

Integrating Bridge Data into dTIMS for the City and County of Denver, CO

Client
City and County of Denver, CO

Start Date
2010

Deighton Contact
Jeff Zavitski
Director of Implementation Services
jeff.zavitski@deighton.com
905.665.6605

Client Reference
Pat Kennedy
Engineering Supervisor
City and County of Denver
william.kennedy@denvergov.org

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Bridge Management

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Since 1997, the City and County of Denver (CCD) has been effectively using the Deighton dTIMS Asset Management System for pavement management, and have achieved outstanding results from the use of dTIMS. In 2009, CCD purchased an additional dTIMS user license for use in the management of their bridge infrastructure.

dTIMS would be used to generate the element level strategies, in addition to optimization and coordination of asset programs. PONTIS would be used primarily to store CCD bridge data.

During the initial configuration and loading of the bridge data into dTIMS, Deighton worked with CCD and LONCO to develop several GIS-based interfaces into the bridge data managed by dTIMS so that the information could be easily accessed.

This project included the following tasks:

- **Heterogeneous Data Services Connection to Oracle** – This connection was implemented to link from the existing dTIMS bridge management database to the PONTIS database. This allowed for retrieval of the latest condition and inspection data on a regular basis.
- **dTIMS Configuration** - Changes and updates to the dTIMS database were made as a result of the ODBC connectivity and heterogeneous data services connection to Oracle. Database updates included:
 - Analysis Variables
 - Analysis Expressions
 - Deterioration Models
 - Treatments
 - Decision Trees
 - Treatment Resets
 - Analysis Sets

- **Testing and Delivery** - Analysis results were tested repeatedly to ensure the results were consistent with expectations. Changes and refinements were performed as necessary during runs on both selected test sets and on the entire network. Final step was on-site delivery, installation and presentation of the initial analysis configuration.

Incorporating the bridge management analysis in dTIMS offers CCD more functionality and more flexibility than is currently available within the PONTIS environment. Using dTIMS for bridge management allows CCD to leverage the current licenses already owned by CCD, thereby maximizing the return on investment in software.

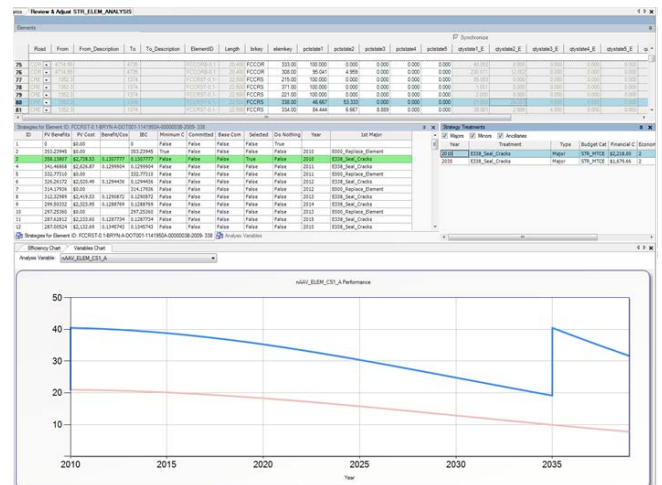


Figure 1: Bridge Analysis Results – Element Level