Innovation During Reconstruction Project Improves Customer Mobility

The Illinois Department of Transportation (IDOT) recently completed an innovative reconstruction project using methods that reduced construction time and minimized motorist delays. Typically, Illinois interstate projects are limited to 8 kilometers (5 miles) of construction per project. With 29 kilometers (18 miles) of heavily traveled interstate needing rehabilitation and safety upgrades, IDOT combined multiple projects into one continuous segment and considered the effect of construction on its customers. The combined project strategy limited construction-related delays to one summer instead of several. Through brochures and real-time information signs, motorists were advised of delays and alternate routes. These efforts greatly reduced the effect on businesses, local communities, and the 35,000 plus motorists using this stretch of I-57 each day.

Quality/Innovation Award to IDOT for Meeting the Customer’s Needs

According to the Federal Highway Administration’s (FHWA) Dan Mathis, “IDOT’s efforts in planning, designing, and constructing exceeded all previous large projects in reducing delays and inconvenience while improving safety.” As a result, IDOT District 9 and Resident Engineer Travis Emery received the FHWA Illinois Division first annual “Quality/Innovation Award,” presented during the 86th Annual Transportation and Highway Engineering Conference held at the University of Illinois on February 22-23, 2000.

Advances in Construction Management, Materials, and Contractor Cooperation

Huge by IDOT standards, the project scope and length involved over 136,000 metric tons (150,000 U.S. tons) of Superpave bituminous hot-mix and the seismic retrofitting and overlay of four bridges. Accelerated work schedules, a lane rental incentive/disincentive, and use of a real-time information network resulted in improved safety and reduced motorist delays. IDOT, in conjunction with contractors E.T. Simonds and Southern Illinois Asphalt, completed construction of this major truck route in the short time frame of just 4 months, more than 2 months ahead of schedule.
Strategies to Improve Customer Service

Mathis said, “This unique project serves as a prototype of innovation in reducing impacts to motorists and local communities.” The 1999 showcase project incorporated several new ideas and features not previously used in Illinois on resurfacing projects. The project innovations included:

- Publication and circulation of a “Traveler’s Guide Brochure”
- Providing “real-time” information to motorists through use of portable changeable message boards
- Weekly informal partnering meetings held between IDOT and all contractors
- Moving lane closures/tapers more often to reduce the length of lane closures
- Contractor sponsored road reports
- Coordinated planning and use of lane closures by multiple contractors to minimize lane closures and construction time
- Lane rental specification (incentive/disincentive of $14,000 per lane closure per day)
- Free flow placement of traffic control devices
- Utilization of fast setting patch mixes to reduce construction time.

Mathis said the I-57 project was an all around success. IDOT’s contract incentives and innovative operations reduced the total project time from an estimated 3 to 4 construction seasons to just 4 months. The public benefited from the greatly reduced delay times and IDOT’s commitment to minimize the impact of highway construction to motorists and the local community.

To learn more, contact:
Travis Emery
IDOT Resident Engineer
Illinois Department of Transportation
State Transportation Building
P.O. Box 100
Carbondale, IL 62903
Phone: 618-549-2171/618-453-3008
E-mail: emeryjt@nt.dot.state.il.us

Daniel Mathis
FHWA Assistant Division Administrator
Federal Highway Administration
3250 Executive Park Drive
Springfield, IL 62703
Phone: 217-492-4641
E-mail: daniel.mathis@fhwa.dot.gov

To share your Best Practices, contact:
Phillip Ditzler
Federal Highway Administration
400 Seventh Street, S.W.
Washington, DC 20590
Phone: 202-366-0855
E-mail: Phillip.Ditzler@fhwa.dot.gov