Electronic Freight Management

The economy is growing and with it the international trade that helps fuel our standard of living. International trade accounted for almost a quarter of our GDP in 2004 and is predicted to continue to grow. The downside of this growth is that increases in the volume of trade are stressing our transportation network and that we simply cannot add enough new physical capacity to relieve that stress. In order to attain an efficient and reliable transportation network, we need to think past physical infrastructure to system operations and technological innovations.

The Federal Highway Administration (FHWA) is working with its private sector partners to identify operational opportunities to enhance freight movement. Improving information exchange is one area that could reap large rewards. FHWA's **Electronic Freight Management (EFM)** initiative targets this area by seeking to improve information exchange between modes and partners by enabling the real-time electronic transfer of shipment information between supply chain partners and between supply chain partners and government agencies.

EFM builds on a previous FHWA-industry sponsored project, called the Electronic Supply Chain Manifest, that tested and evaluated the electronic information transfer protocols and technology and biometric identification cards in the domestic air cargo industry. That project, completed in 2002, demonstrated a time and labor savings of $16.20 per non-express air-freight shipment. This demonstration helped generate industry enthusiasm for the new EFM initiative.

This high-priority freight initiative involves partnering with industry to conduct operational tests in international air-freight movement that will evaluate the costs and benefits of EFM and identify trigger points that will prompt industry to implement the information transfer procedures. The Limited Brands company, and its supply chain partners in Asia and the United States, are involved in the EFM initiative. These supply chain partners include a manufacturer, a customs broker, two freight forwarders, two air carriers, and a logistics trucking company. Other industry partners involved in the initiative are the American Trucking Associations, the U.S. Air Transport Association, and the International Air Transport Association. Other government...
Air cargo is a fast-growing sector of the freight industry. Partners include the Transportation Security Agency and Customs and Border Protection.

Another component of the EFM initiative involves working with national and international standards organizations so that data exchanged between trading partners and government agencies are harmonized. This step will ensure the project remains in step with Customs’ next-generation database, the Automated Commercial Environment, and its multimodal interface, the International Trade Data System.

The FHWA’s Office of Freight Management and Operations, in coordination with the Joint Program Office, manages the EFM initiative. The general design for the deployment test is completed, and detailed design is now underway. Deployment testing is scheduled to run from March 2006 to March 2007. An independent evaluation will be done in parallel to the test and will be completed by Summer 2007. Pending the results of this test, supply chains involving other modes (e.g., truck-rail, truck-ship) could be evaluated and tested.

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