Release Notes for 2009 CPM Beta Release (November 2009 update)

Summary of Changes

Improvements/changes were made to the IHSDM software (from the 2009 CPM Beta Release – June 30, 2009, version 5.3.0 to the 2009 CPM Beta Release – November 2009 update, version 5.3.1) in the following areas:

- Highway Data
- Output/Reporting
- Defect Correction
Highway Data

Changes related to highway data include:

Highway Editor

Several new features have been added to make data entry easier:

- **Data Generators**
  - This feature provides a way to generate complete data elements from summary data. The generators are now available for the Cross Slope, Vertical Alignment and Shoulder Section elements. Clicking on the “Generate” button below the relevant data table brings up a separate interface (dialog) that assists the user in generating the required data, given limited data:
    - The Vertical Alignment generate option provides a method for generating a set of Vertical Point of Intersection (VPI) elements from a set of Vertical Tangent elements
    - The Cross Slope generate option provides a method for generating a set of cross-slope elements from horizontal curve full superelevation values
    - The Shoulder Section generate option provides a method for generating a set of shoulder section elements based on a user-specified differential between the roadway cross-slope and the shoulder cross-slope (i.e., the program subtracts the user-specified slope differential from the roadway cross-slope to calculate the shoulder slope), shoulder width, material and priority

- **Multiple Element Entry**
  - The “Add” button on the data element tables now brings up a data entry dialog which makes it easier to enter multiple data elements (rows).

- **Data Entry Shortcuts**
  - The character < can now be used to represent the station at the beginning of the horizontal alignment or of the section being edited, rather than having to enter the numerical station value. Likewise, the character > can be used to represent the station at the end of the horizontal alignment or of the section being edited.

Other changes to the Highway Editor include:

- Added a new data element for “Whole-Project” Crash Data:
  - Options for entering Crash Data are now “Site-Specific” (i.e., the station location of each crash is specified) or “Whole-Project” (i.e., only the number of crashes that occurred within the project bounds must be input, without regard to station location). Use of site-specific data is recommended, if available.

- Added additional data error and warning checks
- Added data range warnings

Highway Viewer

- Upgraded the Highway Viewer to support multi-lanes, medians, driveways, and on-street parking
- Added new data elements to the highway viewer attributes
Output/Reporting

Improvements to output/reporting include:

- Implemented document links in PDF versions of Evaluation Reports
Defect Correction

Defects corrected include:

- Fix to station equation support in LandXML files
- Fixed defects in Workflow Wizard, including New Highway option
- Fixed defects in Project Un-Archive operation
- Fixed error in output report for multi-section highways
- Improved text and annotation in Administration Tool for CPM data
- Fixed defect in superelevation detection
- Fixed AMF4r (Superelevation) calculation defect in rural two-lane crash prediction model
- Fixed AMF2i/AMF3i (Intersection Left-Turn and Right Turn Lanes) defects in rural two-lane crash prediction model
- Fixed defect in Highway Version
- Fixed cell editing in tables