wrong-way driver detection and hard shoulder monitoring. The system thrives in poor visibility, when accidents are more likely to happen.

## Benefits

- Performs in all weather conditions
- Fast response time
- Low false alarm
- Guaranteed performance
- low cost of ownership

## Features

- **Automatic Incident Detection** - Comprehensive AID delivers multiple applications from a single system
- **Hard Shoulder Monitoring** - Real-time warning for stopped vehicle detection
- **Count and Classify** - Accurate data collection capabilities for traffic management
- **Stopped Vehicle Detection** - Automatically detects stopped vehicles on the highway or hard-shoulder
- **Queue Detection** - Points the exact location of an incident within seconds of occurring
- **Wrong Way Driver Detection** - Detects and tracks movement of drivers going against traffic
- **Debris Detection** - Detects debris on the road
- **Pedestrian Detection** - Detects and tracks pedestrians





## LED Enhanced Signs

### Enhance Sign Visibility and Adherence

**Availed** LED Enhanced signs are designed to provide year-round 24-hour operation. Availed offers flashing LED enhanced signs and solar-powered beacons.

## Benefits

- **MUTCD Compliant:** Complies to the Manual on Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration (FHWA).
- **Quick Set-up:** Easily Installs on new or existing standard sign posts.
- **Reliable Operation:** Operates in challenging solar conditions including cold temperatures, low sun hours, and partial shading.



## Features

- **Optimized Intensity:** Adjustable intensity to optimize visibility and sign legibility during all light conditions.
- **High Capacity Solar & Battery:** Provides reliable, continuous operation year-after-year.
- **Industry Leading Efficiency:** Ultra-efficient microprocessor with integrated solar charging technology and best-in-class LED and lens.



## Rectangular Rapid Flashing Beacons (RRFBs)

### Enhance Sign Visibility and Adherence

Availed RRFBs are highly efficient, feature universal mounting brackets, and are cost-effective with unmatched operating performance. Useful for school zones and mid-block pedestrian crossings, RRFBs have been shown to improve vehicle yielding rates at crosswalks by over 90%.

### Benefits

- **Cost Effective:** Simple installation, high efficiency, and unmatched operating performance.
- **Improved Safety:** Shown to improve vehicle yielding rates by over 90%.



### Features

- **High Efficiency Design:** Built exclusively for RRFB operation.
- **Time Saving Mounting Brackets:** Compatible with all pole types.
- **Solar Engine:** Lightweight, compact, and efficient.

### Applications

- Marked crosswalks at uncontrolled intersections
- School crossings
- Mid-block crosswalks
- Trail crossings
- Cycle corridors

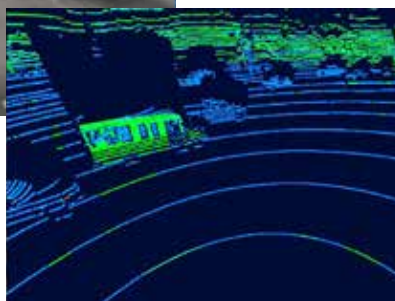
## LiDAR Sensors and AI Software

Turnkey traffic data collection powered by AI technology

**Light Detection and Ranging (LiDAR)** uses eye-safe laser beams to create a 3D representation of a surveyed environment. Combining LiDAR sensors and award-winning, powerful artificial intelligence (AI) software, this collaborative solution monitors traffic networks and public spaces with precision accuracy. It generates real-time mobility and AI powered safety data analytics with predictions; thus improving traffic and crowd flow, advancing sustainability, and protecting vulnerable road users.

### Benefits

- **Cost-effective:** Cost-effective solution for capturing multi-modal, 24/7 traffic data in real-time.
- **Quick Set-up:** Simple and quick to install. One sensor is installed for a chosen intersection. Full installation is usually completed in a few minutes.
- **Cloud-Based:** No need for expensive infrastructure, fibreoptics or large bandwidth. Data is processed at the intersection and transferred.



### Features

- Provides precise traffic monitoring and valuable safety analytics
- Uses deep learning to transform raw LiDAR data into actionable road usage and safety information
- System reliably detects all road users in any weather or lighting condition
- Uniquely suited to deliver flexibility and quality performance for many applications