Building as Last Resort
Maximizing / Decarbonizing Architecture
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Thesis
The practice of architecture in so many beautiful aspects on a grander scale, we are running out of new space. It is often that we reconsider the way we construct our existing buildings in order to save or renovate them. The problem occurs when we consider the way in which we build new architectural structures. The Center for Construction and Planning (CCP) is looking to add 21,000 square feet to its current building stock. This project uses the old Architecture Building, and CCPA as a case study to look at the large complicated renovation and addition projects that are becoming the norm in our profession. As we are developing and renovating projects, it is our responsibility as designers and dividers to approach the problems with several specific goals:

- Build more efficiently
- Build more responsibly
- Alleviate existing space
- Challenge energy
- Create new history
- Create new space

Just as with the process of design, we must ensure ample community input and preserve their legacy which already exist well.

The successful implementation of these goals results in a process that adds value, while it also reduces existing waste. The process of evaluation and maximization is independent of design taste or style and was to be included where possible and reduced to what must be taken away. The existing Architecture Building was selected due to its historical significance and architectural potential. A design/build team was assembled and developed a proposal for renovation and addition of new spaces with these goals as a focus.

Above: Space usage analysis of the Architecture Building

Abstract
Architecture increasingly incorporates reuse, adaptation, renovation or repurposing. As we run out of new space, it is critical that we reevaluate how we construct our existing buildings in order to maximize their use and minimize their embodied energy. This project uses the college's existing Architecture Building as a case study. The architects are tasked with renovating the building to adapt it for current and future use, resulting in new functional spaces and a desire to strengthen connections to FGCU and the region. This is a critical moment where we can break the cycle of building new facilities and reusing the existing. We have responsibility to maximize and deconstruct existing space while adding new constructed buildings as a last resort.

This is demonstrated through the following methods:

- Collection of archival and archival evidence of the history of the college. CCP was founded in 1925. Since then, we have been housed in over 15 buildings on campus. Only 6 of them are still under use for the college.
- The existing occupancy of the college has been measured against that of comparable institutions through micrographic research and pedestrian studies. The College houses numerous academic programs, institutes, and centers. The building's potential for adaptation to a variety of new uses without significant damage to the existing building's structure is the primary focus of this project.
- An analysis was conducted on the existing building, which is the largest structure, housing most of the schools and departments. The study was conducted through micrographic research, interviews, building analysis, and detailed physical and digital modeling. One critical result of this study is the addition of over 400 documents to the University Archives.

A speculative pedagogical study was conducted on the考上 of the college in 2016 and 2018. Any new faculty will need to test a minimum of 60% of the buildings before renovation. Calculations and predictions were conducted into the energy usage of the existing building. This illustrates which strategies are possible to deconstruct and reactivate the existing facility's new spaces.

Finally, an iterative process was conducted through iterative and reevaluating to maintain usable space within Architecture from 11,000 square feet to nearly 100,000. This is largely within the existing building's core and was conducted without significant damage to the facade and interior of spaces within the building. Following this, the addition of 14,000 square feet adjacent to support the college's new building and preserving spaces.

This case study demonstrates that renovation, repurposing, and adaptation of existing space can be an effective and efficient way to renovate and add to existing buildings. It also highlights the importance of rethinking the existing faculty and innovative its role as the change of the Design in the University of Florida.