FACT SHEET

VERMONT
AGENCY OF TRANSPORTATION

VTrans Civil Integrated Management Effort

Introduction or Problem Statement

Civil Integrated Management (CIM), at its simplest, is the concept of having a centralized repository of information related to the transportation infrastructure network. The core of this concept is the idea of a "digital twin" - a 3D electronic model equivalent to its real-world object, that acts as a reference. Data and information can then be affixed or "hung" from the digital twin, allowing users to interrogate the model to get more information about its details. It's important to note that this is not "if", but "when"; the agency needs to adapt.
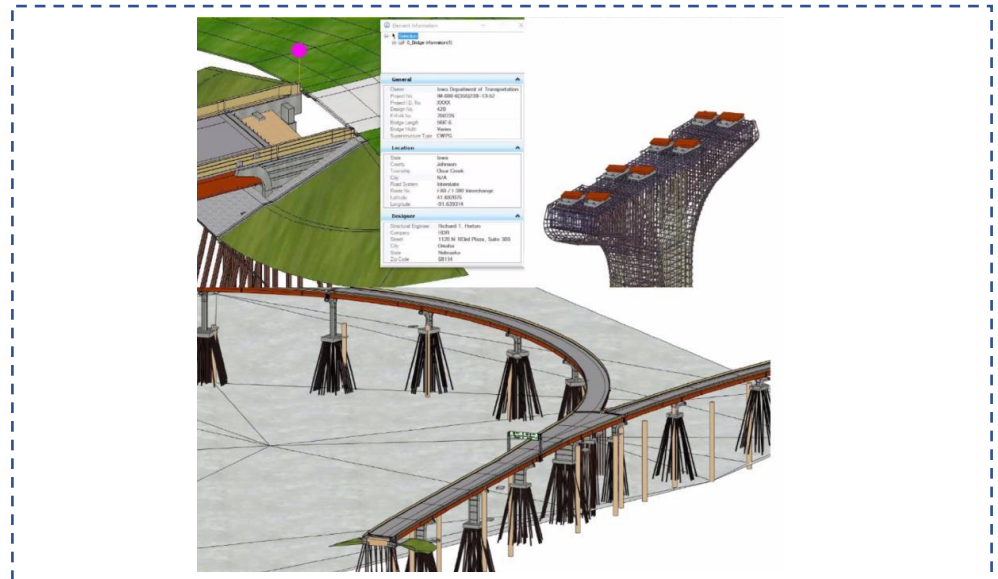
Methodology or Action Taken

To date, the team has met to discuss the needs of the agency, the state of the industry, and the risks based on current technology. The team has participated in FHWA's "Every Day Counts" (EDC-6) Webinars on Digital As-Builts to get a sense of what other state DOTs are doing in this field. There are two pilot projects identified to have project information delivered as 3D models as opposed to electronic plan sets, and the team has performed minor proof of concepts to understand the details and requirements for data integration.

Conclusions or Next Steps

The team will continue its research and look for opportunities to create and improve data integrations. Because of the grand scope, this is an ongoing effort that will take time to execute properly.

Potential Impacts and VTrans Benefits

The long-term goal would be to have a common reference point through which all parts of VTrans would be able to share data and information. This would reduce or eliminate the costly need for manual transformations, and hopefully fill many of the voids that the agency has in its daily data needs.