

Executive Summary

Technical three allows us as students to analyze and understand the industry and how we affect it everyday. The PACE roundtable was an opportunity for all of us to learn at greater length those topics that are currently essential to the industry. These topics included green materials, BIM models, as well as industry respect to sub-contractors. These topics and discussions greatly affected my topics throughout my thesis and the analysis I plan to conduct.

My critical issues analysis concentrates directly on LEED rated buildings and their affect on our industry. How important is it to have a LEED rating, why are owners in the industry simply attaining sustainable designs without LEED and want buildings to remain green? LEED began as simple awareness and morphed into the rating system it has become today. Although, green and sustainability are becoming highly important to the construction industry many contractors and some owners do not like the LEED system. The rating system has been described as flawed and can become too complex or complicated. Therefore it is my interest to understand what is important for sustainable buildings and if another system can be devised or how the old system can be corrected.

Although the ASHA has not faced schedule or cost concerns yet it is attempting a LEED silver rating. Following my critical analysis I am interested to determine whether or not it is possible to have the building remain sustainable along the lines of the new system while lowering up front costs as well as having long term energy costs remain low. The structural system is also a mixed system in which there was a concern about the lead time on the steel used, however because permits took so long to be obtained it became a non-issue therefore it is my interest to redesign the steel with a C.I.P. system that can allow for the same LEED rating or at least allow the building to remain “sustainable” while lowering cost and possibly schedule time. The mechanical unit can also be analyzed. While it remains complex and high in initial cost the long term savings and LEED rating are where the majority of the money is spent. Therefore I hope to change the system while hoping to lower the up front cost and keep long term cost low helping with sustainability and hopefully allowing LEED silver to still be reached. The ASHA because it was a non-profit organization had the building remain design-bid-build. The schedule is highly important to this project and I hope to re-analyze the schedule as a design build project to determine how much time could be saved and overall costs under the same initial design.