

## **KM At FHWA: The Benefits of Sharing Information**

By Mike Burk

Your organization has plenty of information about a specific subject. But where is it? How do you find it? Whom do you call? How can you be sure, even if you identify one or two sources of expertise, that you've done more than scratch the surface of the available information? That's the kind of problem faced by thousands of organizations thousands of times a day and it's the reason for pursuing Knowledge Management.

The Federal Highway Administration, an agency of the Department of Transportation, is dedicated to creating the best transportation system in the world through proactive leadership, innovation, and excellence in service. Perhaps the best definition of Knowledge Management for FHWA is "the process of capturing and sharing a community's collective expertise to fulfill its mission." KM takes advantage of an organization's most valuable asset the collective expertise of its employees and partners. The goal is to capture not just the explicit (or written) information but the tacit knowledge in one's head. We recognize this is happening through a cycle that has four basic elements: find/create, organize, share, and use/reuse.

FHWA's new matrix organization is significantly flatter and less hierarchical, as well as more geographically dispersed. Knowledge Management, with its ability to share information, experiences, and ideas, speed technology transfer, and locate expertise on a given issue will greatly facilitate the transformation of FHWA into an organization primed to meet its business challenges.

### **A Collaborative Culture**

The transportation community has always valued the sharing of knowledge. Cooperation among Federal agencies, states, localities, academia, and the private sector has resulted in some of the most notable advances in transportation technology. Knowledge Management offers the opportunity to improve the efficiency, effectiveness, and timeliness of this sharing process and to build a collaborative, innovative, and knowledge-sharing culture that is always engaged in the activity of learning. In this way, competency-building will be a natural evolution within participating organizations.

A central principle of KM is that organizations can best foster the capture and exchange of knowledge through communities of practice a virtual community connected by interest and expertise in a specific discipline. In addition to contributing research papers, technical briefings, product evaluations, and other reports, the members of the community make an effort to share experiences, locate people with expertise, identify good practices, and pinpoint gaps in knowledge in their field. Because it is electronic, accessible anytime, and available to many, improved customer service is a natural outcome.

Fostering and supporting these communities with improved tools is the first step in creating a knowledge network. As they participate in communities of practice, customers become both users and producers of information. A knowledge network facilitates and accelerates this process. For an example, visit FHWA's Web site on rumble strips at <http://safety.fhwa.dot.gov>, "a prototype of how members of an electronic community of practice can share information, resolve technical issues, and publish results," according to the website.

The website is a collaborative effort of Jim Growney, the Knowledge Manager for FHWA's New York Division, FHWA headquarters' marketing specialist Ann Walls, and contractor Avalon Integrated Services Corporation. The site is divided into sections labeled "Knowledge," "Resources," and "Communication" a common framework to depict what we know about a subject, what resources are available, and who is the contact for more information.

The knowledge area includes reports from states on the effectiveness of rumble strips, descriptions of

the types of rumble strips and how they are installed. The resources section features research papers, state rumble strip policies and specifications, and video clips; a directory of rumble strip providers; and a page of links to other sites featuring rumble strip information. The communication section contains key elements of community-of-practice interaction: an "ask the expert" page, a mailing list, and a discussion group.

## **Implementing Knowledge Management**

Successful KM programs work with organizational cultures and behaviors not against them. That's one reason Mark Youman of American Management Systems, a firm helping FHWA in its early Knowledge Management efforts, prefers the term "knowledge-sharing."

"I try to emphasize that this is not an end in itself, but a set of tools and practices that can be used to further the organization's goals. Knowledge sharing is not a new goal for FHWA, but a way the agency can achieve the goals it has laid out in its corporate management strategy," Youman said.

There's no question that human nature and certain aspects of the corporate culture of organizations, including Federal Government agencies, can interfere with the smooth operation of a Knowledge Management program. Some individuals are proprietary about the knowledge they possess, believing that their advancement and status depend on their demonstration of unique or exceptional knowledge. Some managers fear a loss of control if their departments' knowledge is made available to others. Some staff members feel, at least initially, that they are required to make an extra effort to share knowledge without deriving any benefit from the process. And some supervisors are uncomfortable with the idea of staff members spending time on knowledge-sharing rather than completing traditional tasks.

To a certain extent, these problems are addressed through open communication about Knowledge Management and its benefits. Nevertheless, there's also a need to take a new look at how people achieve recognition and rewards in organizations that practice KM. Often, this cultural change occurs as a direct result of the process of implementing Knowledge Management.

What's most exciting about our effort is that it puts FHWA in a position to be a major beneficiary of "knowledge boom." Organizations of all kinds in all sectors of the economy are waking up to the fact that what they know more accurately, what individuals within these organizations know is not only of immense value, but it is crucial to their success. Knowledge Management enables us to raise the level of expertise throughout the community to the mutual benefit of all participants.

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