Honors Capstone Reflection Paper

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Efficiency and Profitability vs. Human Regard and Safety

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As an interior design student with a deep interest in public safety and real estate development, I wanted my Honors Capstone project to bridge the creative, technical, and ethical dimensions of design. The built environment affects people every day, and I was particularly drawn to exploring moments when that environment failed severely. I chose to research three significant structural collapses in U.S. history to better understand how and why these failures occurred, and whether such tragedies led to changes in building codes. The three failures were the Pemberton Mill (1860), the Hyatt Regency walkway (1981), and the Surfside condominium (2021). My project ultimately became an investigation of not only what went wrong, but what those failures reveal about the intersection of ethics, profit, and safety in design and construction. I specifically chose buildings from three different time periods to demonstrate that these issues are not isolated incidents, but rather part of a long-standing pattern in design and construction. The persistence of greed and the prioritization of profit over safety is a recurring theme across history, revealing how this dangerous human tendency has compromised structures and lives for generations. My project ultimately became an investigation of not only what went wrong, but what those failures reveal about human behavior and government regulation.

Across all three case studies, a disturbing pattern emerged. Major red flags were overlooked or ignored, often due to pressures related to cost-cutting, expedited timelines, or poor communication among stakeholders. The Pemberton Mill collapse (1860) was largely the result of substandard materials and a lack of regulation. The factory was also overloaded with

heavy machinery causing the structure to bow. No formal building codes existed at the time, and while the event highlighted the dangers of unregulated construction, it did not immediately lead to national reforms.

The Hyatt Regency walkway collapse (1981) was caused by a last-minute design change that doubled the load on a connection point, a detail that was not properly reviewed or recalculated. This breakdown in communication between the design and engineering teams led to the deaths of 114 people. Unlike the Pemberton Mill collapse, the Hyatt Regency disaster prompted major changes in engineering oversight, liability, and the necessity of rigorous structural review.

The Surfside condominium collapse (2021), the most recent of the three, involved years of deferred maintenance and ignored warnings about structural damage. The construction of the building itself was also poorly thought out with overcrowding of columns and an excess amount of rebar, causing the concrete to crack in many locations. Investigations revealed that engineers had identified serious concrete and waterproofing issues years prior, but repairs were delayed. The collapse brought national attention to the aging infrastructure of buildings in coastal areas and led to new legislation in Florida requiring more frequent inspections.

What ties these cases together is a culture where production pressures often outweigh human safety. Whether it was the rush to complete construction, reluctance to spend money on proper materials, or a breakdown in professional accountability, each disaster was preventable. In each case, human lives were the cost of overlooked standards, miscommunication, or complacency.

Despite the compelling findings, my project also had limitations. First, because some of the events occurred long ago, particularly the Pemberton Mill collapse, there was limited access to detailed records or contemporary analyses. The historical context made it difficult to fully assess how the event was handled or understood at the time. Second, many building code documents are locked until you purchase them, which makes it difficult to analyze how specific codes evolved across different states and years. Without access to all editions of the building codes, I had to rely on secondary summaries and publicly available commentary. Third, as a student and outsider to the construction and engineering industries, my analysis is based entirely on publicly available information. I did not have access to firsthand accounts or internal documentation, so my perspective is limited to what has been reported or published.

Still, this project gave me new insight into the importance of research and its relationship to design. I used to view research as something separate from creative practice, but I now see it as essential. Good design isn't just about how something looks, it's about how it performs, how safe it is, and how it anticipates human needs and potential risks. Research provides the foundation for making informed, ethical choices. For interior designers, understanding codes, construction methods, and human behavior isn't just a technical requirement; it's a moral obligation.

This project also expanded my understanding of research methods. Rather than simply compiling facts, I had to evaluate sources, identify patterns across decades, and connect the dots between isolated events and systemic issues. As I move forward in my career, I plan to apply this mindset to future work in design and development. I want to be part of a generation

of professionals who don’t accept shortcuts when they compromise safety, and who push for better codes, better communication, and better outcomes for the people who utilize the spaces we create. Responsible design begins long before a space is built, and this capstone project has shown me how crucial it is to integrate ethics, research, and rigor into every stage of the process.