



## *Freeway Management and Incident Detection*

The ever increasing need to accurately monitor traffic and detect incidents on freeways has driven EIS to develop the state-of-the-art Freeway Traffic Monitoring System (EIS FTMS). Based on the RTMS radar, the EIS FTMS vehicle detection stations are spaced every 500 m (1500 feet) and installed on roadside poles in a side-fired configuration. They deliver data to a PC at the Traffic Operations Center (TOC) at predetermined time intervals using RF radios, Ethernet (TCP/IP), or land-line modems. Incident management by TOC personnel is facilitated through the FTMS' immediate reaction, processing and integration with a CCTV monitoring system. The system enables quick deployment on existing structures with no traffic disruptions and features one of the lowest life cycle costs in the industry. It is fully programmable and scalable to cover up to 8 lanes of traffic in side profile.

## *Data Collection and Corridor Management*

Whether on a highway or an arterial road, data collection is one of the most critical elements of successful traffic management. Using RTMS radar detection stations mounted on roadside poles, information on the volume, occupancy and speed of each of 8 lanes is recorded and sent to a cluster controller in regular time intervals. The cluster controller communicates wirelessly with the RTMS units with a clear line of sight of up to 10 miles. This consolidated information from multiple stations can be sent to the Traffic Operations Center (TOC) via RF, TCP/IP or land-line modems. Each station is defined in the Station Manager application, while the information from all stations is stored on the SQL server for easy data mining. Web-based speed maps can be easily populated with real time traffic conditions.

## *Work Zone Safety and Warning Systems*

Ideal for work zone safety or early warning systems under adverse weather or traffic conditions, NEWS is designed to detect and send warnings of traffic irregularities to drivers (e.g. stopped traffic, fog, etc.) by variable message signs, flashers, and other warning signals. This stand-alone surveillance solution is using up to 16 preprogrammed events from up to 8 stations simultaneously (monitoring up to 8 individual lanes each) and provides immediate output. It is intended for either permanent or temporary installations because of its speed, ease of deployment and proven reliability under all weather conditions.

## *Traffic Counting*

EIS traffic counting stations are cost-effective integrated solutions for non-intrusive traffic analysis. Based on the RTMS detector, the EIS traffic counter is a self-contained package powered by solar energy or batteries. It can be outfitted with a cellular, land-line, or dial-up modem, TCP/IP, or RF communication. The package is very flexible and easily relocated, making it ideal for either permanent or temporary traffic counting stations. The solution comes with Traffic Reporter, the most advanced industry software for charting and graphing traffic patterns of multi-lane roads (up to 8 lanes of traffic). Its central software can be prescheduled to automatically download stored data from hundreds of stations via modem and generate reports in user-defined formats in batch mode. EIS traffic counting stations can also be clustered and the information from multiple stations transmitted through a single link. Each station has a storage unit with the capacity of storing up to 64,000 messages (equivalent to 30 weeks of traffic data for 8 lanes of traffic at 5 minute intervals). Data downloads can reach up to 115,200 bps by dial-up modem.

## *Urban Traffic Detection*

SPIDER builds upon the advantages of the RTMS and radio frequency modems operating in Spread Spectrum, integrating them into a seamless solution. A single remote SPIDER Controller (typically located in a Controller Cabinet) collects data from up to 8 individual RTMS radar sensors, eliminating the need for fixed communication lines associated with mid-block or system detection. SPIDER can be successfully applied in mid-block, advanced, and system detection. Wherever the wireless transmittal of real-time traffic data is required in urban environments, a SPIDER solution is ideal.



## **TRAFFIC SOLUTIONS**

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150 Bridgeland Avenue, Suite 204, Toronto, Ontario, Canada M6A 1Z5 Tel.: 416.785.9248 Tel.: 1.800.668.9385 Email: info@eistrafficsolutions.com www.eistrafficsolutions.com

# EIS TRAFFIC MANAGEMENT SOLUTIONS

*Complete, Customizable Answers*

Application	Freeway Management & Incident Detection		Data Collection & Corridor Management		Work Zone Safety & Warning		Traffic Counting		Urban Traffic Detection	
	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional	Standard	Optional
<b>Hardware</b>	RTMS	RTMS RIC	RTMS/DSS Cluster Hub	RTMS Modem	RTMS/DSS NEWS Controller	RTMS	RTMS RTC	RTMS Sentinel	RTMS	RTMS/DSS SPIDER
<b>Software</b>	FTMS		WATER / SQL		NEWS		Traffic Reporter			
<b>Communications</b>	*DSS TCP/IP Fiber	Type 170 Controller Fiber	DSS Last Mile TCP/IP or Leased Line	GPRS	*DSS	Other Radio	Cellular or Land-Line Dial-Up Modem		Contact Pairs	*DSS

\*DSS - Digital Spread Spectrum Radio Modem

## Configure Solutions To Your Requirements

At EIS, we recognize that you may have unique traffic challenges that not everyone shares. Our flexible, customizable solutions are designed to help you meet these specific needs. Simply select the applications that are relevant to your situation, and we will provide fact sheets, case studies, and full support to help you configure the perfect, worry-free system. Whatever your needs, you can count on EIS to provide the perfect solution.

*We Relieve Traffic Headaches*

