

Waste Management Strategies Relating to Sustainable Practices In Construction Management

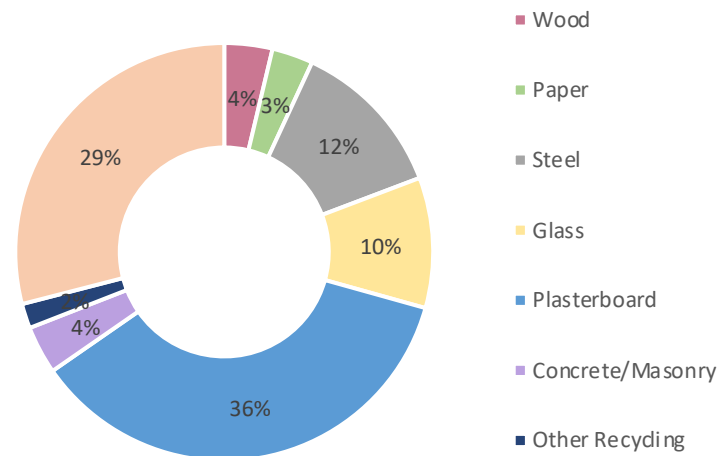
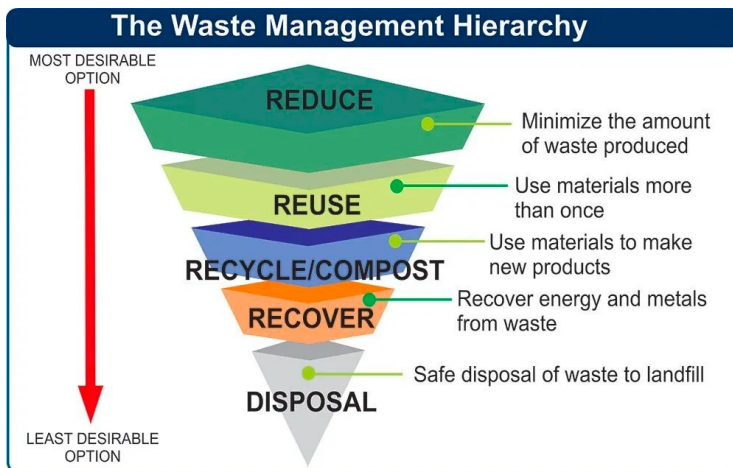


Benefits

- Better understand the approach to LEED specific building
- Waste management strategies decided earlier in construction process proves more efficient
- Evaluate current and possible future waste management strategies
- Necessary resources and teams for more efficient projects
- Research impact on future buildings & the environment
- Beneficial cost and schedule impacts from certified buildings

This study is a combination of research from previous studies as well as interview to evaluate the effects of the various sustainable systems and rating systems, how they are working to improve waste management, and how this has plays into the current and future practices of construction. Construction and demolition (C&D) waste is one of the largest waste flows in the world, reaching 30–40% of the total solid waste because of the large-scale construction and demolition activities resulting from accelerated urbanization and city rebuilding (Islam, 2019). To evaluate the difference between LEED certified construction in comparison to non-LEED certified construction, we can better understand the different approaches to waste management strategies and their overall impact to the project and the overall environment. This project paired with Balfour Beatty Construction in San Diego, California to analyze two different projects, one LEED certified and the other non-certified. A research case study was performed to analyze the different approach to waste management strategies, and it was found that the LEED certified buildings ultimately have more substantial and significant waste management practices and are more beneficial impact to the environment compared to those of non-LEED certified buildings.

Key Words: Construction Management, LEED, Waste Management, Construction & Demolition, Sustainability, Recycling



A typical breakdown of construction and demolition waste components

Research

- LEED certified project vs non-LEED certified project
- Qualitative data case studies with semi structured interviews of team members
- Different waste management strategies performed by each project team

Conclusions

- Strategies are better and have more beneficial effects on LEED certified projects
- LEED projects have a significant impact on the overall cost and schedule