

Technical Leadership Teams Report July to September 2006

The Leadership Teams are led by Technical Services for the following major technical disciplines: Access Management - Bridge - Construction - Right of Way - Traffic-Roadway and include key representatives from Regions and from Technical Services. In addition, the Technical Leadership Team provides technical and engineering leadership for the business. This team is led by Cathy Nelson, Technical Services Manager/Chief Engineer for the Oregon Department of Transportation.

The Quarterly Report is a communication tool to provide an update on key information for ODOT and Consultant staff involved in delivering projects for ODOT.

This is our first report. Please look for changes as we continue to refine this communication to provide information for you.

Key Accomplishments and Major Milestones

Draft revisions to OAR 734-051 (access management rules) were approved. Proposed changes were open for public comment through December 18, 2006. Final adoption by the Oregon Transportation Commission (OTC) anticipated at January 2007 meeting.

Completed updating instructional figures in the Access Management Volume 3 – Central Highway Approach Maintenance Permit System (CHAMPS) to match numerous changes made in the CHAMPS program over the last 18 months.

A Bridge Numbering Guideline document has been completed and posted on the Bridge Webpage.

Bridge updated and posted the Utility Guidelines on the Bridge Web Page.

A primary focus during this quarter was on delivering the Construction program. With the OTIA program starting to ramp up for the construction phase, along with the STIP projects, the 2006 season was very busy.

The HYDRO Design Manual, a 17-chapter manual, was published on-line 6-7-06.

Culvert Repairs Program - Design and construction for 140 culverts state-wide on-going. Over \$17 million of work is anticipated to be completed by June 30, 2007

Updating all Wall and Culvert standard drawings have calculation books, be stamped, and to LRFD design standard. Anticipated completion date is July 1, 2007.

Fish Passage Culvert permitting streamlining - Another helpful tool is ODOT's streamlined permitting processes currently under development. Before, permits were issued project by project. With a new emphasis on covering more projects over a longer period, the department will save money (for more culvert projects) and time (fish get their fixed culvert faster). This kind of a strategic approach will help make the best decisions for funding and fish, but the challenges will remain.

Several guidelines are being worked on by Traffic-Roadway. These include:

- Revised Safety Corridor Guidelines.

- Technical Bulletins for Right Turn Acceleration Lanes and Colored Crosswalks sent on to the Technical Leadership Team (TLT) for approval prior to issue;

- Updates of the ODOT Sign Policy and Guidelines;

- Approval of new Traffic Signal Policy & Guidelines;

- Approval of Oregon Temporary Traffic Control Handbook

What's on the horizon?

Bridge anticipates that an update to the Bridge Design and Drafting Manual will be posted in November 2006. Consultants have been offered an opportunity to comment on the changes beginning September 20, 2006.

A Steel Girder Erection Manual for bridges is in the process of being developed. This will follow guidelines from NSBA and AASHTO. This is anticipated to be published in about one year.

The Bridge Section provided training in October on the ODOT LRFR Manual for those consultants who will be load rating state owned bridges using LRFR with Oregon Specific Live Load Factors. An audio/visual package for future training of new load raters is under development, which will cover the same material provided at the October 2006 training.

Construction is in the process of developing and reviewing their 2007 work plan.

The OTIA III Bridge Program Fluvial Performance Standard Task Force is working on developing a more clear understanding of how to apply this standard and how to evaluate bridge sites for abutment protection using this standard.

GEO Design Manual - The publication of the first ODOT design manual to cover the wide range of topic areas used by Geotechnical Engineers and Engineering Geologists is scheduled for April 2007.

Traffic Roadway is currently working on policies and procedures related to the following:

- Documenting signal turn-on procedures
- Raised Pavement Marker Policy
- Follow-up on draft policies for Safety Projects and implementing HSIP
- Pedestrian Signals at Roundabouts (requirements of the Accessibility Guidelines);
- Requirements for Passive Highway/Rail Grade crossings;
- FHWA Interim Approval of Flashing Yellow Arrows
- Requirements for Retro reflectivity of Signs
- FHWA retro-reflectivity requirements

Bridge maintenance design may be outsourced to consultants in some Regions.

Bridge Standard Drawings will be updated over the next two years to LRFD, English Units, New Discipline Owners, and drafting standards, including standard levels. Approximately one fourth of the 100 drawings will be updated each six months starting in July 2007.

The ODOT Traffic Line Manual is being drafted and should be complete by February 2007.

Key Changes (people or organization) of Interest

Ed Fischer is the manager for the newly merged Traffic-Roadway Section. This will be effective October 1, 2006. This change provides increased collaboration between these two closely aligned areas. Their website can be accessed at - <http://www.oregon.gov/ODOT/HWY/TRAFFIC-ROADWAY/>
If you have the original sites bookmarked, you will be automatically re-directed to this new page.

As part of the Traffic-Roadway merger, two units which were previously part of Traffic are now part of the Maintenance and Operations Branch. These units included Traffic Signal Services (TSSU) and Intelligent Transportation Systems (ITS), which includes the TripCheck program.

The Bridge Section added a new staff member for archiving, scanning, and retrieval of bridge records, Don Newkirk. He can be reached in the same way Bridge has established in the past for questions on bridge records, through the e-mail address: bridge@odot.state.or.us.

Gary Obery is the new Senior Traffic Engineer in charge of the Signal Operations Group. Massoud Saberian formerly held this position. Gary can be reached by phone at 503.986.3576 or email at Gary.R.OBERY@odot.state.or.us.

Recognition

Ron Singh, and his Geometronics Unit presented information for the Technical Leadership Team regarding their working on developing a state Global Positioning System (GPS) reference station network. They are partnering with state and local governments, federal agencies, and educational institutions to develop the network.

The ODOT Geometronics Unit is responsible for enhancing and maintaining the vertical and horizontal geodetic control infrastructure across the state of Oregon. The establishment and operation of this permanent GPS CORS network in Oregon will help accomplish this mission.

This GPS network will consist of GPS Continuously Operating Reference Stations (CORS) that will provide real-time kinematic (RTK) correctors via cellular phone and radio networks. GPS users that are properly equipped to take advantage of these correctors can survey in the field to the one centimeter accuracy level in real time. Excellent work by Geometronics in moving this forward. To find out more about the Oregon Real Time GPS Network, see <http://www.theorgn.net/>

Joe Squire, Technical Center Manager for Region 3, discussed their innovative solutions for the Gregory Slide, an emergency slide project along Highway 101 in Southern Oregon. They figured out what was possible to responsibly re-open the highway and to take care of the large amount of slide material which was deposited on the beach. They partnered closely with contractors, external agencies, university researchers regarding the ocean environment, and ODOT staff to open the highway and also to ensure that the plan to use wave action to help dispose of a portion of the debris does not adversely affect the coastal environment now and into the future. Compliments to all involved with this project.

For Up-to-Date Information, see the Technical Services Website at <http://www.oregon.gov/ODOT/HWY/TECHSERV/> to find...

- **Training:** Information on current technical training open and available for consultants. ODOT employees can also research available classes on the ODOT Human Resources training intranet site.
- **Guidance Documents (Directives, Bulletins, and Advisories):** Please refer to this information for technical guidance currently in effect.
- **Manuals:** Technical manuals are included on this website.
- **Leadership Team Charters and Membership information.**
- **And more...**

Questions or Comments? Email Technical Services @
technical.services@odot.state.or.us