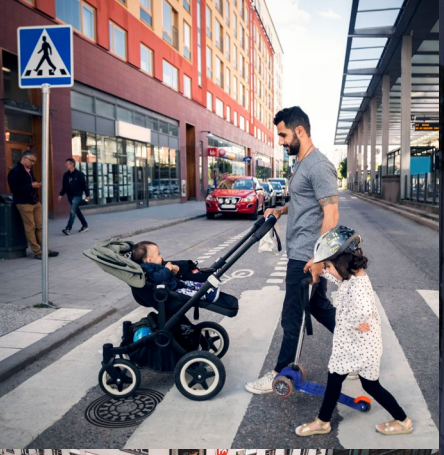
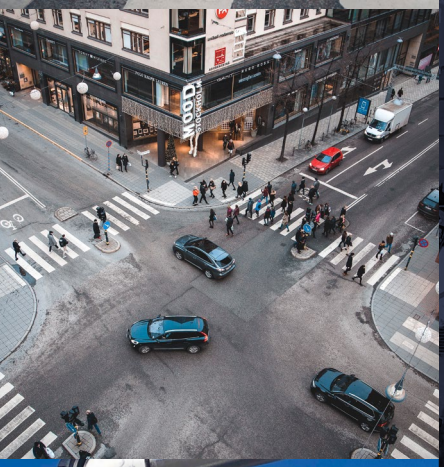
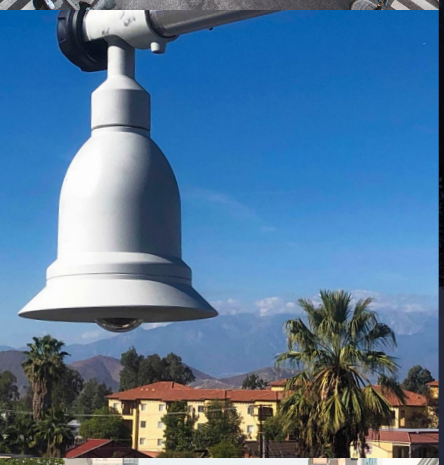
THE ROAD TO BETTER INFRASTRUCTURE

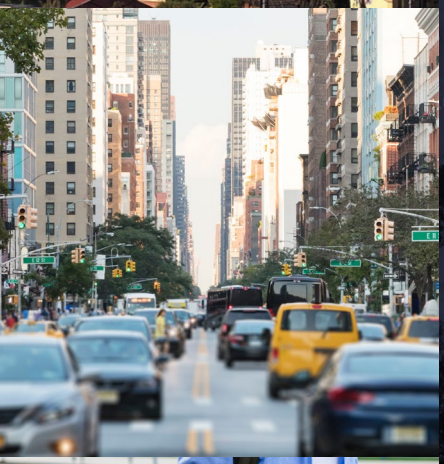
» ITS Overview

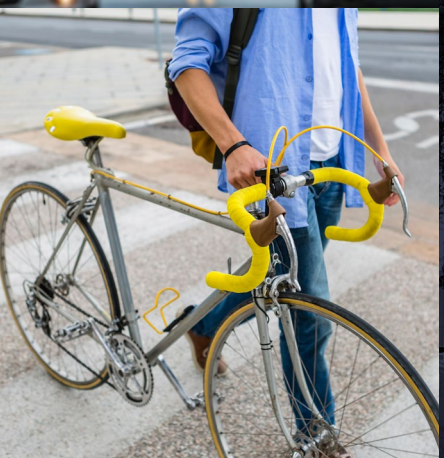
CUBIC®
Advancing Mobility Together™







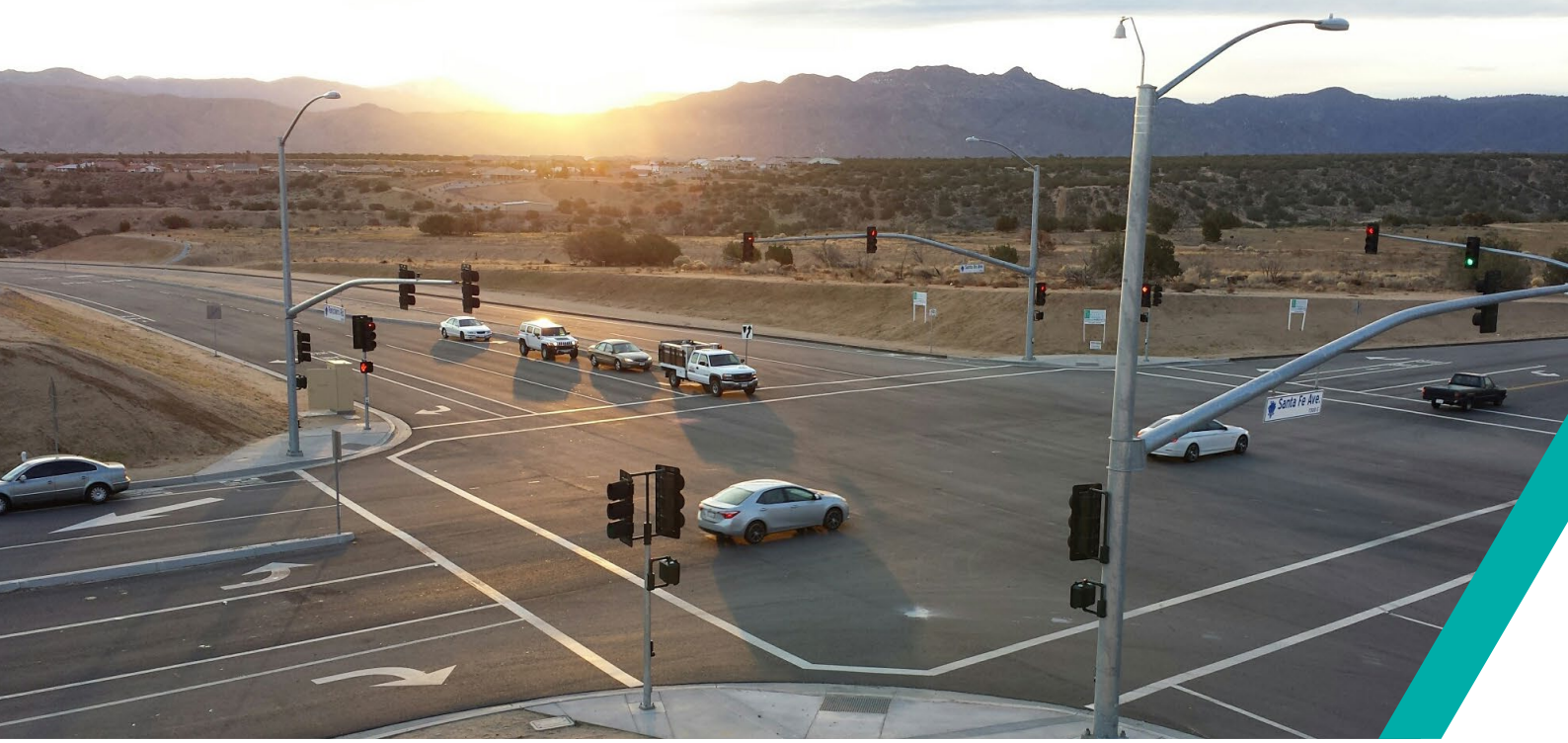




THE ROAD TO BETTER INFRASTRUCTURE

At Cubic Transportation Systems (CTS), we design, assemble, and engineer products that create safer, more efficient, and conscientious cities for drivers, vulnerable road users, municipal partners, and equipment installers. Our intersection management technology minimizes congestion to enhance mobility for all travelers, whether in dense, urban city centers or arterial corridors.

Our solutions include a comprehensive suite of hardware and software components that manage traffic movements, delivering a fully integrated approach that provides traffic managers with seamless, real-time, and predictive insights into traffic conditions. Innovation is at the heart of our efforts, a relentless focus on delivering the next generation of products that connect people, vehicles, and communities. It is a critical undertaking to support our vision of protecting all road users who travel through a CTS intersection.



OPTIMIZE TRAFFIC FLOW AND PROTECT VULNERABLE ROAD USERS AT THE INTERSECTION

According to the U.S. Department of Transportation, more than 20,000 people died on U.S. roads in the first six months of 2021, the highest number of transportation-related fatalities since 2006. Unfortunately, this scenario will continue if we ignore solutions that do not put safety at the forefront. Municipalities must innovate their transportation systems to improve operations and focus on safer roads for all users.

Cities can use computer vision to make intersections safer and more efficient for vehicles and vulnerable road users like pedestrians and bicyclists. Much like the human visual system, the GRIDSMART Solution combines traditional computer vision and Deep Neural Networks to detect, identify, and track all moving objects in a scene.

The GRIDSMART Solution tracks all road users, including pedestrians, as they enter, travel through, and exit the intersection, extending clearance times to accommodate each traveler or giving back valuable time to vehicles. Additionally, GRIDSMART is simple to install and low maintenance, minimizing a technician's time in the field and relieving the agency budget.

- **Accommodate each road user with automatic clearance time extensions** regardless of how quickly or slowly they move through the intersection, preventing accidents.
- **Eliminate the need for manual timing signals** and optimize the intersection by actively adjusting signal times to respond to current traffic demand.
- **Access complete intersection performance reports** with vehicle detection, analytics, and more to understand infrastructure demand and make informed city-planning decisions.
- **Helps cities improve safety and efficiency** at transit network's busiest points—intersections, focusing on the safety of the community's most vulnerable members: pedestrians and bicyclists.

ACCESS DATA ANYTIME, ANYWHERE

Traffic engineers require data to make quicker and more informed traffic management decisions.

Our Signal Performance Measures (SPM) is an out-of-the-box solution that stores and analyzes high-resolution data collected from traffic signals. The cloud-based platform provides access to your data anytime, anywhere.

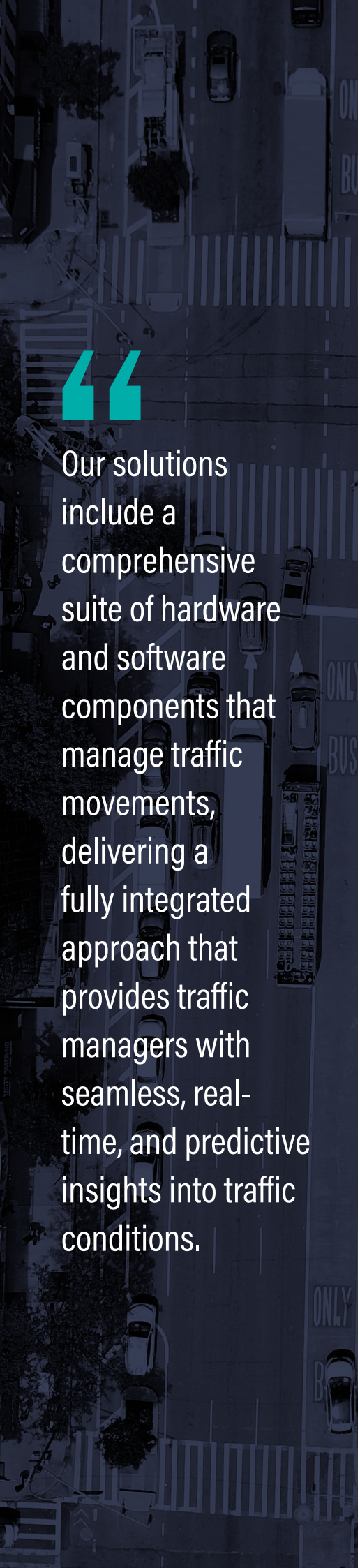
- SPM includes custom reports developed by our engineers and leading DOTs.
- Automated data collection and analysis allow agencies to quickly identify potential signal timing issues before they are noticed by the public, saving time and money by immediately pinpointing problems.

OPTIMIZE AVAILABLE ROADWAY CAPACITY, IMPROVE TRAVEL TIME, AND REDUCE FUEL CONSUMPTION AND EMISSIONS WITH A SINGLE SOLUTION

Unlike outdated manual signal timing, adaptive signal control technology automatically adjusts signal timings based on vehicle demand and pedestrian traffic. Adaptive signal timing ensures updates as situations occur, increasing the probability of receiving a green light when approaching a signalized intersection. Adaptive technology reduces vehicle stops, travel time, and road user frustration.

SynchroGreen is the industry's premier Real-time Adaptive Traffic Signal Control Technology, a field-proven software solution that reduces motorist travel time, delays, and stops by continuously assessing traffic trends for all phases of intersection movements to determine the optimal signal settings.

- **A holistic approach to traffic signal management**, considering mainline and side-street vehicle traffic and pedestrian movements.
- **Allocate time for each vehicle and pedestrian phase in real-time**, powerful functionality that makes it a leading adaptive solution.
- **Reduce emissions of hydrocarbons and carbon monoxide** with improved traffic flow.
- **Respond to road conditions faster**, resulting in happier road users and fewer complaints.
- **Save money** by getting travelers to their destination more efficiently, cutting fuel costs.



> Our solutions include a comprehensive suite of hardware and software components that manage traffic movements, delivering a fully integrated approach that provides traffic managers with seamless, real-time, and predictive insights into traffic conditions.

INTEGRATE TRAFFIC ANALYSIS, SIGNAL TIMING AND TRAFFIC SIMULATIONS

Cities of all sizes and traffic network complexities rely on Synchro Studio to deliver precise insights for managing traffic at intersections and roundabouts. Transportation planners and engineers use Synchro Studio as a single application to design, optimize, and simulate both signalized and unsignalized intersections.

Synchro Studio includes three core modules that collectively provide traffic analysis, optimization, and simulation capabilities. Synchro integrates seamlessly with our ATMS Central Transportation Management System, providing a holistic approach for managing every mobility-related asset of a city's network.

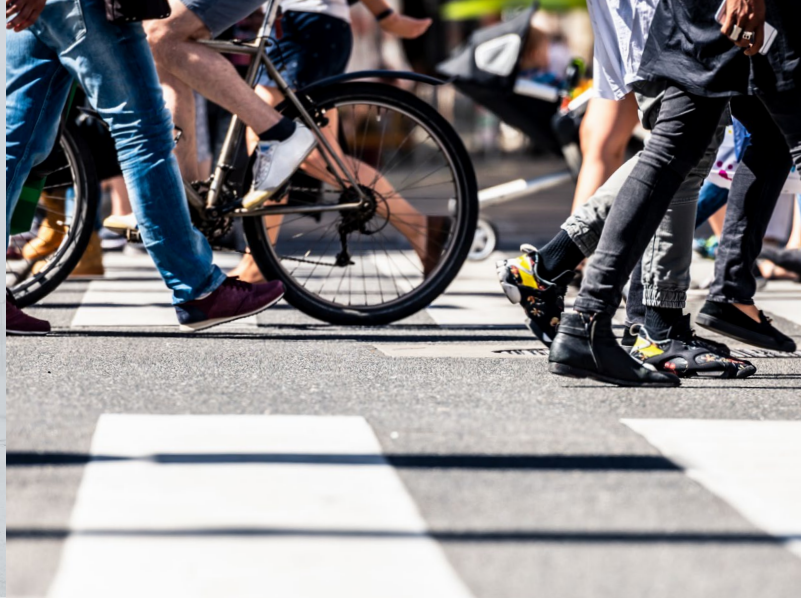
- **Design, model, and optimize** traffic signal infrastructure.
- **Simulate real-world** vehicular and pedestrian traffic scenarios.
- **Support Highway Capacity Manual (HCM) 6th Edition**, 2010 and 2000 best practice methodology for signalized intersections, unsignalized intersections, and roundabouts.

ONE SOLUTION FOR OPTIMAL THROUGHPUT

A central management system allows traffic operations staff to respond to congestion and incidents quickly.

Our Advanced Transportation Management Software (ATMS) has powered traffic management systems for communities worldwide. ATMS simplifies the management of complex, multi-modal networks and provides a holistic view of all network infrastructure, devices, traffic, and environmental conditions through a cloud-based platform. This facilitation enables users to quickly pinpoint and respond to congestion incidents, abnormal events, or accidents, potentially saving lives. ATMS also helps our customers address their Net Zero objectives by addressing carbon emissions through effective congestion management.

- **Improve response times using real-time data**, intuitive dashboards, and automated response workflows.
- **Reduce congestion by quickly communicating with travelers** using message signs and variable speed limits.
- **Make informed city-planning decisions** with predictive demand management and analytics.
- **Minimize carbon emissions** with superior congestion management.



UNMATCHED DURABILITY, EVEN IN THE HARSHEST CONDITIONS

Thousands of communities worldwide utilize our traffic cabinets to safehouse traffic signal equipment and accessories. We work closely with each customer to determine their needs, offering both standard built cabinets and fully customizable designs to meet each location's size and performance demands. This unwavering commitment to quality and performance excellence has earned Cubic cabinets the trust of thousands of communities worldwide.

- **We build each cabinet to exact standards** in our manufacturing facility, leveraging the expertise of nearly a half-century of engineering.
- **All cabinets undergo exhaustive testing** before shipping, ensuring they meet the most stringent operational standards.

KEEPING YOU FIRMLY IN CONTROL OF INTERSECTION TRAFFIC

We are proud to offer an extensive portfolio of traffic controllers designed with the latest ATC standards, including NEMA and CalTrans. The range of options ensures seamless compatibility for our customers as they migrate (or upgrade) their current technology. Our controllers are known for their quality build and superior reliability, performance distinctions borne from decades of manufacturing experience.

PROJECT FUNDING AVAILABLE

With the new **Infrastructure Investment and Jobs Act**, also known as the bi-partisan infrastructure legislation, more Department of Transportation funding opportunities are available than we've seen in previous years. Grants are more accessible than you think to secure, and our team is here to help guide you through the process, from developing grant content to aligning support.

The Infrastructure Investment and Jobs Act includes programs (see Figure 1) that agencies can use to partner with Cubic to help improve your transportation system. These are a mix of new and old programs – some are competitive grant programs, and some are formula programs providing State, regional, and local governments, as well as transit agencies, with an array of opportunities. To start the grant process, contact your Cubic sales representative or audrey.denis@cubic.com.

FUNDING PROGRAMS AVAILABLE TO IMPROVE YOUR TRANSPORTATION SYSTEM

Cubic is Here to Assist in the Grant Process. Contact us Today.

Title	Size Over 5 Years	Purpose	Agency	Eligible Awardees	Size	Funding Share	Technology Investment
Advanced Transportation Technology and Innovative Mobility	$900M	• Investment in the development of and deployment of large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment • Formerly ATCMTD • 200% funding increase from IIJA	FHWA	States, municipal gov'ts, transit agencies	$3M-$12M (typically $6M)	50% federal / 50% local	• ATMS • Detection • VRU Analysis • Adaptive • Transit Signal Priority
Safe Streets and Roads for All (new)	$5B	• Grant to develop and carry out comprehensive safety plans to prevent death and injury on roads and streets • Support Vision Zero	USDOT-OST	State and local gov'ts		80% federal / 20% local	• Detection • VRU • Signal Optimization
SMART (new)	$500M	• Provide grants for demonstration projects focused on smart city technologies to improve transportation efficiency and safety • AVs, sensor-based infrastructure, logistics, smart grid, smart traffic signals, UAVs for surface transportation safety and efficiency	USDOT-OST	State and local gov'ts		80% federal / 20% local	• ATMS • Detection • VRU Analysis • Adaptive • Transit Signal Priority
Congestion Relief (new)	$250M	• Advanced innovative, integrated and multi-modal solutions for congestion relief in congested metro areas. Funds projects that reduce congestion and optimize existing highway capacity and use of highway and transit systems	FHWA	Units of local gov'ts in regions with a pop. over 1.0M		80% federal / 20% local	• ATMS • Detection • VRU Analysis • Adaptive • Transit Signal Priority

Figure 1

WHO WE ARE

For us, transportation is personal. We know that every journey matters, no matter how long or short. That's why the team at Cubic Transportation Systems helps transportation authorities and transit agencies design, integrate, deploy and manage mobility systems fit for the challenges of tomorrow.

We work alongside our transportation partners to understand their needs, objectives, and budgets while helping them build modern mobility systems to manage demand and congestion, make journeys safer, and empower travelers to make informed and preferred travel choices.

Whether you're after a small-scale cloud-based, real-time passenger information system, a regional congestion management platform, or a complex traffic management system for urban networks delivered in an as-a-Service model, we're here to support you and your customers.

Our solutions are scalable to ensure we're the right-sized partner for any job, from rural communities like Eugene, Oregon, and Merida, Mexico, to urban metropolises like London, New York City, Sydney, and Singapore. With over 1,500 transportation projects across every continent under our belt and a network of convenient, locally-based offices with dedicated support teams, we have the technology and the know-how to solve your mobility challenges.

But don't just take it from us. Hear from our local partners who entrusted us with their mobility needs. We've worked with partners from all transportation modes, including transit agencies, airports, highways, intersections, and corridors across small communities, metropolitan cities, and regional authorities.

Get in touch to see how we can work together to help your transportation network.

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