



# SynchroGreen®

Real-Time Adaptive Traffic Control System



**SynchroGreen** optimizes for balanced service, maximum progression, and critical movements.

### What is **SynchroGreen**?

SynchroGreen optimizes signal timing for arterials, side streets, and pedestrians through real-time adaptive traffic control. This field-proven solution is designed to reduce motorist travel time, delays, and stops. SynchroGreen maximizes the use of available roadway capacity, while also decreasing fuel consumption and emissions.

*Installs in traffic controllers,  
**not beside them.***

### How is **SynchroGreen** different?

SynchroGreen was designed from the ground up by Trafficware and Naztec, two companies with decades of experience in the traffic industry. Trafficware's Synchro Studio software is used by thousands of Traffic Engineers around the globe to simulate and optimize traffic. The Naztec ATMS.now central management software is utilized by 200 cities across the country to manage and control thousands of intersections. Together, this depth of experience provides a reliable and effective foundation to understand the complexity of optimizing traffic signal operations.

SynchroGreen takes a holistic approach when optimizing traffic signals by considering side-street and pedestrian traffic, in addition to mainline traffic. SynchroGreen will allocate time to each vehicle and pedestrian phase in real time, without any additional modules.

Finally, as the only true NTCIP-compliant, real-time adaptive traffic control system, SynchroGreen provides peace of mind.

**SynchroGreen** has demonstrated...

- 70% Reduction in Intersection Delay
- 60% Reduction in Total System Delay
- 80% Reduction in Arterial Delay
- 70% Reduction in Arterial Travel Time



*It's not just about the greenband.*

**SynchroGreen** considers side streets and pedestrians too.



## How does **SynchroGreen** work?

SynchroGreen optimizes signal timings based on demand. If more vehicles demand service for a particular movement, then more time is allocated; if less time is required, less time is allocated. Secondly, SynchroGreen promotes traffic signal coordination and synchronization. SynchroGreen reduces vehicle stops and travel time by analyzing when vehicles arrive at the intersection and increasing the probability that the traffic signals will be green when they arrive.

- The SynchroGreen management information base (MIB) resides within the signal controller
- The traffic signal controller is still in charge of the intersection
- The signal cabinet does not require proprietary hardware or rewiring
- Allows the agency to choose whether adaptive control is provided from a central location or by using a closed-loop system

## REAL-TIME ADAPTIVE TRAFFIC CONTROL

1. Adjusts traffic signal timing plans in real time based on **current traffic characteristics**
2. Optimizes signal timing for normal traffic flow or **uncharacteristic surges** due to accidents, road closures, or special events

## SMART SYSTEM AND EASY SETUP

1. Designed for **easy startup** and **reliability**
2. Accessible from a **web-based interface** or Windows application
3. Returns traffic controllers to **normal time-of-day operation** if the system is shut down

## INTEGRATES WITH SYNCHRO & SIMTRAFFIC

1. Models adaptive traffic control and provides **simulation capabilities**
2. **Calibrates adaptive settings** using actual field data
3. Allows users to **preview expected results** before implementation

**SynchroGreen** is the only solution that **analyzes the entire system**.

## SynchroGreen is Available in Three Levels

- *SynchroGreen Lean* includes the Local Intersection Software and Central Server Software, and provides a web-based interface for monitoring and controlling the system. This option is an economical way for a city to experience the benefits of adaptive traffic control.
- *SynchroGreen Premium* includes the Local Intersection Software and Enhanced Central Server Software and operates up to 150 intersections. It provides agencies with the ability to analyze real-time system performance, create detailed reports, log system calculations, and much more. This solution is designed to be easily integrated as part of federally funded adaptive traffic control projects.
- *SynchroGreen Enterprise* integrates directly with your ATMS.now central management system and also qualifies for federal funding. It allows agencies to operate up to 150 adaptive intersections and 9,999 total intersections.

	Lean	Premium	Enterprise
SynchroGreen Adaptive Algorithm	✓	✓	✓
SynchroGreen Local Intersection Software	✓	✓	✓
SynchroGreen Web Interface	✓	✓	✓
Enhanced User Interface		✓	✓
Adaptive System Performance Monitoring		✓	✓
Real-time and Historical Adaptive System Reports		✓	✓
Assign User Profiles and Restrictions		✓	✓
Support up to 150 Intersections		✓	✓
Designed for Federally-Funded Adaptive Traffic Control Projects		✓	✓
Supports Adaptive and Non-Adaptive Traffic Signals		✓	✓
Comprehensive Monitoring of Non-Adaptive Traffic Signals			✓
1-Year Support and Upgrades	✓	✓	✓

### ABOUT TRAFFICWARE

Trafficware specializes in researching, designing, and developing electronic equipment and system-wide software designed to enhance the transportation industry. Our industry expertise comes from:

1. Hands on experience attained while solving traffic management challenges across the country since 1979
2. Our team of Professional Traffic Engineers and their combined 50+ years of real-world experience
3. Valuable feedback from our customers

Trafficware manufactures a full line of traffic equipment in its 90,000 square-foot technology plant located in Sugar Land, Texas. In over three decades of manufacturing in the USA, our products have earned a reputation for unmatched quality and reliability.



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