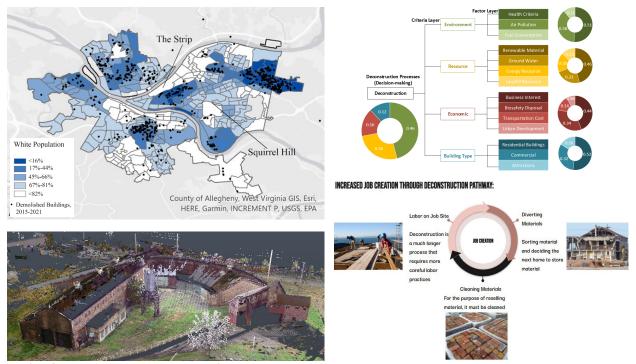


School of Architecture

College of Fine Arts, CFA 201 Carnegie Mellon University Pittsburgh, PA 15213



AECM Synthesis Report Analyses by Grant Johnson, Alyssa Mayorga, Rutuja Dhuru, Zehan Zang, Zhihan Fu, & Wes Fortna.

48-765: MSAECM Synthesis Project

Units: 12

Instructor: Joshua D. Lee, PhD, AIA

This course is designed to apply the diverse knowledge and skills that AECM students have acquired during the program to a critical public interest issue related to the built environment. This fall we will build upon the research on deconstruction carried out by the 2021 class (see <u>AECM Synthesis 2021 Final Report</u>) and investigate the potential for circular construction in the City of Pittsburgh more broadly. During the first few weeks, students will learn about the global, regional, and local impacts of construction debris as well as a wide array of existing mitigation efforts through readings and discussions with experts near and far. We will then discuss basic research skills and methods. From this knowledge, students will formulate a coordinated research project by working in teams of two or three. Investigations may include multiple AECM modes of inquiry including, but not limited to, deep case studies, expert interviews, GIS story maps, energy modeling analyses, carbon footprint calculations, life cycle assessments, AR/VR visualizations, LiDAR scanning and photometrics, BIM integration, real estate analyses, feasibility studies, or other modes. Findings will be presented to a panel of stakeholders and distilled into a collective report.