

from Blaine Leonard to Everyone: About CAD integration - What software are the dispatch centers using, and are they "sending" you the data, or does your software reach into their database and extract the data you want?

The FHP CAD system makes a filtered set of their data available to SunGuide via an FTP. From the data feed, SunGuide creates alerts that match configurable criteria. The alerts are then presented to the operators for action (dismiss, create an event, etc.)

from Barry Pekilis to Everyone: Can you talk in a little more detail about the vehicle sensors themselves and what the data from the vehicle probes looks like?

Point detection devices include

- Loop sensors use 170 controller with the Bitrans B238-I4 firmware.
- RTMS sensors are Wavetronix or EIS devices; drivers are currently being upgraded to the more recent HD (Wavetronics) and G4 (EIS) devices.
- 3M micro-loops

Probe devices include

- Toll tag readers
- LPR readers

Data from the point detection devices includes time stamps, detection device id, speed, occupancy and volume. Depending on the devices, classification data may also be sent to SunGuide.

Data from the probe devices includes time stamps, probe identifier and id (LPR or tag ID hashed for privacy)

Connected Vehicle sensors include J2735 messages

- Basic Safety Message (BSM)
- PVDM with some optional fields

from NJ Turnpike Auth Sean, Chip, John, Cindy, Tony to Everyone: Good Afternoon, what vendor did you use to develop the software

Southwest Research Institute is under contract to both the FDOT and TxDOT to provide software development services as "work for hire" for the SunGuide and Lonestar software systems.

from Sal Cowan to Everyone: Is the tablet / vendor application data fed directly into the core software, in turn feeding VMS/511?

The tablet software (there are three different applications) feeds the SunGuide software. All three applications interact with the SunGuide software Event Management subsystem. Independently, the SunGuide software pushes information through its Center-to-Center subsystem to the Florida Advanced Traveler Information System (ATIS) which includes web, voice (511) and other interfaces.

from Mike Pack to Everyone: For C2C comm., what network do you use? Dept network, fiber, ?

The Center to Center traffic is on a department owned network which is a combination of technologies including fiber and wireless.

From Stan Markuson to Everyone: Does your Road Ranger program receive advertising funding. I ask since I saw the state farm insurance logo on the side of the truck.

The funding model used for the Road Ranger program differs from district to district, but yes some of the funding is provided through advertising.

From Mark Kirouac to Everyone: Are the vehicles being monitored drive by state employees or contractors? If state employees, do you have any union issues?

"Vehicles being monitored" is not clear. The Road Ranger program is contractors. The vehicles monitored by the Connected Vehicle program are varied but identification is "hashed" to prevent precise identification of vehicles.

from Mark Kirouac to Everyone: do you record CCTVs?

No.

from Sal Cowan to Everyone: Do you have automated incident detection with your cameras? Is the camera software also developed in house and have full diagnostics through the core software?

Automated incident detection through cameras is provided by Citilog devices (commercial product).

from NJ Turnpike Auth Sean, Chip, John, Cindy, Tony to Everyone: Could you provide more info on the V2V and V2I, are you using a particular car vendor, cellular provider, GPS, etc.

The V2I was implemented using the SAE J2735 standards from FHWA. The devices deployed and used during World Congress were from a variety of vendors.

from Pedro Vega Escribano to Everyone: Does the software incorporate signal control capabilities. If not, why since ATMS should not stop at the Interstate system.

The SunGuide software does not incorporate signal control capabilities. It has been discussed over the past 8 years but had not yet been implemented.

From Richard Glassco to Everyone: What device receives messages broadcast from RSEs and displays them inside vehicles?

The Connected Vehicle terms the units that receive messages as On Board Equipment (OBE). An OBE consists of a DSRC (Dedicated Short Range Communication) radio (5.9 GHz), a netbook to view the output, and an antenna for broadcasting and receiving messages as well as receiving GPS. OBEs are not currently available on the market. OBEs for the World Congress ran custom software provided by Southwest Research Institute to send Basic Safety Messages, Probe Vehicle Data Messages, and receive Traveler Advisory Messages to display on the netbook.

From Brian Kary to Everyone: Is SunGuide OpenSource? If so, under what License? GPL?

The SunGuide and Lonestar softwares are not open source. FDOT and TxDOT hold the software as proprietary though are willing to license the software to other government agencies free of charge .

From Veronica Cipponeri to Everyone: How User roles defined/assigned?

There is an administrative editor used to configure the system, e.g. add / modify / delete roadways, links, devices and users. Thus through use of the editor roles can be defined consisting of predefined privileges and assigned to users or individual privileges assigned to users.

From Lorenzo Parra to Everyone: Cost, Time to deploy, training, adaptable to tunnel environment?

Time to deploy and train operators typically is about one to two weeks. However, that makes the assumption that the SunGuide is capable of controlling the existing field devices, i.e. contains device drivers for the legacy devices. Development of new device drivers or inclusion of the additional interfaces to control a tunnel environment (power, fans, pumps, etc.) is not easy to answer without more information. Typical on-site Training can be done in 1 or 2 days and consists of training from an administrative standpoint as well as an operations standpoint. A full user manual can be found on the SunGuide project web site (<http://sunguidesoftware.com>).