MAKING WORK ZONES WORK BETTER

Summer 2004

Publications

Work Zone Publications

- Compendium of Work Zone Research, Development, and Technology Transfer Projects (2002) – Database that provides users with valuable information on other work zone-related efforts that can support personnel in making informed choices about the allocation of funds for future research projects (CD-ROM format). (FHWA-OP-02-053)
- Dramatically Reducing Highway Construction Project Times: Suggestions for Research (1998) – Summary of issues and research needs associated with dramatically reducing highway construction project times and the potential for research to help achieve such reductions.
- Economic Analysis Primer (2003) Provides a foundation for understanding the role of economic analysis in highway decision making. (FHWA-IF-03-032)

• Fact Sheets

Snapshots of information on activities for improving mobility and safety in our nation's construction and maintenance of work zones, including lessons-learned, new products/initiatives, and best practices.

- o Fact Sheet 1 "Oregon's QuickFax Service" (July 2000, Publication No. FHWA-OP-00-022)
- o Fact Sheet 2 "Customer Driven Construction in Illinois" (July 2000, Publication No. FHWA-OP-00-023)
- o Fact Sheet 3 "Work Zone Safety Awareness Week" (July 2000, Publication No. FHWA-OP-00-024)
- o Fact Sheet 4 "Delaware's Survival Plan for the I-95 Shutdown" (July 2000, Publication No. FHWA-OP-00-025)
- o Fact Sheet 5 "Innovation During Bridge Rehabilitation Improves Mobility" (Winter/Spring 2001, Publication No. FHWA-OP-01-008)
- o Fact Sheet 6 "Work Zone Best Practices Guidebook (Winter/Spring 2001, Publication No. FHWA-OP-01-009)
- o Fact Sheet 7 "Compendium of Work Zone Research, Development and Technology Transfer" (Summer 2002, Publication No. FHWA-OP-02-054)
- o Fact Sheet 8 "Ohio Keeps Motorists and Road Rehabilitation Moving Forward" (Summer 2003, Publication No. FHWA-OP-03-190)
- Full Road Closure for Work Zone Operations A Cross-Cutting Study (2003) – The report provides a summary of how departments of transportation in Oregon, Kentucky, Michigan, Ohio, Washington, and Delaware



each used a full closure approach to conduct a road rehabilitation/reconstruction project. (FHWA-OP-04-009)

- Get In, Get Out, Stay Out! Proceedings of the Workshop on Pavement Renewal for Urban Freeways (1998)
- Informed Motorists, Fewer Crashes: Using Intelligent Transportation Systems in Work Zones (2001) – This brochure examines the safety and mobility benefits using intelligent transportation systems (ITS) in work zones. (FHWA-OP-01-043)
- Intelligent Transportation Systems in Work Zones: A Case Study. Dynamic Lane Merge System. Reducing Aggressive Driving and Optimizing Throughput at Work Zone Merges in Michigan (2004) - Describes the design, selection, implementation, and operation of the ITS work zone application used to facilitate traffic flow and enhance safety at merge points in Michigan work zones. Also documents benefits experienced and lessons learned. (FHWA-HOP-04-033)
- Intelligent Transportation Systems in Work Zones: A Case Study. Real-Time Work Zone Traffic Control System. Using an Automated Traffic Information System to Reduce Congestion and Improve Safety During Reconstruction of the I-55 Lake Springfield Bridge in Illinois (2004) - Describes the design, selection, implementation, and operation of the ITS work zone application used to facilitate traffic flow and enhance safety during the I-55 Lake Springfield Bridge reconstruction. Also documents benefits experienced and lessons learned. (FHWA-HOP-04-018)

- Intelligent Transportation Systems in Work Zones: A Case Study. Work Zone Traffic and Incident Management System. Keeping Traffic Moving During Reconstruction of the Big I, a Major Interstate-Interstate Exchange in Albuquerque (2004) – Documents the design, selection, implementation, and operation of the ITS work zone application used to facilitate traffic flow and incident management during the Big I reconstruction. Also documents benefits experienced and lessons learned. (FHWA-OP-04-072)
- Intelligent Transportation Systems in Work Zones: A Case Study. Work Zone Travel Time System. Reducing Congestion with the Use of a Traffic Management Contract Incentive During the Reconstruction of Arizona State Route 68 (2004) - Describes the design, selection, implementation, and operation of the ITS work zone application used to measure travel time through the work zone. The travel time measurements were used to assess the contractor's ability to minimize work zone delays during the reconstruction and expansion of Arizona SR68. Also documents benefits experienced and lessons learned. (FHWA-HOP-04-032)
- Intelligent Transportation Systems in Work Zones: A Cross-Cutting Study (2002) – Examination of realworld experiences with ITS in work zones from four locations as well as information on other work zone ITS technologies. (FHWA-OP-02-025)
- Life-Cycle Cost Analysis Primer (2002) Provides guidance on life-cycle cost analysis in pavement design. (FHWA-IF-02-047)
- Meeting the Customer's Needs for Mobility and Safety During Construction and Maintenance Operations Model Work Zone Traffic Management Program and Self Evaluation Guide (1998) – A tool to assist agencies in quantifying their benchmarking efforts against a model work zone traffic management program. (HPQ-98-1)
- Methods and Procedures to Reduce Motorist Delays in European Work Zones (2000) – Summary of findings from scan of how European countries manage traffic flow through temporary work zones. (FHWA-PL-00-001)

• Portable Changeable Message Sign (PCMS) Handbook – Presents basic guidelines for the use of PCMS. (FHWA-RD-03-066)

QuickZone

(*Public Roads*, July/August 2001, article) QuickZone is software that will estimate traveler delay due to work zones, and by doing so, it will provide a more complete and realistic view of the total construction costs.

• A QuickZone Tailor-Made for Maryland

(*Focus*, March 2001, article) QuickZone's open source code has allowed the University of Maryland, under contract with SHA, to customize the program to better meet the State's needs.

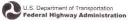
- Shorter Duration, Safer Work Zones, More Satisfied Travelers (2003) – Brochure on successful applications of full road closures in work zones. (FHWA-OP-03-086)
- A Snapshot of Summer 2001 Work Zone Activity Survey of nearly 800 work zones posted on 13 state road closure and construction web sites during a twoweek snapshot of the peak summer roadwork season in 2001. (EDL #13793)
- Strategic Work Zone Analysis Tools (*Public Roads*, November/December 2000, article) The SWAT program addresses work zone factors and stresses the importance of accounting for work zone influences when making transportation-improvement decisions.
- Traffic Control Handbook for Mobile Operations at Night (2003) – A synthesis of current practices for performing mobile highway operations at night. (FHWA-SA-03-026)
- Work Zone Best Practices Guidebook (2000) A resource designed to give state and local transportation agencies, construction contractors, transportation planners, trainers, and others with interest in work zone operations access to information and points of contact about current best practices for achieving work zone mobility and safety. (FHWA-OP-00-010)

Many of these publications are available online at

http://ops.fhwa.dot.gov/wz/resources/publications/publications.htm.

Hard copies may be requested by sending an email to workzonefeedback@fhwa.dot.gov or by contacting our office at: FHWA, Office of Transportation Operations (HOTO) 400 7th Street, SW Washington, DC 20590 or by calling (202) 366-1993.

21st Century Operations Using 21st Century Technologies



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