



Executive Summary

The Center for Health Research and Rural Advocacy poses many interesting aspects relevant to research analysis. Some of the more interesting features include waste management for LEED credits, an expansive aluminum curtain wall system for prefabrication, as well as difficult site logistics.

The core research proposed will be to determine the selection criteria for health care sustainability. The newly compiled GSA LEED Cost Study will be utilized as a tool for determining LEED costs and compared to value adding sustainable credits as determined by health care professionals.

When analyzing recycling costs, effort must be put forth to garner information from industry professionals. This information will be gathered using interviews and surveys from fifteen professionals including architects, construction managers, LEED experts, and even owners representatives. The surveys will be used to compile industry trends in terms of who is determining that recycling should be pursued on a project. LEED cost breakdowns will be created to quantitatively assess pursuing recycling credits on construction projects.

The technical analysis for the Center for Health Research will include determining the feasibility of prefabrication of components for the aluminum curtain wall. Cost and schedule analyses will be done to determine if the project would benefit from a prefabricated system. Quality control issues and concerns will also be raised through industry surveys and interviews.

The final area for study will include the site logistics of the CHRRA. The site is extremely condensed due to the close proximity of the Weis Research Center and Centre Street. Having only one main entrance and exit may cause additional project constraints during key construction activities such as superstructure delivery and erection as well as precast panel delivery. 3D and 4D CAD models will be developed to determine if the site logistics are adequately planned for these construction phases.