

**Work Zone Safety Task Force Meeting
Kent Maintenance Facility 9:00 am – 3:30 pm
June 5, 2007**

Introductions

Chris Christopher introduced new co-chair Linea Laird, State Construction Engineer, and each attendee introduced his or her self.

Welcome

Lorena Eng and Bill Vlcek welcomed the task force to NW Region. Lorena expressed gratitude that the group is getting the word out about work zone safety and working on innovative ideas that reduce worker exposure, such as new ticket taking methods. She also talked about the importance of (1) plenty of press before a large project begins, especially if lanes will be closed; (2) encouraging alternate routes, carpooling or transit to help alleviate congestion; (3) traffic analysis being used to determine how many days construction will last taking into account weather, events and looking at all traffic impacts; and (4) looking at challenges that include coordinating with other projects in the area to lesson impacts to drivers. Bill said that the WZSTF helps to keep safety at the front of people's minds.

Lorena told the group about a homeless person killed while brush was being cleared for a project on I-5.

Next Meeting

The next meeting will be hosted by Eastern Region on September 20, 2007.

Goals, Expectations and Perspectives

Chris C. encouraged the group to look over the handout on goals, expectations and perspectives of the Work Zone Safety Task Force and look at where we've been and decide where we are going. Chris C. reminded the group that agenda items need to hit one of the goals. He said one of the expectations is to share key information from the meeting with the regions; there seems to be a communication disconnect when sharing information from the task force meetings. Amy Revis said the first goal, to decrease work zones through design effort, requires that word get out to the right design people and to the contracting community encouraging the closing of highways, and to reiterate the success of total closures from both a safety and a better product view point. Maintenance crews can also use total closures for safety sake, especially since several operations can be taking place simultaneously. Public involvement and outreach are necessary to get local buy-in by users. Lakeside Industries and Wilder Construction are both very much behind full closures. The new federal ruling that requires more work up front may help make ideas like total closures more prevalent.

Stop/Slow Paddle Issue

Sue Babic said she had to special order a stop/slow paddle with high intensity sheeting. She wants to make sure that word is getting out on using higher grade sheeting on stop/slow paddles as a standard. Ted Trepanier said the issue stalled, but a memo will be issued to let the RAs (with cc's to Maintenance people, the WZSTF, and the sign shop) know that the lower grade paddles are still legal but that as paddles are replaced, the higher grade sheeting will be used. Mike O'Neil asked if standards would be developed

as to when a stop/slow paddle with the new sheeting would need to be replaced to reduce subjectivity from L&I inspections.

WSP Guests

The WSP evidently had a schedule conflict as they were not present. They offer valuable input and it's always interesting to have each region's WSP representatives share their view points.

Photo Enforcement in Work Zones

Mike Dornfeld said during the last two legislative sessions WSDOT requested the use of camera enforcement in work zones. Last session the bill was doing well but the session ended before the bill was passed. Instead, a pilot program has been authorized; WSDOT will use cameras in work zones until June 30, 2009. A photo will only be taken of the license plate, not the driver or passenger, and a citation will be mailed. The citation does not go on a driver's record. Currently, an implementation team, including WSP, is looking at what type of equipment will be used, what criteria will be used to select the pilot areas, and how many pilot areas will be chosen. This will be done in time to implement photo enforcement for the 2008 construction/maintenance season. Part of the program will be an awareness campaign, if the public perceives photo enforcement positively; the legislature will view it in a more positive light. Results of photo enforcement will be closely monitored for a report to the legislature; hopefully this can become a permanent fixture in work zones. Another important piece is data collection, traffic must be managed and congestion monitored. Any ideas for photo enforcement should be sent to Frank Newboles or Marty Weed.

Attenuator Installation

Steve Russell said that NW Region looks for ways to keep employee exposure to traffic at a minimum and as a result put together a plan to pre fabricate impact attenuators at the maintenance shop. A piece of jersey barrier is bolted to the attenuator, the whole assembly is loaded on a trailer and lowered in place by a boom truck, anchored in place and the crew is off the road. NW Region has gravitated to using attenuators that are compatible with existing installations, have lower maintenance effort to repair, and can be removed from the road in a few pieces instead of having to deal with lots of debris thereby offering less exposure for crews. The region uses salvageable pieces whenever possible to rebuild attenuators that have been crashed into.

Median Cable Barrier

Mike Evans, Incident Response Supervisor of Olympic Region, showed a PowerPoint program on median cable barriers. The program was created primarily for fire fighters, but it also contains important information for maintenance crews and work zone employees. WSDOT has installed close to 70 miles of high tension cable guardrail on nine different highways in eight counties to help prevent crossover collisions. When a vehicle becomes entangled in the cables, the PowerPoint outlined the procedure to follow when there are life threatening injuries and the victims cannot be accessed because of the cables. The cables can be safely cut, if the cable is cut away from the vehicle between posts; but since cutting the cable puts it out of service, cutting is only a last resort. Frequently, the cable can be stretched and pulled away from the vehicle to release it, the posts are made to break away and intact posts can be pulled up and laid down to release pressure on the cable. For routine maintenance, cables can be held with a come-along,

cut and spliced back together. Training is available from Trinity Industries. To schedule training, contact Don Gripne at (360) 943-9559 or gripned@earthlink.net

HQ Communications Office

Melanie Coon and Alice Fiman briefly talked about the NW Region Give ‘Em a Brake kickoff, where a Roboflagger was present. Two 555 programs were implemented, where troopers patrolled two different work zones at peak driving periods. Double fine signs were posted, citations were written when workers were present in the work zones. The task force was asked to look at the current Give ‘Em a Brake website, Melanie and Alice would like feedback. They would also like to include on the website “near misses” from the regions and lessons learned. Next year WSDOT hopes to have the Safety Stand Down coincide with the Annual Work Zone Memorial event. King 5 news will spend some time with Sue Babic’s crew getting a real sense about work zone challenges and dangers.

Task Force Subcommittee Reports

Traffic Control Oversight Subcommittee – Joel Amos noted that as of November 2008 federal requirements state that all apparel for workers in the right of way on federal aid highways must meet ANSI 2 standards. Regions have the flexibility to decide if personnel can wear reflective T shirts or whether a vest will be required. Joel also talked about the Traffic Control Oversight Committee in regard to traffic control supervisor and flagger training. Flagger training is not being monitored as to the quality of training, and the TCOC wants to see flagger training upgraded to include field experience. Effective flagging is critical in providing a safe work zone and poor flagging practices continue to be observed in the field.

Technical Subcommittee – Frank Newboles said the next Technical Subcommittee meeting will be held September 19 in Spokane. This subcommittee looks at the details of issues that the task force brings up but does not have the time and/or expertise to deal with, then reports findings back to the task force. Frank also talked briefly about the last meeting with the Department of Labor and Industries; sign spacing, short duration flagging, flagger position while actively flagging, traffic volume definitions, the new FHWA rule for apparel, photo enforcement, the M54-44, and cable barrier were all topics of discussion.

Safety/New Products Subcommittee – Marty Weed gave a slide presentation containing several new products that WSDOT will evaluate. They include a removable marking paint made to spray on then be removed with a chemical remover and a power washer leaving no mark on the road, a trailer attenuator that can be used on a variety of vehicles vs. the truck mounted attenuator, a temporary sign stand that can mount signs seven feet in the air although it cannot hold a supplemental sign as well, a work zone alert radio that interrupts a trucker’s CB radio letting the driver know of a work zone ahead and other real time road conditions. The work zone alert radio combined with a VMS letting drivers know to tune to this station has been successful in several other states. Chris Tams will do a pilot project with the work zone alert radio and report back to the task force in September.

Work Zone Intelligent Transportation Systems

The use of ITS elements in WSDOT work zones began almost 20 years ago using VMS, HAR, portable sign systems, over height detection systems, flashing stop/slow paddles, and intrusion alarms. Currently portable HAR, SMART Zone systems, speed detection/display units, speed violation and deterrent systems, work zone photo radar speed enforcement, variable speed limits, automated flagger assistance devices, dynamic lane merge systems, queue detection systems, travel time estimation systems, and work zone traffic management are being used or are under evaluation. Work zone ITS is currently underutilized by WSDOT, yet has some of the greatest potential for new work zone solutions. Funding and design efforts are two of the roadblocks to implementation. Benefits from work zone ITS depend on the appropriate project work zone applications. WSDOT's top three priorities of ITS application include the dynamic lane merge system, the queue detection system, and work zone traffic management.

Region Roundtable

South Central Region – Rick Gifford says their season is just beginning, mostly daytime paving. He talked about a 19 year old man arrested after a high speed chase through a work zone on SR 397. Kathy Hatcher said that she has never seen a WSP pursue a speeding car through a work zone but has witnessed both city and county law enforcement do so.

Olympic Region – Steve Haapala explained that he is getting new people in the Traffic Office and is working to get them trained to work on traffic control plans and design. He also told the group that a Roboflagger will be used on an upcoming project. The Tacoma Narrows Bridge will be opening on July 15, there will be an extra tow truck on the SR 16 corridor and aggressive IR teams working the area to keep traffic flowing smoothly. Kathy Hatcher talked about a total closure planned for SR 7 for three weeks, there will be a detour around the area. Sue Babic said the region is trying to create another maintenance closure on I-5 with multiple crews working in the closure.

Lakeside Industries – Mike O'Neil said some of his concerns include heat related illnesses for his paving crews, and flagger positioning – flaggers behind the fog line don't feel they are effective, and if a car is not stopped, the rest of the crew is in danger. Frank pointed out that flagger positioning is not an option but there are devices to help protect the flagger and notify the public of the flaggers presence. A pilot car is another alternative to a flagger. Mike told the group that his company is working on ticket taker procedures to keep their people safer, the truck is not to be approached until it is completely stopped and the ticket is extended. Mike feels standardized procedures for all entities would be beneficial. Once their policy is finalized, it will be discussed at every pre-paving meeting, and made part of new employee orientation. Mike Frucci of Eastern Region says that on select projects where WSDOT is the only customer from the material source, it seems to be working well when tickets are collected the following day, removing the ticket taker from danger altogether.

Wilder Construction – Mike Fallon says their policy is that it is every person's job to watch out for everyone else. He shared the good news that one of their employees who suffered a serious fall last year has had a full recovery. Mike says Wilder is a proponent of weekend closures, so his crews can get in, get the work done and get out with little exposure to traffic.

North Central Region – Kirk Berg said last winter they completely closed Highway 2 twice for a work zone, it's much safer. He said lane shifts are working well. Kirk explained that the traveling public is accepting of closures as long as the details of a closure are communicated in advance and people realize that the work is of value. He said his region is using pilot cars more. He also reiterated that the traffic management plan needs to be worked well in advance of the project.

Eastern Region – Mike Frucci talked about his region's pre-activity plans, and showed the group their laminated pocket cards that are required reading before going on a project. The card also includes safety phone numbers. Mike said that the Spokane viaduct traffic is in a detour situation. He believes that painting pavement marking messages and symbols has reinforced the lane restriction messages to the drivers, and that solid white lane lines appear to work better than a broken line pattern in work zones.

Southwest Region – Chris Tams says they are using a Roboflagger on a Highway 14 project. One flagger can run two automated flagging devices if the devices are no more than 800 feet apart. The bridge on Hwy 97 will be completely closed for six months instead of 18 months of partial closures. WSDOT is being proactive to help the surrounding community deal with the closure including creating a website that matches carpoolers, the Region Traffic Office will also match carpoolers for those without computer access.

Federal Highways Administration – Cathy Nicholas also talked about the new apparel rule that requires any worker in the right of way of a federal aid highway to wear ANSI 2 vest or shirt, which becomes effective November 2008. The WSDOT *Standards Specification Manual* will need to be updated to reflect this change, although currently WSDOT vests and nightwear are already ANSI 2. The WSP is exempt from this ruling, FHWA sees a challenge in getting other entities on board with the ruling, including fire fighters and the news media. Cathy also talked about the pavement marking removal process, FHWA is looking at several types of removable marking tape. She will report in September on FHWA findings.

Northwest Region – Bonnie Nau said they are gearing up for a big construction season. They try combining work in a corridor, and did this on the Alaskan Way Viaduct inspection which included the WSDOT Design Office, Urban Corridors Office, Sound Transit and others. Region construction is being coordinated so that construction in one area does not coincide with another, thereby compounding traffic on alternate routes. Julia Mizuhata said that they have lots of new people and are pairing inexperienced workers with those that have more knowledge. Jeff Peterson talked about speed reductions and how the 2010 Olympics will affect construction. Pat Moylan said the Evergreen Point Bridge will be closed two full weekends and will have up to 50 crews doing maintenance on the bridge.

Josh Cheatham gave a PowerPoint presentation providing an overview of NWR's work zone safety and mobility issues as part of a design build project. The design build process addresses five key points: RFP development, proposal evaluation, design process, installation oversight, and maintenance and audits. He reviewed lessons learned and revised approaches to each, primarily in the area of traffic maintenance.

Work Zone Traffic Control Guidelines (M54-44)

Every year minor revisions are made to the guidelines, every couple of years the guidelines receive a major revision (Marty collects feedback year round on the guidelines). The newest version available January 2008 will have an improved table of contents, and tabs to help find topics easier. With more people using the guidelines, Frank felt it was time to see what improvements could be made. Informal polls indicate some people want more detail, others want less. Kathy Hatcher says her crew likes the detail, but also likes to have a condensed version to take into the field. Tom Lenberg said he has heard some say there is too much detail, but he thinks that this level of detail is needed to get the job done right. His people copy the pages they use the most, laminate them, and take the pages with them. Frank said the MCOT training relies on the M54-44 as the primary training resource. Frank also reminded the group that the M54-44 is applied guidance that may be adjusted within the limits of the related standard if the reason is justified. The group agreed the more a person uses the guidelines, the easier it is to use. Mike F. pointed out that it has plans but it is not a pre-approved plan book, these are guidelines for creating plans. Kathy H. says she keeps a copy with her and uses it to educate utility crews. Frank reiterated that the primary focus of the M54-44 is for maintenance crews.

Federal Rule on Work Zones/Compliance and Implementation

Frank N. talked about eight key compliance and implementation items that need to be dealt with before the October 12, 2007 compliance date. They include the new Work Zone Policy document, the *Design Manual* Chapter 810, guidance document on implementation issues, *Construction Manual* and *Standard Specifications Manual* revisions, training, *Plans Preparation Manual* revisions, work zone performance measures development, and review of FHWA/WSDOT Stewardship Agreement and process review.