



# FAST BULLETIN TRAC



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## Board of Oakland County Road Commissioners

Larry P. Crake, Chairman - Richard G. Skarritt, Vice-Chairman - Eric S. Wilson, Commissioner

### Letter from RCOC's Managing Director



**Brent O. Bair**

When we at the Road Commission for Oakland County (RCOC) first launched the FAST-TRAC adaptive traffic signal system in 1992, virtually no one was familiar with the concept of Intelligent Transportation Systems (ITS) - the name that has

come to be associated with advanced technology applied to transportation. Today the ITS field has grown far beyond what many of us could have imagined.

How far it has come is evidenced by the amazing 15th World Congress on ITS which will take place in New York City Nov. 16 to 20. This event, which will also

## ITS World Congress coming to NYC

serve as the Intelligent Transportation Society of America's annual meeting, will draw thousands of participants from around the globe.

It will showcase the thought leaders in the world of transportation technology. Many of the space-age technologies presented will ultimately help make our roads safer and more efficient, saving time, lives and money.

The World Congress will feature the largest fully-integrated demonstrations yet seen, showcasing vehicle-to-vehicle and vehicle-to-roadside communication technologies. The demonstrations will include innovative mobility solutions operating on the streets and highways of New York.

The World Congress will also feature technologies related to: cooperative system network management, probe data, tolling

and congestion pricing, parking management, mayday/incident response, fleet management, transit and commercial vehicles. In other words, it will provide information and demonstrations of the latest concepts in transportation technology.

Why does all this matter? Because it will allow us to vastly improve the safety of motorists on our roads while at the same time reducing congestion and travel time. It will also reduce the amount of fuel we waste idling in traffic and significantly cutting the amount of money wasted responding to collisions the are avoidable.

So, keep an eye out for news coming out of the ITS World Congress in November -- it's bound to be exciting!

## FAST-TRAC extended on Orchard Lake Road

This fall, the Road Commission for Oakland County (RCOC) will complete the installation of FAST-TRAC traffic signals on the north Orchard Lake Road corridor in Keego Harbor, Sylvan Lake and Pontiac.

As has been the case elsewhere where FAST-TRAC has been installed, the signals should result in improved traffic flow and reduced crashes along this section of Orchard Lake. FAST-TRAC is a computerized signal system that uses vehicle detection technology to continually monitor traffic volume in each direction at an intersection and, in real time, adjust the signal timing to most efficiently handle the current traffic volume and patterns.

The project will involve the installation of seven new FAST-TRAC signals, including video-imaging vehicle detection. The project is unique because it represents the first time RCOC has incorporated accommodations for the disabled in a signal

upgrade project from the initial design phase forward (the federal government recently interpreted the Americans with Disabilities Act to include pedestrian crossing facilities on public roads).

As a result, the new signals will include updated push-button-activated pedestrian-signals, pedestrian ramps at crosswalks and other features that will make it easier for disabled pedestrians to traverse the corridor.

The new signals will also feature the latest technologies, including new, state-of-the-art "controllers" -- the computer cabinet placed near each signal. This project is the first time that RCOC has installed this new controller, which will allow simplified signal troubleshooting.

Additionally, the new signals will be wireless-ready. Traditionally, FAST-TRAC signals are connected via phone lines to link the signals, coordinate corridors and relay signal data to RCOC's Traffic Operations

Center. Because the phone lines are often problematic, RCOC has been converting some signals to wireless communications.

While RCOC is not yet able to install wireless communications along this corridor, these signals will allow for easy conversion to the new technology as soon as it is available.

The new signals will be installed at the Orchard Lake intersections with Commerce Road, Ward's Point, Warwick, Middlebelt, Pontiac Ave. and Old Telegraph as well as the fire station just north of Commerce Road.

The signal upgrade will cost approximately \$700,000. It is being funded through a federal Congestion Mitigation and Air Quality improvement (CMAQ) grant.

### What is FAST-TRAC?

FAST-TRAC, an integrated technology system utilizing computers and video, reacts to the traffic flow and adjusts traffic signals accordingly.

**FAST-TRAC - Faster And Safer Travel through Traffic Routing & Advanced Controls**

## RCOC helps stage hi-tech demo for state Transportation Commission

Staff from the Road Commission for Oakland County (RCOC) and the Michigan Department of Transportation (MDOT) jointly recreated a cutting-edge technology demonstration Aug. 20 for members of the Michigan Transportation Commission, showing how vehicles and the road infrastructure can electronically communicate with each other.

The demonstration, which proved that as many as eight software applications can run simultaneously on a live wireless network linking a moving vehicle with other moving vehicles and with the roadway infrastructure, was first staged at the Intelligent Transportation Society of Michigan Annual Meeting at the Rock Financial Showplace in Novi in May of

this year. Prior to that, such a demonstration had never before been attempted.

The technology is known as Vehicle-Infrastructure Integration (VII). The Federal Highway Administration is promoting VII as a way to improve roadway safety and efficiency in the future, and some believe it could become a significant growth industry. Michigan is one of the leading states in the fledgling technology.

Because of the national recognition gained through the Novi VII demonstration, state transportation leaders felt it was importation for the Transportation Commission members to witness the demonstration as well. The commission, whose members are appointed by the governor, oversees MDOT.

## Macomb introduces smart signals

The Road Commission of Macomb County has been upgrading its traffic signals with radio-controlled technology similar to RCOC's FAST-TRAC system.

RCMC now has over 175 locations operating with this state-of-the-art equipment. The system is incorporated in the agency's new Traffic Operation Center.

The center enables RCMC Traffic Dept. staff to view signals in real-time to better anticipate and mitigate traffic congestion and coordinate signals to assist in emergency situations.

### FAST-TRAC fast fact:

RCOC has the largest deployment of video-imaging vehicle detection in the world with 2,000-plus cameras in service.

## Who is FAST-TRAC?

*The Road Commission for Oakland County's FAST-TRAC adaptive traffic signal system doesn't just happen. It takes a carefully orchestrated team of professionals to keep it operating smoothly. At the FAST-TRAC Bulletin, one of our goals is to share the human face of North America's largest high-tech traffic signal system.*

Among this team is Traffic Engineer Terry Creech. Creech reviews and adjusts traffic signal timing (the duration of green and red times) for both traditional and FAST-TRAC traffic signals. This involves monitoring traffic, both in the field and through the FAST-TRAC software pro-

gram to adjust timing at intersections as needed to achieve the most efficient traffic flow.

Creech also assists in maintaining the equipment necessary to run the FAST-TRAC system. He utilizes computer programs to generate and optimize traffic signal timings.

"I get instant gratification when I can



*Terry Creech*

fix a traffic signal issue on the spot," he said of his job. In particular, he enjoys working with the latest technologies. "The continuous advances in the new technologies are very interesting," he observed.

Creech has been a full-time engineer with RCOC since 2005, though he spent three years as a co-op student with the agency while completing his civil engineering degree at Lawrence Technological University.

When not working, Creech enjoys playing guitar, exercising and playing poker, including participating in poker tournaments.

**31001 Lahser - Beverly Hills, MI 48025**

**FAST-TRAC: Advanced Technology  
To Keep You Moving**

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248.858.7250 or pmillard@rcoc.org