

14th Street Bridge Shown in Time Lapse

A major headache for Midtown commuters came to an end Thursday afternoon when the 14th Street bridge reopened for traffic. This project, however, has provided Dr. Jochen Teizer, assistant professor in the School of Civil and Environmental Engineering, and his graduate students with extensive educational value. Specializing in engineering and management in construction and transportation, Dr. Teizer heads the Real-time Automated Project Information and Decision Systems (RAPIDS) laboratory. The RAPIDS laboratory develops and uses commercial as well as prototype sensing technologies to collect and process construction and transportation data. Presently, Teizer's research group concentrates on an inference management framework in the areas of real-time 4D site management and real-time active work zone safety. So the demolition and construction of the 14th Street Bridge served as a perfect platform for research, and it was literally right outside their door.



Dr. Teizer partnered with OxBlue, Inc. and mounted a camera on top of the nearby Marriott hotel building which overlooks the building project. Throughout the construction, pictures were taken and a time-lapse video was produced. The project was financially supported by OxBlue Inc., CW Matthews Inc., the Atlanta Midtown Alliance (all supporting camera hardware and operation), as well as the RAPIDS construction laboratory. In addition, Dr. Teizer and his team of graduate students conducted field interviews to measure how well and why the camera technology is being used by field professionals. A survey given to more than 1,200 construction camera users was used to collect even more data. A detailed cost-benefit analysis on the use of construction cameras was the final product of this research study. The effort was also assisted through the use of remote 3D laser scanning equipment (a surveying instrument that supplies a virtual model of the bridge) supplied by Leica Geosystems Inc. Using the results of this research, the team hopes to develop more efficient construction techniques and processes for future construction projects.



For additional information about the 14th Street Bridge project, Dr. Jochen Teizer, and the RAPIDS laboratory, please visit <http://www.teizer.com>. On this page,

viewers will find a direct link to the live web cam where they can click on a calendar to view the project on any date, from demolition to the new construction. Or click at the top center of the screen to see it all happen in time lapse. The bridge was closed to traffic on May 27, 2008, and is complete, but an Interstate ramp and street work are still in progress. The camera will remain active at least until December, Teizer said.

For more information concerning this research topic or program, please contact:

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