

CERC RESEARCH: 2016-2017

At the forefront of industry innovation

The Future Is Here: Virtual Reality (VR) as a Training Tool in Building Operations



VR has the potential to be a powerful training tool, especially when learning tasks are costly or dangerous to duplicate in the real world. This pilot study developed a VR training module for switchgear operations. Operators participated in the VR training and reflected on what made VR training valuable.

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UW Capital Planning and
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Implementing Progressive Design Build (PDB): UW West Campus Utility Plant

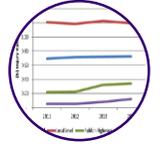


PDB is an alternative project delivery approach that solves or mitigates many problems perceived with traditional Design Build. This research studied the application of PDB on the UW's West Campus Utility Plant (WCUP). The report provides a benchmark for future PDB projects and generates lessons learned from each of the project's phases.

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Road Safety and Public-Private Partnerships (PPP)



PPP is a procurement mechanism where the government focuses on policy, planning, and regulation while the private sector attends to day-to-day operations. This research compared and analyzed crash and traffic data of PPP and non-PPP projects to discover whether PPP roads were safer than traditionally procured projects.

Read more at: <https://trid.trb.org/view.aspx?id=1439666>

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Record Modeling Industry Practices



This white paper reviews record modeling specifications and processes used by a broad range of institutional owners, from NASA to universities in the United States and beyond. Developed out of CERC's Sound Transit record modeling research, this paper compares different types of record modeling specification and processes providing the industry with an overview of when certain record models are used and why.

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What Can We Do Better? Convening the Best Minds to Re-imagine Capital Construction at UW and WSU



In 2016, Washington State University (WSU) and University of Washington (UW) Capitol Projects invited building industry leaders to discuss strategies for adding value and innovation around how and what to build. Out of this event, UW and WSU developed the white paper, "What Can We Do Better?" CERC supported this work through participating in these conversations and writing a literature review as an appendix to the white paper, which suggests that owners can integrate many IPD collaborative practices into their own projects regardless of the delivery method.

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