AASHTO TIG and GCEDMS

A long standing objective of AASHTO is to assist States in acquiring and developing new technology or engineering procedures. As a result, AASHTO TIG has identified the implementation of a Grade "Highway-Rail" Crossing Electronic Document Management System (GCEDMS) as a high-payoff, ready-to-use, innovative technology that with its use can be highly beneficial to other states and their industry partners.

The TIG executive committee has formed a Lead State Team for GCEDMS. The Team members - with support from AASHTO staff - include the Federal Railroad Administration (FRA), Illinois, North Carolina, Pennsylvania, and Virginia.

Need More Information?

For more information on AASHTO-TIG visit
www.aashtotig.org

In addition the AASHTO-TIG website contains a GCEDMS webpage filled with additional detailed information and available resources, including a GCEDMS Library.
http://tig.transportation.org/Pages/GradeCrossingEl ectronicDocumentManagementSystem.aspx

LEAD STATES TEAM

TIG's Lead State Team includes representatives with GCEDMS and crossing inventory experience in their states and the FRA who can assist you with your current system or help you in evaluating the use of this system technology in your State or organization. Let our knowledgeable team members provide you with some insight, guidance, and expertise related to the implementation of GCEDMS. Team members can provide presentations at seminars / conferences, and educate others through webinars.

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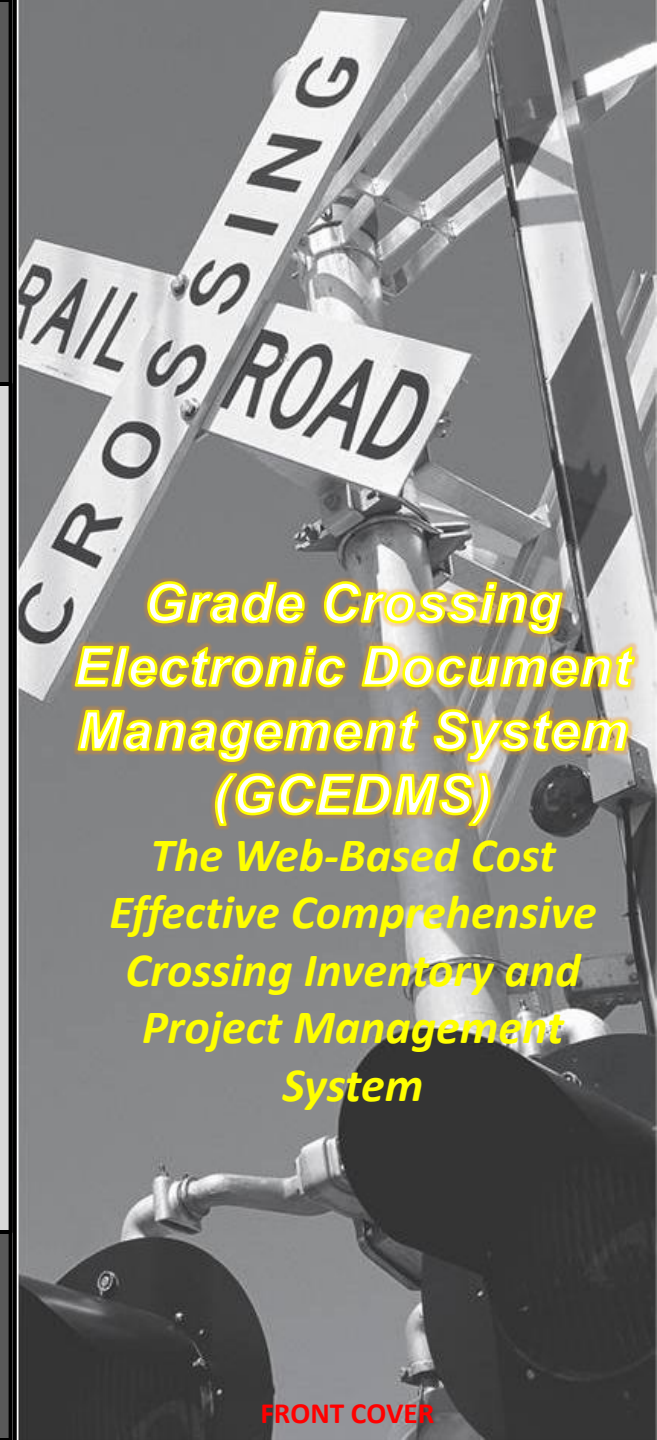North Carolina DOT
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Grade Crossing Electronic Document Management System (GCEDMS)

The Web-Based Cost Effective Comprehensive Crossing Inventory and Project Management System

What is GCEDMS?

GCEDMS is a comprehensive highway-rail grade crossing information system for day-to-day highway-rail crossing inventory data collection and management as specified on the US DOT Inventory form. The system provides electronic updates to the National file, facilitating railroad-related internal communications, electronic document storage, and expedited external (inter-agency) communications between the state DOT, Public Utility Commission, Railroad companies, and the Federal Railroad Administration (FRA).

How does it Work?

GCEDMS is typically developed with the highway-rail crossing inventory element as the core "module". Additional data "modules" can be added to handle development of proposed improvement programs, collision tracking, crossing inspections, GIS mapping. GCEDMS can be internet or intranet based and communicate electronically with our partners in the grade crossing arena (ex. Railroads, PUC, FRA, FHWA).

What else can it Do?

GCEDMS can incorporate photographs, scanned images of documents, and other "non-data" pieces of information. GCEDMS can be linked into other State DOT systems for the sharing of data.
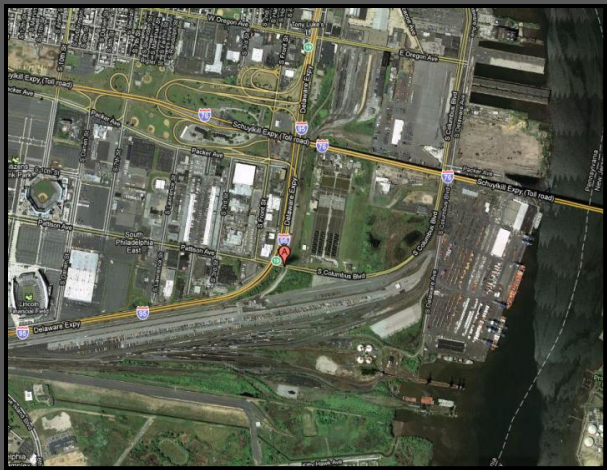
System Goals:

In addition to supporting highway-rail crossing inventory updates to the National file, GCEDMS can optimize the limited resources available to improve public safety at highway-rail crossings. Each year across the nation hundreds of people are either killed or injured at highway-rail crossings. The use of highway-rail crossing related data and document management system can assist in reducing the number of needless tragedies.

Some of the Benefits:

1. Public Safety and Operational Benefits
2. Facilitated Compliance with New Federal Inventory Requirements
3. Improved National Inventory Information.
4. Improved Internal Management Methods and Tools
5. Cost Effectiveness Improvement

Why is this Technology needed?

1. **Inventory Requirements:**
   - Updates to the National file
   - Accurate inventory - Support for ENS
   - Essential to the FRA Web Accident Prediction System (WBAPS).

2. **National Inventory:**
   - Consistent, current and accurate information
   - Maintain and upload data to the National file
   - Minimize system data discrepancies
   - Reconciliation of State data to National file
   - Simplifies how updates are stored / transferred

3. **Enhancements/Benefits**
   - Lat/Long linkage to GIS mapping system
   - Photographs of crossings
   - Report generator
   - Links to other references (MUTCD, FRA, etc.)
   - Improved Public Safety
   - Add enhancements

4. **Management Tools**
   - Efficient and Effective Project Management
   - Project funding tracking
   - Project prioritization and selection process
   - Transfer and storage of electronic documentation

5. **Cost Effectiveness**
   - Reduce travel time and legal inquiries
   - Reduce paper / reproduction – Going Greener
   - Use by external partners (Railroads, FHWA, etc.)

Crossing Information		Pictures
DOT/AAR Number:	294275U	
Railroad:	Union Pacific Railroad Company	
Milepost:	173.00	
ICC Line Code:	SSWNAO	
Crossing Type:	Public (At Grade) Crossing	
Type of Private Crossing:	Not private	
County Name:	Sangamon	
City Name:	WILLIAMSVILLE	
In Or Near:	In	
Street Name:	MAIN ST	
Highway Number:	CH2	
Railroad Division:	ST.LOUIS	
Railroad Subdivision:	SPRINGFIELD SU	
Number of Main Tracks:	1	
Number of Other Tracks:	0	
Description of Other Tracks:		
Crossing Surface Type:	Concrete	
Average Number of Daily Trains:	10	
Train Speed - Timetable:	79	
Train Speed - Minimum Likely:	5	
Train Speed - Maximum Likely:	79	
Maximum Warning Devices:	Four Quad Gates	