

The National Work Zone Safety Information Clearinghouse: 15 Years Successfully Serving the Industry



From left to right: Morris Oliver (FHWA), Brad Sant (ARTBA), Joe Toole (FHWA), Hong Yu and Dennis Christensen (TTI) accept the IRF Global Road Achievement Award presented to the Clearinghouse in January 2008.

The year 2012 marks the 15th anniversary of the contract signing that created the National Work Zone Safety Information Clearinghouse. Owned and operated by the ARTBA Transportation Development Foundation (ARTBA-TDF), many of its functions are maintained through contract with the Texas Transportation Institute (TTI) and supported financially by the Federal Highway Administration (FHWA).

Since 1998, the Clearinghouse has provided assistance to more than 1.2 million users from all 50 states, the District of Columbia and 30 countries around the world. Originally conceived primarily as a repository of knowledge of all facets of work zone safety for access by both private-sector and public-sector practitioners, it has grown and evolved significantly over the years, and is a valuable information tool for a wide range of people, including the general public. Through it all, the goal has remained the same: to be the pre-imminent resource of roadway work zone safety information nationally, and even worldwide.

The Early Years

When the concept for a Clearinghouse facility was initially conceived in the mid-1990's, utilization of the Internet and

the volume of information on it were still to be tapped; fax machines were heavily used, and cellular telephones—for those that had them—weighed a few pounds and were used primarily for calling and talking to someone. At the same time and more disconcerting for those in the transportation industry, work zone fatalities in the U.S. were rising due to the large influx of highway construction dollars—and thus number of work zones—authorized through the 1991 ISTEA and 1998 TEA-21 infrastructure investment laws.

The Clearinghouse was originally envisioned as a call center with “operators standing by” to help those with work zone safety questions and information needs. Fortunately, ARTBA and TTI staff correctly anticipated the impending shift in information technology. With FHWA’s concurrence, they altered course to design a website-based repository of multiple databases that could be searched by users without Clearinghouse staff intervention. Databases were developed and made searchable via the Internet on topics such as:

- Contact information of work zone safety “experts” across the U.S.;
- Crash data;
- Work zone-related laws;

- Current research and research results;
- State transportation agency safety practices and procedures;
- Innovative technology and products;
- Training resources and opportunities; and
- Public information outreach campaigns.

Still, many practitioners in those early days, unable to access the Internet, relied on direct communication with Clearinghouse staff via telephone or fax to obtain the desired information. Usage grew quickly as an integrated ARTBA communications and advertising campaign, led by ARTBA's Lisa McCluskey, was undertaken to make people aware of the existence and usefulness of the Clearinghouse. Several national and international work zone safety and traffic management conferences were held to further awareness and discussion of work zone safety issues and the availability of information to improve safety via the Clearinghouse. A four-color newsletter was published and mailed out widely to industry professionals to highlight key topics and new information that had recently become available.

Feedback from users validated the value and effectiveness of this resource, and the Clearinghouse received multiple awards from both the International Road Federation (IRF) and American Society of Association Executives (ASAE) for the important services being provided.

FHWA intended the Clearinghouse to become self-sufficient for funding after the third year of operation. Therefore, at the conclusion of direct federal support in 2000, ownership of the Clearinghouse was transferred to ARTBA-TDF. Both ARTBA and TTI committed some of their own funds to continue Clearinghouse operations, and several other organizations and associations made contributions.

Meanwhile, an American Association of State Highway and Transportation Officials (AASHTO) resolution encouraged annual voluntary contributions by the state DOTs. Although the contributions provided critical support for Clearinghouse maintenance, it soon became clear that the pace of technological change occurring during the 2000s would necessitate significant and regular upgrades of the Clearinghouse infrastructure and expansion of its capabilities to take advantage of those changes. Such changes were not going to be possible under the funding model that existed at that time. Congress agreed, and directed FHWA to expand its support of Clearinghouse operations under the 2005 SAFETEA-LU law. After conducting research of Clearinghouse users to better understand their needs, a major website redesign was initiated and a number of

new services were rolled out. The new and interactive website, www.workzonesafety.org, was launched in October 2007.

Today

Just as information technology in general has evolved dramatically from the late 1990's, the Clearinghouse has enhanced its operations and activities to take advantage of that technology. Users still have access to over 14,000 database entries that are periodically verified and updated by Clearinghouse staff, and a number of new features offer even more assistance to those seeking help with a work zone safety-related issue. For example, a Clearinghouse listserve is now operational that allows subscribers the opportunity to interact directly with each other via email, asking questions and offering experiences and opinions on a wide range of work zone safety issues. Over 1,300 users subscribe to and participate on the listserve, and options exist to limit the frequency and amount of information the listserve provides.

The Clearinghouse has also been designated as the repository of materials that have been developed under the FHWA Work Zone Safety Grant Program, which was also initiated under the SAFETEA-LU law. This will ensure that the products will be available to practitioners even after the grantees have completed their efforts. Guidance documents, informational brochures, and training materials are posted and available for download and use at www.workzonesafety.org/fhwa_wz_grant.



Dr. Gerry Ullman, TTI's senior research engineer.

The Clearinghouse has made further efforts to truly be a worldwide resource to practitioners as well. Under a grant provided by the National Institute of Occupational Safety and Health (NIOSH), the Clearinghouse now posts a number of work zone safety-related documents from the European Union, China, Japan, Saudi Arabia, Argentina, Chile, Spain, Mexico, Peru, Venezuela, Canada, and the Russian Federation. Material is also available in more than a half dozen languages.

In addition to the website enhancements, Clearinghouse staff members have bolstered efforts to package and disseminate information for practitioners, including the increased use of social media. The Clearinghouse has also hosted numerous webinars in recent years on topics such as high-visibility garments, the Roadway Safety+ Training program, accommodating pedestrians in work zones, changes in the 2009 MUTCD, speed management in work zones, and work zone performance measurement. These webinars have attracted thousands of industry professionals, providing further evidence of the reach and value of the facility's services. The webinars are recorded and posted on the website for continued access by practitioners. In recent years, focused "Power Workshop" sessions have been held in conjunction with other national conferences. These sessions have also been recorded and are available for viewing from the Clearinghouse website.

The Future

The fact that the Clearinghouse is much different and more

effective than the Clearinghouse of 1998 is a reflection of the ARTBA, TTI and FHWA commitment to innovation. The Clearinghouse will continue to evolve and grow as new technologies and other opportunities become available.

Already, plans are underway to incorporate web-based training technology into the Clearinghouse as part of the next round of Work Zone Safety Grant products under development. Tools to help practitioners better sort through and identify the most appropriate safety training and guidance needed for certain work zone types and job duties is also a future objective. Smartphone and smarttablet usage continues to increase in the workplace. Applications that can effectively support those technologies to facilitate real-time access to specific information elements that answer a specific question or concern are likely to be developed.

Although the extent and speed at which such changes may occur will rely, in part, on continued financial support for the facility. The Clearinghouse management and staff look forward to ensuring that the next 15 years are as productive and valuable to the industry as the past 15 years have been. To get your fill of the latest safety information, visit: **www.workzonesafety.org**.

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Chung Eng, workzone team leader, FHWA, presents a webinar for the Clearinghouse.



The Clearinghouse's mascot, Safety Sam advises motorists on work zone safety.