Background

- 600 million tons of Construction and Demolition (C&D) debris are generated yearly.
- Clean Wood is one of the largest materials flowing through our waste stream.
- Salvaging lumber, sheet wood, and pallets will reduce wood waste, reduce GHG emissions, and catalyze a circular system in the King County area.
- The purpose of this research is to gauge stakeholders interested in participating in a King County's proposed Salvaged Lumber Warehouse.

Research Question

What are stakeholders' interests in participating in circular practices to lower the amount of waste in the construction industry?

Internship and Methods

- Interned with King County’s Solid Waste Division.
- Developed and administered surveys to local stakeholders.
- Conducted a literature review on importance of circular economies.

Results

Interest in Circular Economy

How interested are you in participating in or supporting efforts that promote circular economy practices?

- Not interested at all
- Slightly Interested
- Neutral
- Interested
- Extremely interested

Motivation for Participation in a CE

What motivates your company to engage with circular practices?

- Environmental concerns
- Cost savings
- Social impact
- Regulatory compliance

Takeaways

- Understanding stakeholders' perspectives is crucial for ensuring the successful implementation of circular construction practices.
- 67% of stakeholders expressed extreme interest in incorporating circular economy practices into their organizations (see Figure 2).
- 92% of respondents expressed interest in contributing to circular construction practices, with motivations such as environmental stewardship, social impact, and potential cost savings. (see Figure 3).

Implications

- With the creation of a circular economy, building products made from locally sourced salvaged lumber would have significantly lower carbon emissions.
- Reusing and reducing C&D materials can lower financial costs.
- In order to implement these changes we have to recognize and combat barriers to waste mitigation.
- By examining the challenges, successes, and lessons learned from these initiatives, researchers can provide insights into effective strategies, innovative solutions, and best practices.

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