Successes in Stewardship

http://www.environment.fhwa.dot.gov/strmlng/es4newsltrs.asp

January 2009

Meeting Environmental Requirements After a Bridge Collapse

Two months after the August 1, 2007 collapse of Minnesota's Interstate 35 West (I-35W) Bridge, Minnesota's Department of Transportation (MnDOT) entered into a contract for a new bridge design and construction. The startling speed of the environmental review process and contract decision demonstrated that, in emergencies, the timeframe can be reduced dramatically, from several years to several months, without compromising environmental standards or safety. MnDOT held the reconstruction project to the same standards required for any transportation project of similar scope and scale.



The new I-35W Bridge (drawing courtesy of MnDOT).

ALT TEXT Drawing of the new I-35W bridge

In the wake of the Minnesota bridge collapse and the MnDOT response, the Federal Highway Administration (FHWA) produced a report entitled "Meeting Environmental Requirements After a Bridge Collapse." The report is now available on the <u>FHWA Environmental Review Toolkit website</u>.

FHWA Report, "Meeting Environmental Requirements After a Bridge Collapse"

The report is intended to help transportation and environmental professionals expedite the environmental review process in the event of a bridge collapse or similar emergency. Since 2002 in the United States, five bridges have collapsed:

The New I-35W St. Anthony's Falls Bridge

The new 1,219-foot-long bridge was constructed with use of the cantilever method. Construction included placing 120 precast segments from each side of the piers, with the segments meeting in the middle. Since the amount of time spent working in the river is not significant, the cantilever method helps to protect water quality, making it an environmentally sensitive solution.

Construction began on October 15, 2007, and the new bridge opened at 5 a.m. on Thursday, September 18, 2008, three months ahead of schedule.

For more information, visit MnDOT's website.

- I-35W Bridge, over the Mississippi River in Minneapolis, Minnesota; collapsed in August 2007, with cause not yet determined.
- I-10 Bridge, over Escambia Bay in Florida; destroyed by Hurricane Ivan in September 2004.
- I-40 Bridge, over the Arkansas River near Webbers Falls, Oklahoma; partially collapsed after being struck by a barge in May 2002.
- US-90 Bridge, over Biloxi Bay in Mississippi; destroyed by Hurricane Katrina in August 2005.
- US-90 Bridge, over St. Louis Bay in Mississippi; destroyed by Hurricane Katrina in August 2005.

In preparing the report, FHWA and the U.S. Department of Transportation's Volpe National Transportation Systems Center (Volpe Center) spoke with FHWA Division Office staff members and with representatives from Federal, State, and local planning, transportation, and resource agencies. Through these interviews, FHWA and the Volpe Center developed case studies for each of the collapsed bridges and used them to develop the lessons in the report.

Lessons Learned About Expediting the Environmental Review Process

The report "Meeting Environmental Requirements After a Bridge Collapse" describes how in the cases reviewed, the key elements of the environmental review process were completed relatively quickly. The case studies illustrate that, when emergencies occur, they create a sense of urgency on the part of all stakeholders that leads to a consensus on the prioritization of the project. The report identifies several effective practices that allowed sponsor agencies to expedite the environmental review process. These practices include:

- Implementing processes and agreements that lead to regular dialogue among State and Federal transportation and resource agencies, and establishing strong working relationships before
 Table 1 Major Causes of Delay
- Limiting the scope of projects to reduce the potential for new environmental impacts or disagreements.

emergencies occur.

 Using contracting mechanisms that offer opportunities to respond quickly to emergency situations.

Major Causes of Delay	Non-Emergency	Emergency
Lack of funding or low priority	V	
Local controversy	V	
Stakeholder and/or local opposition	N	
Insufficient political support	V	
Project complexity	V	V
Poor consultant work	N	V
Environmental review	N	V

Major causes of delay to the NEPA process (table excerpted from the report).

- Maintaining up-to-date inventories of historical, cultural, and natural resources to quickly identify the potential impacts of proposed designs.
- Establishing formal and informal emergency procedures to help identify clear roles and responsibilities for expediting the environmental review process.
- Networking with peers from other States to see how they have handled similar situations.

FHWA has high expectations that the report will be a useful resource for transportation and environmental professionals, not only in responding to a bridge collapse or similar emergency but also in outlining practices that may be effective during the standard environmental review process.

Safer Bridges Nationwide: The Oberstar Bridge Bill

On July 24, 2008, the U.S. House of Representatives passed the National Highway Bridge Reconstruction and Inspection Act of 2008 (H.R. 3999), or the Oberstar Bridge Bill, sponsored by Rep. James L. Oberstar (D-Minnesota). The bill contains provisions that, when implemented, will improve the safety of U.S. highway bridges, create stronger bridge-inspection standards, and authorize an additional \$1 billion in FY 2009 to rebuild structurally deficient bridges. Passage of this bill may be attributed directly to the collapse of the I-35W Bridge in Minneapolis, which brought national attention to the state of the nation's bridges and the urgent need for their repair.

For more information on H.R. 3999, refer to this legislative summary.

Contact Information

Ruth Rentch

Project Development Specialist Federal Highway Administration Office of Project Development & Environmental Review 1200 New Jersey Avenue, SE Washington, DC 20590 202-366-2034 <u>Ruth.Rentch@dot.gov</u>

Cassandra Allwell

Community Planner, PMP USDOT Volpe Center 55 Broadway, Kendall Square Cambridge, MA 02142 617-494-3997 Cassandra.Allwell@dot.gov

Look What's New!

- On December 15th, 2008 the notice of request for public comment on the Surface Transportation Project Delivery Pilot Program; Second Caltrans Audit Report appeared in the <u>Federal Register</u>. The public comment period will extend until January 14, 2009.
- This month several exciting updates were made to the <u>FHWA Environmental</u> <u>Review Toolkit</u>:
 - Visit the updated <u>PEL Publications</u> page, which is now organized into categories such as practical applications, data and analysis, Eco-Logical, freight, climate change, PEL benefits, and Federal guidance.
 - Read new information about the <u>Eco-Logical Grant Program</u>, including updates about each of the grant projects.

Explore the Environmental Competency Building Competency Navigator

l

Successes in Stewardship is a Federal Highway Administration newsletter highlighting current environmental streamlining and stewardship practices from around the country. To subscribe, visit <u>http://environment.fhwa.dot.gov/sis_registration/Register.aspx</u> or call 617-494-3259.