BY DEMONSTRATION will utilize three anomalous threads of investigation in exploring Public Interest Design. Each thread will explore a unique scale, chronology, and social dimension.

THREAD ONE will focus on the design, fabrication, and deployment of UDBS installations at the 2013/2014 UABC HONG KONG BIENNALE, URBAN EDGE. Curated by Colin Fournier and URBANUS, URBAN EDGE is challenging invited exhibitors to comparatively explore social, political, physical, and digital manifestations of urban boundaries. As one of nine invited exhibitors (archigram, Field Operations, Zaha Hadid, MAD, madaspa, Thom Mayne, OMA, Bernard Tschumi, Urban Design Build Studio) the UDBS will be exploring EDGE as a nuanced boundary between consciousness and pragmatic constraints of daily existence. The exhibit will utilize previously developed projects by the UDBS in conjunction with new research and construction to provide comparisons between Public Interest Design issues the Allegheny/Mon River Valley and the Pearl River Delta. The UDBS Hong Kong Biennale exhibit is supported through generous grants provided by the UABB, HKIA, Ford Motor Company, Autodesk, and Heinz Endowments.

The Urban Design Build Studio (UDBS) is an affiliated outreach arm of the Carnegie Mellon University School of Architecture. The mission of the UDBS is to develop regionally specific, climate appropriate building technologies for neighborhoods of Allegheny County and Western Pennsylvania, with specific focus on the implementation of strategies that can be replicated within the dominant social, political and economic realities of this context. The UDBS process of developing building strategies is dependent upon the engagement and participation of communities in a reciprocal educational process that fosters understanding. It is predicated on collective intelligence, is highly collaborative, and involves hands on making as a foundational method of thinking.

The dialogue between the UDBS, stakeholders, and constituents will tangibly underscore the notion that buildings are built in specific places, for specific people, with specific intent. The reality of a building’s impact on the people and environments it influences will demonstrate the constraints of a for-profit economy where the generalized primary purpose of construction is generation of income. This profit function of construction and development can be accepted as a limiting factor, or embraced as strong requisite for innovation. This studio will embrace the latter, and explore the potentials of pre-fabrication in achieving higher quality at a lower initial investment cost. Design processes and construction will benefit from computer based parametric analysis and potentials of mass customization in elucidating specificity within the constructive context of pre-fabrication. Students electing this studio option will be responsible for completing all phases of work from contextual analysis through construction documentation, and onto construction. Selection of this studio will imply an individual’s recognition of the opportunity to build as a supreme privilege – not an entitlement.
THREAD TWO will focus on the design development and implementation of PROJECT RE_, a self contained educational workshop located at Construction Junction. Developed in Partnership with the Trade Institute of Pittsburgh and Construction Junction, PROJECT RE_ is a physical space and transactional enterprise. Physically, it will be the primary fabrication, studio, and gallery space for the UDBS and partnering entities. It will also be the transactional enterprise by which each partnering entity leverages complimentary assets to achieve greater good; Public Interest Design (UDBS), Job Training (Trade Institute of Pittsburgh), and Material Repurposing (Construction Junction). This work is supported through generous grants provided by Heinz Endowments, Colcom Foundation, AutoDesk, and Ford Motor Company.

THREAD THREE will focus on the design development and prototyping of VALUE ADDED PRODUCTS for mass production. These products will incorporate reconstituted materials from Deconstructed Buildings complimented by digitally and manually manipulated materials. Thread ONE will operate at the Urban Scale in Reflective and Projective dimensions; THREAD TWO will operate at Building Scale in Projective dimension; THREAD THREE will operate at Ergonomic Scale in Present dimension. This work is being supported through grants from Heinz Endowments and support of Construction Junction.