



Glass Recycling Network in Greeley

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Introduction

- The city of Greeley lacks efficient method for glass recycling, Momentum Recycling asked for a map of potential locations.
- Currently all glass “recycling” in Greeley is still taken to the dump because the single stream recycling plant cannot handle glass.
- Our project group is a mix of environmental and GIS majors/ minors.
- The glass in Greeley is essentially a untapped resource, and Momentum is hoping to maximize efficiency leading to less wasted resources.
- This project will undoubtedly be significant for both the city of Greeley and Momentum Recycling, and the start of a good partnership.
- We have created a map of the best locations for these bins (pictured right), as well as a map oriented towards the people of Greeley who will be using this new resource to them.
- Locations decided on were vetted for accessibility for pickup purposes as well as use by people.



Figure 1: Truck used by Momentum to pick up materials



Figure 3: Map of proposed bin locations

Recommendations

Have Momentum Drivers track how much glass is being picked up weekly from each bin location in order to see where the hot spots are and where else to target. (Bins full, half, empty).

Sell sustainability to encourage more community engagement.

- The energy we save when we recycle one glass bottle is enough to light a light bulb for four hours. (<http://www.gpi.org/recycling/glass-recycling-facts>)
- Glass is 100% recyclable and can be recycled endlessly without loss in quality or purity. (http://recycling.about.com/od/Glass_Recycling/fl/Glass-Recycling-Facts-And-Figures.htm)
- Producing one ton of new glass from raw materials generate approximately 384 pounds of mining waste, but using recycled glass instead of raw materials can cut this number by almost 75 percent. (<http://www.recycling-revolution.com/recycling-benefits.html>)



Figure 2: Example of bin set up

Process and Approach

- Bin locations selected based on proximity to high traffic areas
- Further locations will be selected based on the success of the pilot locations
- Proposed locations distributed for ease of access
- Locations provide greatest exposure to public to promote use
- Sample Location placed between Highway 34 and 10th Street due to high through traffic between the two roads

Expected Outcomes

Greeley takes a step forward in sustainability and waste reduction.

Greeley public take initiative and are involved in sustainable practices and are rewarded by recycling glass for free.

Momentum will need to add more recycling bins and locations once the network gets going and is familiarized with the public.

Tons of glass will be saved from going to the weld county land fill.

References

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2. “Recycling Benefits:The Many Reasons Why.” *Recycling Benefits - A Recycling Revolution*, 2005, www.recycling-revolution.com/recycling-benefits.html.
3. “Recycling.” *Glass Recycling Facts | Glass Packaging Institute*, 2019, www.gpi.org/recycling/glass-recycling-facts.