SCATS

Adaptive Traffic Control System

SCATS® is the most proven adaptive system on the market that optimizes cycle length, splits and offsets on a **cycle-by-cycle basis** utilizing real-time detection. For more than 30 years, SCATS has repeatedly provided measured operations improvements to travel time, stops and delay.

SCATS Proven Results

In the United States, several independent studies have shown that based on reduced emissions alone,system payback has been obtained within 12 months from installation.

Santa Rosa, California

- Average increase in speed of 49%
- Average reduction in travel time of 32%

Road Commission for Oakland County, Michigan

- Off peak travel time reduced by up to 31%
- Peak period travel time reduced by up to 8%

Gresham, Oregon

- Up to 19% reduction in peak-period peak direction travel time
- Up to 30% reduction in off-peak travel times

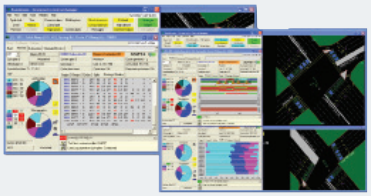
TRAFF® Controller Firmware

The SCATS TRAFF controller firmware resides on the local intersection controller. It manages time-critical tasks such as sampling detectors, timing all phase intervals, outputting phase colors, maintaining controller clock and communications with the SCATS server.

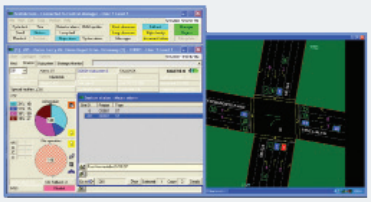
TRAFF ensures safe signal operation regardless of communications or central software status. TRAFF has been successfully deployed and is currently supported on:

- Peek ATC-1000 Linux controller
- Siemens Linux M60 series Linux controllers and M50 series OS9 controllers
- Trafficware Commander series and 2070-1C Linux controllers

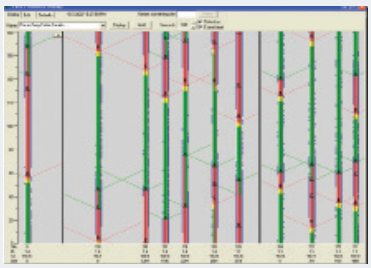
TRANSCORE®
Trusted Transportation Solutions



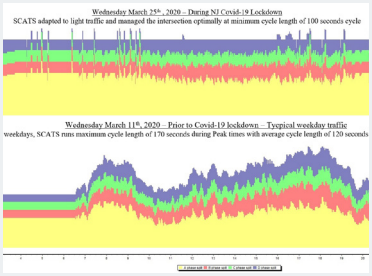
Real-Time Information



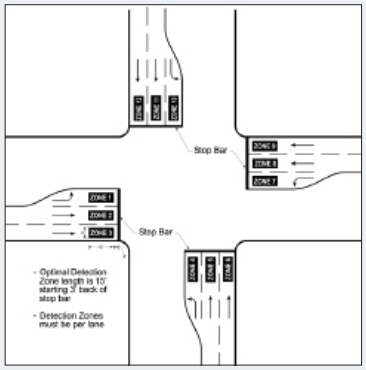
Real-Time Alarm Monitoring



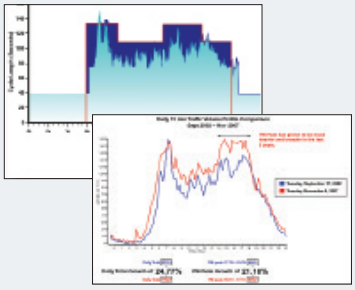
Real-Time Time/Space Diagrams



Historical Reports



Cost Effectiveness



Immediate and Long-Term Benefits

SCATS Features

Adaptability

SCATS allows for better control of unpredictable traffic patterns. Even consecutive Sundays can experience vastly different traffic patterns, and SCATS provides you the ability to accommodate these variations without manual intervention.

Real-Time Information

SCATS provides real-time information for both advanced operations and maintenance monitoring. This includes detection, timing, saturation, status, communication and coordination information.

Real-Time Alarm Monitoring

SCATS provides real-time alarm monitoring, including communications, detection, user access and flash status alarms. The highly intuitive detection alarm monitoring specifies the exact lane with the detection issue, and whether that issue is a constant call or chattering detector -- all from the central GUI.

Real-Time Time/Space Diagrams

SCATS provides user-configurable real-time time/space diagrams. The diagrams convey easy-to-view real-time status of the corridors and include detection actuations for monitoring platoon arrivals, as well as theoretical travel time information. This also provides an efficient and easy-to-use method for real-time fine tuning of system coordination aspects.

Historical Reports

On a daily basis, SCATS collects and saves information for future use and historical reporting. This includes timing, detection actuation, lane saturation, lane volume, coordination and adaptive trigger information. This information can then be used for future planning purposes or for reviewing past operations.

Cost Effectiveness

SCATS reduces overall operational costs as it is self-calibrating and does not require on-going traffic counts or manual development of timing plans. In addition, SCATS is an off-the-shelf software package that utilizes contemporary hardware and the Windows® operating environment. SCATS adaptive control, unlike other adaptive control systems, is also a standalone system that requires no separate underlying control system.

SCATS Optimization

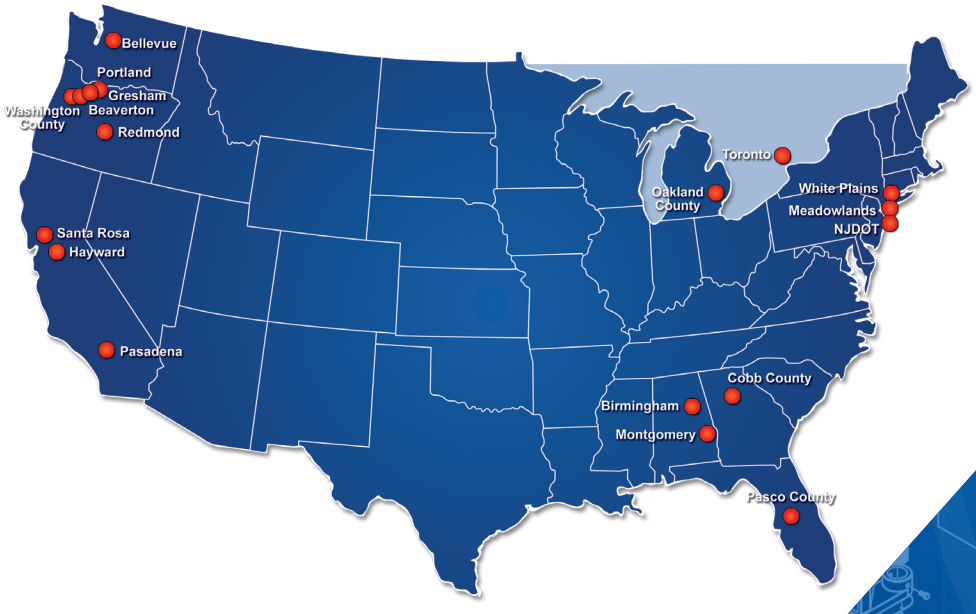
SCATS optimizations are based on the collection of saturation information at the stop bar **eliminating the need for costly advanced or downstream detection.**

This provides optimal data collection for cycle length and split optimizations as SCATS monitors the saturation of every lane, every cycle. This detection approach also provides inherent detection redundancy as a detector loss affects only one lane at an intersection. This allows SCATS to continue to collect information and perform optimizations on the remaining intersection detectors. Historical detector data can be used for adaptive calculations in the event of multiple detector failures.

Immediate and Long-Term Benefits

SCATS provides both immediate and long-term benefits through its real-time adaptive operations. Benefits include reduction in overall delay during the shoulders of the peaks through the use of smaller, more optimal cycle lengths, as well as its ability to adapt to traffic changes (both increases and decreases) over long periods of time without manual intervention. SCATS real-time detection collection features allow it to always provide optimal timings to all movements even when unexpected changes occur.

Existing SCATS Uses	SCATS Installations																		
	Alabama DOT	Hayward, CA	Pasadena, CA	Sanat Rosa, CA	Pasco CTY, FL	Cobb CTY, GA	Oakland CTY ,MI	Meadowlands, NJ	RTE 1, NJ DOT	RTE 18, NJ DOT	RTE 73, NJ DOT	RTE 130, NJ DOT	RTE 322, NJ DOT	White Plains, NY	Beaverton, OR	Gresham, OR	Portland, OR	Redmond, OR	Washington CTY, OR	Toronto, CAN
Congested/Bottleneck Areas	●	●	○	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	○	●
Reduced Capacity Areas	●	●	○	●	●	●	●	●	●	●	●	●	●	○	●	●	●	○	●	○
Rapidly Developing Areas	●	○	○	○	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○
Schools	●	○	○	●	○	○	●	●	●	●	○	●	○	○	○	○	○	●	○	○
Shopping Areas	●	●	●	○	○	●	●	●	●	●	●	●	●	●	○	○	○	○	●	●
Construction	○	●	○	●	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
High Capacity Roadways	●	○	○	○	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	○
Special Events	●	●	●	○	○	●	●	●	○	○	○	○	○	○	○	○	○	●	○	○
Recreation Traffic	●	●	●	○	●	○	●	●	●	●	●	●	●	●	○	●	○	●	●	●
Economy Fluctuations	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	○	○	●	○	○
Freeway Traffic	●	○	○	○	○	●	●	●	●	●	●	●	●	○	●	○	○	○	●	●
Light Rail Areas	○	○	●	○	○	○	○	○	○	○	○	○	○	○	●	○	○	○	●	○



TRANSCORE®

SCATS

Adaptive Traffic Control System

Cobb County, Georgia
Adaptive Traffic Control System – SCATS

For more information:

Call
800. 923.4824

Email
ContactUs@TransCore.com

Follow Us
linkedin.com/company/transcorelp

transcore.com

TRANSCORE®
Trusted Transportation Solutions