

## Oklahoma Highway-Rail Crossing Crash Data

The automobile collisions from across Oklahoma are reported by the Oklahoma Highway Patrol, city police, county sheriffs, university police, or game wardens. They are forwarded to the Oklahoma Department of Public Safety (DPS), where they are either directly stored electronically or hand-coded, scanned, and stored electronically into a master database. These electronic collision data are transferred weekly to the master collision file at ODOT. The Collision Analysis and Safety Section conducts a review on each collision adding the correct location codes to match the ODOT highway, city street, or county road location files. Collisions involving highway-rail grade crossings are cross referenced to the data in the highway-rail crossing inventory for the respective AAR-DOT Crossing Number<sup>2</sup> to help ensure that the appropriate codes match the crossing inventory data. In the event discrepancies are identified, any data in question are reviewed by Rail Programs Division personnel to populate any missing data fields or resolve any conflicting data elements.

The transfer of data from DPS to ODOT and to the University of Oklahoma for final entry into the master collision file normally occurs on Friday of the same week or Monday of the following week when it is submitted by DPS. After all the collision data have been coded for each week, the location codes are transferred back into the ODOT master collision files. A copy of any collisions loaded or corrected each week is electronically transmitted to a computer server maintained on the Oklahoma University campus, where the revised data elements are merged into the master collision file database. These data are accessible through a web-based program (Safe-T) where the user is allowed to select from a variety of reporting criteria to generate reports containing desired information. Safe-T provides access to the collision data for the Oklahoma Highway Patrol, city police, city planners, and other entities having a need for collision information, including engineers and safety personnel at ODOT.

## ODOT Graphical Resource Intranet Portal Database

The Graphical Resource Intranet Portal (GRIP) database is a web application that allows users to query, overlay, map, and report on many of ODOT's business data layers. Highway-rail crossing data were one of the first GPS location databases to be collected and inventoried statewide. Consequently, these data were identified as a business layer and utilized in the initial population and further development of the ODOT GRIP Database providing recently updated baseline data that could assist in the development of data utilization and reporting methods for similar roadway and bridge data. Railroad crossing, county bridge, and hazard elimination projects eligible for federal funding currently have specific inventory requirements tied directly to the data requirements deemed necessary for the allocation of safety funding under current federal legislative guidelines. The data available from GRIP is accessed utilizing workflows developed to display location, theme, attribute, historical, mileage, inspection, and mapping data for specific business layers identified to be useful for ODOT program and project management activities. Following are basic workflows for building maps or reports:

<sup>2</sup> A national grade crossing numbering system to assist in the collection and maintenance of information regarding crossings. The system is jointly organized by the FRA and the Association of American Railroads.