

Fostering Innovation in Kentucky: Success through People and Partnerships

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An Innovation Partnership with States

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KENTUCKY TRANSPORTATION CABINET



KYTC Mission

To provide a safe, efficient, environmentally sound and fiscally responsible transportation system that delivers economic opportunity and enhances the quality of life in Kentucky.

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Encouraged and Enabled at All Levels




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STIC
State Transportation Innovation Councils

SHRP2 SOLUTIONS
TOOLS FOR THE ROAD AHEAD

EDC

National Center for Asphalt Technology
NCAT
AUBURN UNIVERSITY

KTIC

AASHTO

TRB
TRANSPORTATION RESEARCH BOARD

KAHC

Fayette Urban County Government
Lexington Kentucky
1775

Louisville
1778
Jefferson County

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ACEC
American Council of Engineering Companies of Kentucky

TAP
Local & Tribal Technical Assistance Program

U.S. Department of Transportation
Federal Highway Administration

UK
University of Kentucky
College of Engineering

University of Louisville
J.B. Speed School of Engineering

waze
OUTSMARTING TRAFFIC, TOGETHER



KYTC UAS Program – Department of Aviation


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KYTC Utilities and Rail Program – Department of Highways

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Managing Utilities in Kentucky
SHRP2 CASE STUDY

SHRP2 SOLUTIONS
STRATEGIC HIGHWAY RESEARCH PROGRAM

Managing Utility Conflicts in Kentucky through the SHRP2 Solution: *Identifying and Managing Utility Conflicts* (R15B)

Photos courtesy: District DOT, FHWA, FEMA

Challenges in addressing utility conflicts

Utility relocations are a significant investment for departments of transportation (DOTs) and utility companies. This investment in Kentucky can easily total in the tens of millions annually, so minimizing the cost holds intrinsic value to the DOT. As a result, the Kentucky Transportation Cabinet (KYTC) is working to streamline and create standard procedures for its designers and utility experts, while minimizing utility conflicts.

Although the KYTC has worked effectively with its utility companies in the past, the second Strategic Highway Research Program (SHRP2) opened the door to an opportunity to improve this coordination. By incorporating new methodologies developed through *Identifying and Managing Utility Conflicts* (see sidebar), the agency is enhancing and upgrading its current tracking database while offering training to all potential users.

Under KYTC's prior utility program, roadway projects were often designed to a significant degree before utility companies were actively involved. Consequently, utility relocations could not be completed prior to road construction. In some cases, this situation set up serious consequences, such as increasing the potential for utility strikes. These strikes can delay the roadwork and traffic, be a safety concern, and result in a loss of utility services. The possibility of utility strikes and longer construction and design time frames can also lead to added costs.

No clear standards or policies for utility conflict identification existed to help designers communicate and mitigate utility conflicts during the design process. In addition, with 12 separate KYTC Districts, the process of identifying and managing utility locations was inconsistent.

UTILITIES & RAILS
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Kentucky's implementation activities have led to the development of new, "smarter" software that may be applicable to other states.

KYTC developed a new vision for executing its utility program based on initial SHRP2 research findings conducted by the Transportation Research Board (TRB). Working with its information technology (IT) staff, analysts, and central and District office utility branches, they designed

What is the SHRP2 Solution, *Identifying and Managing Utility Conflicts*?

Identifying and Managing Utility Conflicts (R15B) was developed through the second Strategic Highway Research Program (SHRP2) to help public agencies, utility companies, and transportation professionals improve the overall process of minimizing utility relocations on highway improvement projects.
By using the tools and methodologies included in the product, these agencies can identify, resolve, and manage utility conflicts, which will ultimately expedite the project development process.
The materials included are:

- Utility Conflict Data Model and Database (UCM)
- Utility Conflict Matrix (UCM) Training Course

Seven state departments of transportation are now implementing *Utility Conflicts* through the FHWA/AASHTO Implementation Assistance Program. This case study documents activities underway in the Kentucky Transportation Cabinet to address utility conflict management during roadway project process.

KURTS screen shot:

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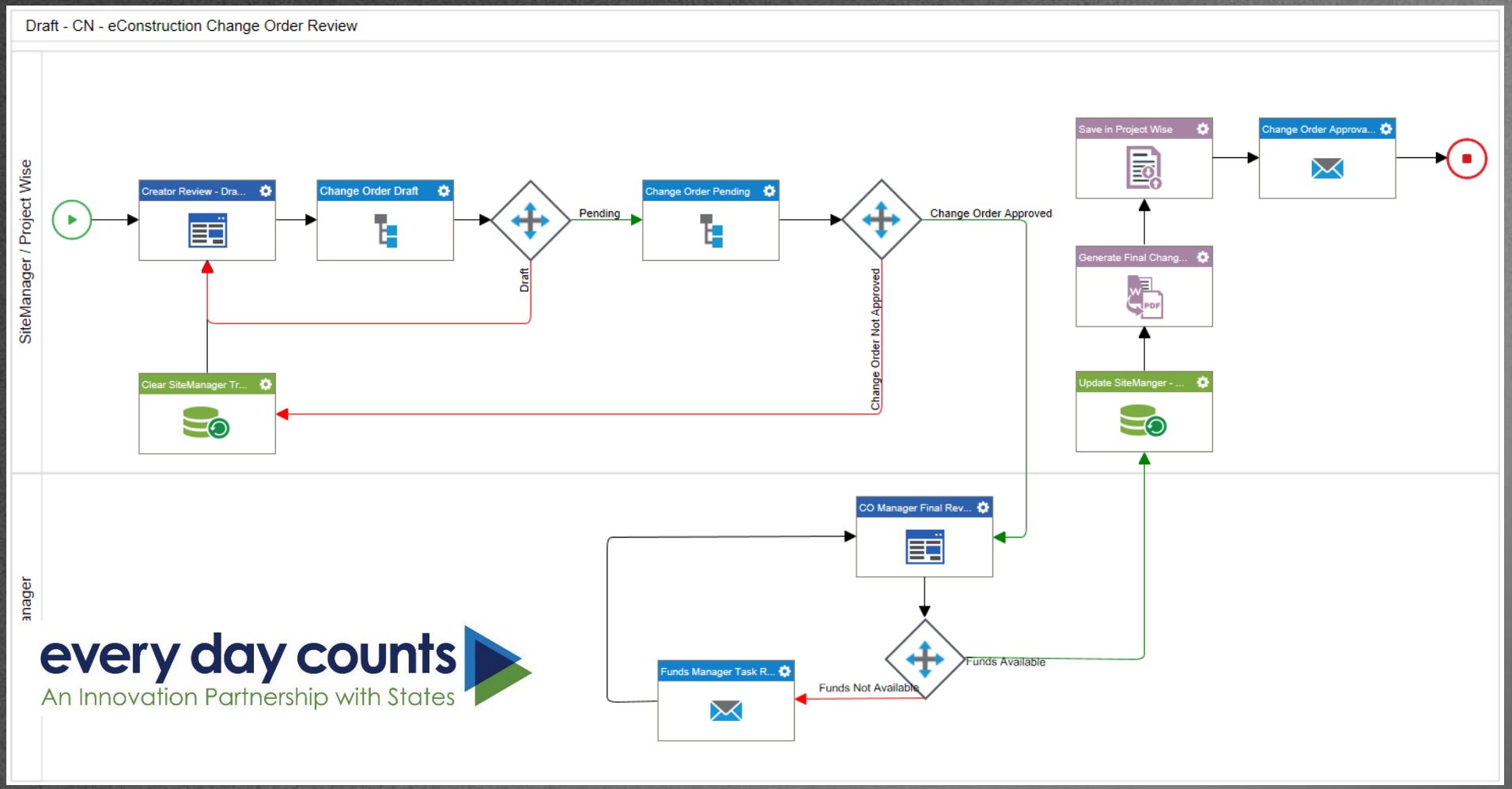
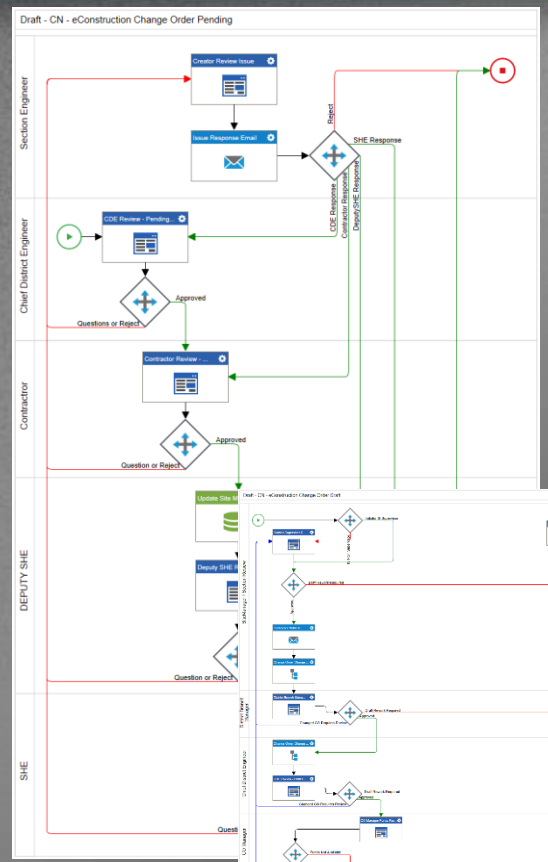
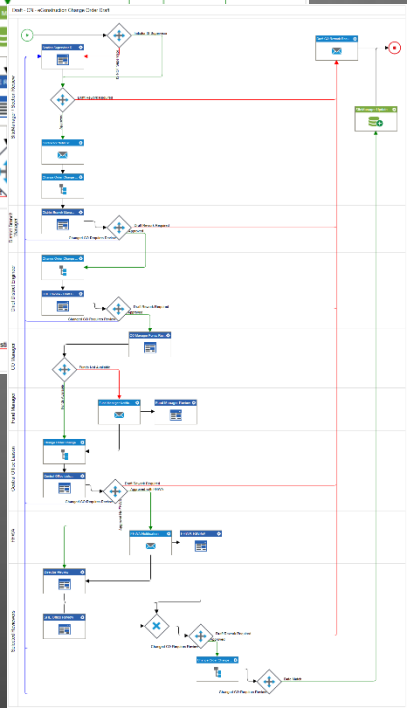
e-Construction









Questions?

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