

Managing assets — the Intelligent Systems way

Ever wondered how many cameras there are on TripCheck? Several hundred, in fact, and they are the single most popular feature of our road condition Web site. In 2008, total visits to TripCheck reached nearly 24 million — and that’s a lot of people looking at a whole bunch of cameras several hundred thousand times each throughout the year.

It’s clear the public has come to depend on TripCheck to access information provided by cameras and weather stations along the road, not to mention details about incidents, speed, congestion, construction and other road conditions. Motorists also use permanent and portable variable message signs, highway advisory radio, TripCheck’s mobile Web site and our 511 system for important travel data. All of this equipment, along with items like ramp meters, ramp gates, flood and wind warning systems, and rotating drum signs, are part of ODOT’s inventory of Intelligent Transportation System equipment around the state. Currently ITS counts more than 988 items in its inventory of equipment used for providing information to the public, monitoring road conditions, and managing traffic.

So how does the ITS team manage this colossal gathering of extremely valuable assets? Intelligently, of course!

Micromain, a commercial, off-the-shelf maintenance management software package, is the tool of choice for tracking ODOT’s ITS equipment. As with other assets like guardrail, culverts and pavement, ODOT tracks the



Region 2 ITS Support Coordinator Tony Owens works on a weather station on Megler Bridge in Astoria.

location, installation date, and condition of ITS equipment. But there are some significantly different needs.

Unlike many highway assets, maintenance of ITS equipment often involves replacing parts instead of complete replacement. ITS technicians must be able to search for intricate, specialized parts so they can be prepared for site visits. For each site, equipment is monitored to the “part” level, including manufacturer, part number, and serial number. Other unique items important to track include network address, phone numbers, passwords, firmware versions, and utility account information, just to name a few.

While the resulting asset inventory is useful, the real benefits of the Micromain system are its maintenance management features. An intranet page allows Transportation Operations Center operators or others that discover a problem with any ITS device to enter a work order. Depending on the severity of the problem, an ITS technician can be automatically notified of the problem. This same intranet page also allows users to check on the status of the repair.

Once in the system, work orders are assigned to a specific technician. Technicians update the work order status and record any actions taken via a handheld wireless device or laptop while they are in the field. At the end of the month, technicians can print their timesheets based on the information tracked in the system. A number of other useful reports are available from the systems that help identify problem locations or trends in failure causes. Work order summary reports help to measure the current workload backlog and calculate the average time to complete work orders.

ODOT’s asset management capabilities related to ITS equipment are fairly advanced thanks in part to the newness of our equipment — at least compared to other highway assets. The other factor that has pushed ODOT’s ITS asset management efforts forward is our need to keep things working on a 24-7 basis with a diverse, widely distributed network of equipment. The side benefit is a management tool that helps answer many questions that come up — so if you are still wondering about the number of cameras, a quick look at our inventory system currently shows we have 231. Enjoy!

April 25 is 95th anniversary of ‘Good Roads Day’ in Oregon

As Oregon celebrates its sesquicentennial this year, it’s fun to look back at interesting moments in transportation history.

On April 25, 1914, Governor Oswald West proclaimed the day “Good Roads Day” across Oregon. The proclamation stated “the good roads question is one of vital interest to us all...”

Today’s headlines are filled with stories about the need to improve Oregon transportation infrastructure. At a recent meeting of the Oregon Transportation Commission, the room was filled with local government representatives, transportation advocates, interest group members and others lobbying for



Gov. Oswald West

federal economic stimulus funds to improve and enhance transportation infrastructure within their communities.

It seems as if the more things change, the more they stay the same.

In the late 1800s, the good roads movement began when bicyclists lobbied for an improvement of the dirt roads that existed in most of Oregon. The popularization of the automobile in the early 1900s accelerated the effort. The Columbia River Highway (now a national scenic byway) was largely a result of the groundswell of support for better roads. In fact, the precursor to the modern day Oregon Department of Transportation, the Oregon Highway Department, was formed in 1917 to help “get Oregon out of the mud.” A lot has happened since then!

Region 5 joins National Engineering Month

Like other ODOT engineers throughout the state, two Region 5 employees took time out of their busy schedules to participate in National Engineering Month in February.

Tom Wallace, Region 5 Tech Center, and Craig Sipp, Hermiston Construction office, met with high school students to talk about what it means to work as an engineer.

Engineers have been making significant and lasting contributions to society since the beginning of civilization. The Pyramids, the Great Wall of China, vast cities of Aztecs and a multitude of ancient man made wonders have survived hundreds or thousands of years due to high quality engineering. More recent engineering feats are evident in the continuing exploration of space and in harnessing the powers of nature to create energy that will protect the earth for future generations.

To help inspire future generations of potential engineers, Wallace talked to young adults at Kennedy High School and Hawthorne Alternative High School in Pendleton, and Sipp presented his insight to students at Hermiston High in Hermiston. Both spoke of the schooling needed for an engineering career, along with the rewards one might reap by pursuing work in engineering.

When students were asked what they thought the most interesting points of the talks were, some mentioned the fascination they had with the objects, buildings, and materials made by engineers everyday that improve their lives.

Wallace’s personal feelings about the job were evident, as he repeatedly said how much he enjoyed using the “toys” of the trade. Students at Hawthorne



Tom Wallace from the Region 5 Tech Center talks to a class about what it means to work as an engineer.

High also said they learned interesting facts including that the largest bridge is in France, is 8,000 feet long and 1,125 feet tall. Wallace left the group with two simple bits of advice for anyone interested in the engineering field: study hard and stay focused.