IPRO 339: Adapting Shipping Containers to Create Affordable Housing

Midterm Presentation
Summer 2009
Statement of the Problem

• Temporary Olympic Housing.
  • Approximately 17,000 people.

• Permanent Affordable Housing for the City of Chicago.
  • Affordable housing solutions for low income residents.

• Showcase sustainability.
Current Semester

- Focus on allocating and optimizing land use.
  - Olympic Housing relatively new goal.
- Recommendations have been incorporated.
  - Chicago Lot
  - Building Heights
  - Sustainability
- Some past research and work has been shelved due to shift in focus.
## Organization of the Team

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<td>Chan, Ronald</td>
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Ethical Considerations

- Understanding needs of low-income residents.
- Distinguishing between cheap and affordable to ensure the conditions are livable.
- Using local materials and labor from USA.
- Is this housing solution going to effectively increase the standard of living?
- Honesty in assessing fundraising needs.
DESIGN BUILD SUBGROUP: Progress

• Olympic Housing
  • Located on Michael Reese Hospital Site
DESIGN BUILD SUBGROUP: Progress

- Affordable Housing
ENGINEERING SUBGROUP

Project Goals & Progress

- Build a sustainable complex to house about 17,000 Olympic athletes.
- Make the complex work structurally.
ENGINEERING SUBGROUP
Challenges & Obstacles

- Determine whether wind load and uplift will be a structural concern.
- Finding cost effective solutions for individualized MEP and HVAC systems.
ENGINEERING SUBGROUP

Future Work & Conflicts

- ADA accessible lift and its structural effects.
- Making the deconstruction and transportation of housing simple and cost-effective.
Presentation Group: Progress & Goals

• Mission – Funding and organize an Olympic Village built using Forty Foot Equivalent Units (FEU).
  • If these units or homes, are then sold, the individual buying the home, would then be paying for the Olympic Village.

• Goals – Work with local Chicago-based companies to create a model of our Olympic Unit, Cost of Model approx. 25,000 dollars.
  • We have meet with several companies, of which one is interested in helping with funding, J.C. Restoration.
  • Another, Complete Trucking, is interested in helping with transportation.
Presentation Group: Obstacles and Solutions

- **Obstacles**
  - Due to a depressed economy, getting companies interested in donating is difficult.

- **Solution**
  - We build a marketing plan, focused on a basic target audience using familiar interest.

- **Future problems**
  - If we raise the needed amount, getting space on IIT has been a problem, and recruiting professional laborers to complete construction.
Conclusion

- The Olympic Unit
- Green Options
- Housing 17,000 athletes
- Sustainability
- Transition from Olympic Village to Low Income Housing
Questions?

Thank you