



9003 North Main Street,  
Est. 2009.  
281-814-3324

Houston, Texas 77022  
[www.houstonreuse.org](http://www.houstonreuse.org)  
[reuse.warehouse@houstontx.gov](mailto:reuse.warehouse@houstontx.gov)





## Solid Waste Workshop, August, 2020



**The Reuse Warehouse accepts building material from anyone, keeps it out of landfills, and gives it to non-profit organizations for free.**

**We don't sell or give material to the general public.**

**There is no charge for drop-offs or collections.**



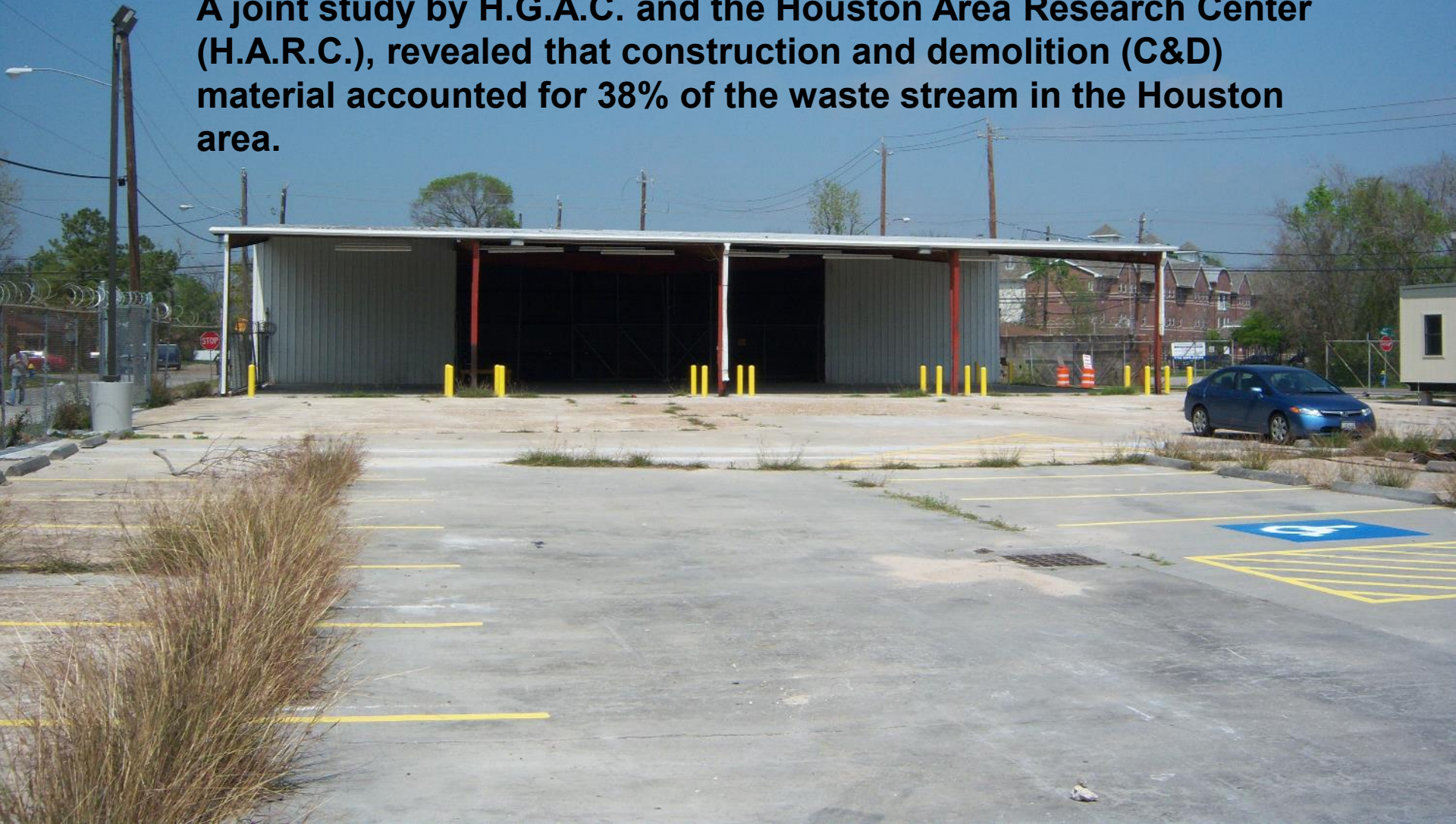
**It is the only reuse facility of its kind in the United States that is run by a municipal government, does not charge for any exchanges, and provides material to communities through non-profit organizations.**



## **A Brief History:**

**2004 – 2005**

**A joint study by H.G.A.C. and the Houston Area Research Center (H.A.R.C.), revealed that construction and demolition (C&D) material accounted for 38% of the waste stream in the Houston area.**



**2007**

**The Mayor's Office of Environmental Programming identified air quality and landfill reduction as areas of focus.**

**An abandoned city property was identified and secured for future landfill reduction use.**



**2009**

**The program was adopted by the Department of Solid Waste Management. One condition was to place a neighborhood depository/recycling center on adjoining property.**



An aerial photograph of an industrial facility. The site is bounded by several streets: N Main St to the south, E Whitney St to the east, and a road labeled 'Harwood St' to the north. The facility includes a large paved area with several green recycling bins, a large white building with a corrugated metal roof, and a smaller white building. A large yellow oval callout bubble is positioned in the upper left, and another is in the upper right. A third yellow oval callout bubble is in the lower center, pointing towards the central part of the facility. The surrounding area includes residential houses and trees.

Neighborhood  
Depository

Reuse  
Warehouse

Community  
Outreach



Multi-disciplinary team leaders:



06/23/2009

Amanda Tullos, Sheila Blake, Dan Phillips, Sarah Mason



**Predecessors:**  
**Trash Into Plowshares (T.I.P.S.),**  
**Huntsville, Texas.**

**PhoenixCommotion.com**



# Initial Grant Funding, 2007 = \$150,000



# Bulk Material Equipment Grant Funding, 2020 = \$45,000



**The Unexpected**

## **Who Brings Material?**

**Large Corporations.**

**Small to Medium Companies.**

**Individuals.**

**Other reuse facilities.**

**The City of Houston.**

**Alamo Stone**

**Avan Construction**

**Balfour Beatty**

**Brochsteins**

**Case & Associates**

**Durotech**

**Junk King**

**Justin Gordon Homes**

**Ikea**

**Pioneer Millwork**

**Historic Houston**

**Repurpose Depot**

**Habitat for Humanity NWHC**

**AIA Houston**

**Tarkett**

**The City of Houston**

**Exxon**



## Who Takes Material?

**501(c)(3) Non-Profit Organizations.  
Schools & Universities.  
Government Agencies.  
(800 groups)**



**Small religious organizations  
Community development corps.  
Home repair organizations  
Schools and universities  
Organizations for the homeless  
Performing and visual arts  
Urban food producers  
Organizations for women  
Maker spaces  
Veterans organizations  
Disaster relief organizations  
Federal, state, and local gov'ts.  
Historic preservation  
Animal shelters  
Neighborhood organizations  
& many more.**

**We Accept:**  
**Lumber, Plywood, Trim, Cabinets, Some Furniture**



**We don't accept:**

- **Rotten Wood.**
- **Paint & Solvents.**
- **Hazardous Materials.**
- **Energy Wasting Appliances.**
- **Water Wasting Fixtures.**
- **Partial Assemblies.**



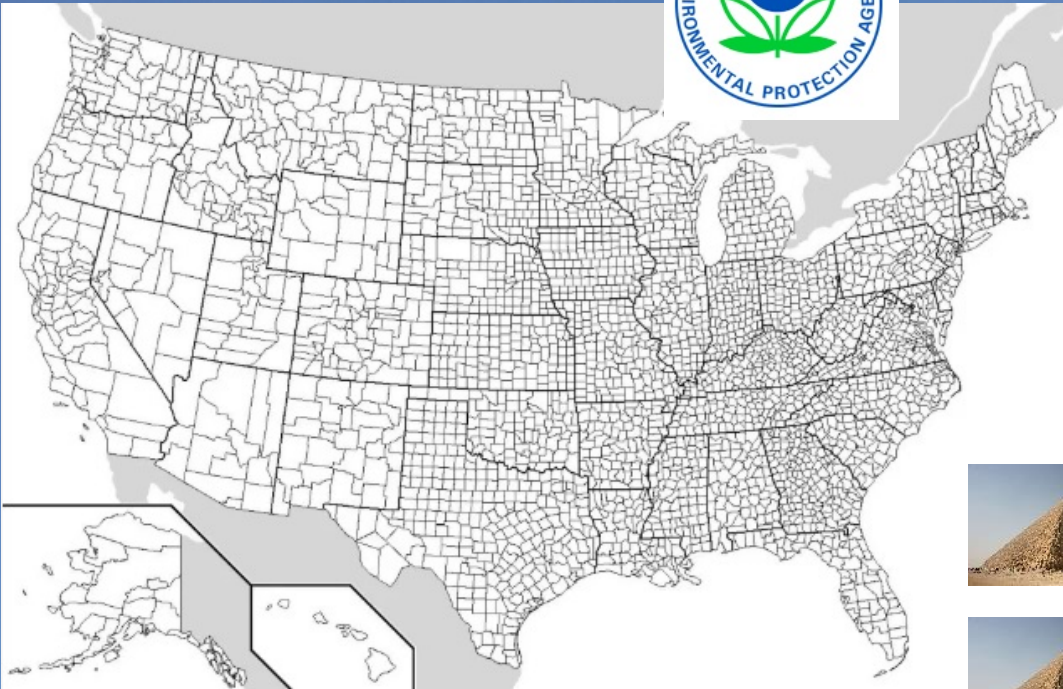
**Unit of measure: The Great Pyramid of Giza, 65 million tons.**



570 million tons of construction and demolition debris were generated in the United States in 2017 = 9 Great Pyramids.



HARC



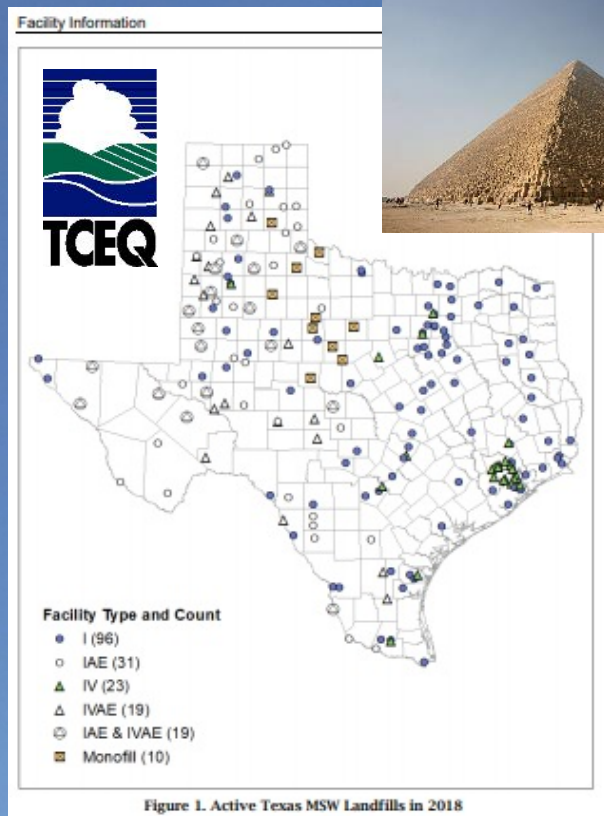
How much was diverted?  
It's complicated.



8.6 million tons of construction and demolition debris were generated in Texas in 2018 = 1 Great Pyramid every 7.5 years.

.5 million tons were diverted = 6% tracked diversion rate.

34 lbs. of C&D material diverted per person.

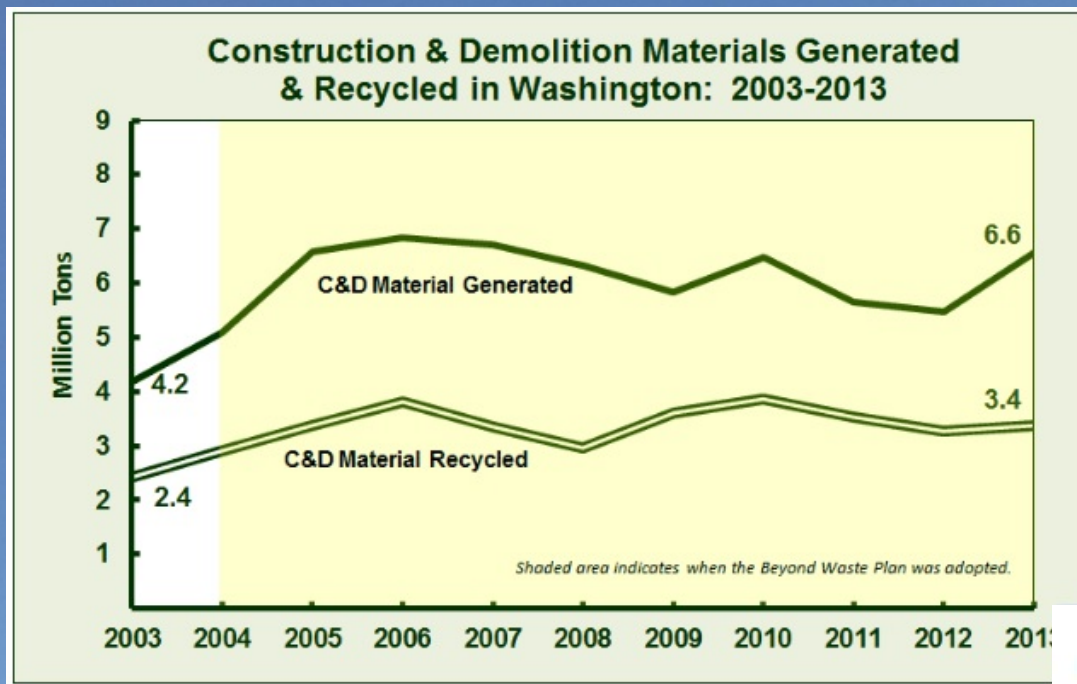


15,000  
tons  
diverted



Houston generates 250,000 tons of C&D waste annually  
= 1 Great Pyramid every 25 years.

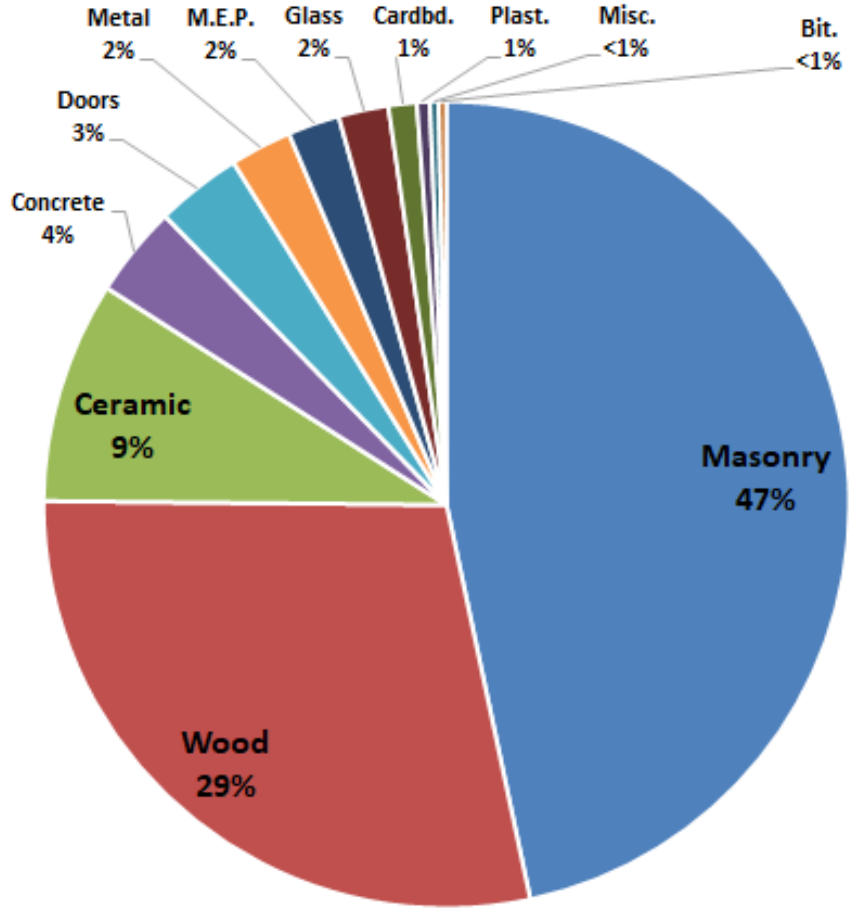
**6.6 million tons of construction and demolition debris were generated in Washington State in 2013 = 1 Great Pyramid every 10 years.**  
**3.4 million tons were diverted = 51% tracked diversion rate.**  
**877 lbs. of C&D material diverted per person.**



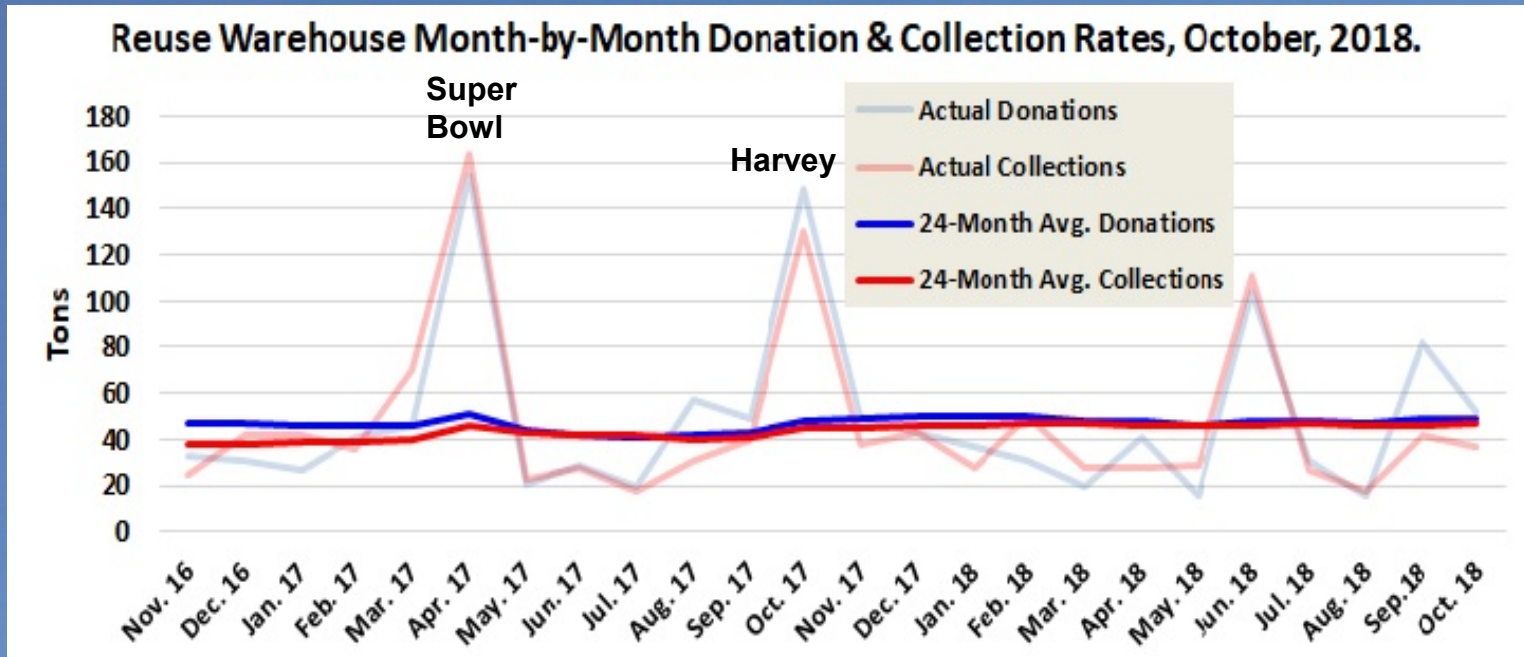
DEPARTMENT OF  
**ECOLOGY**  
State of Washington

### Reuse Warehouse Donations by Material, April, 2019

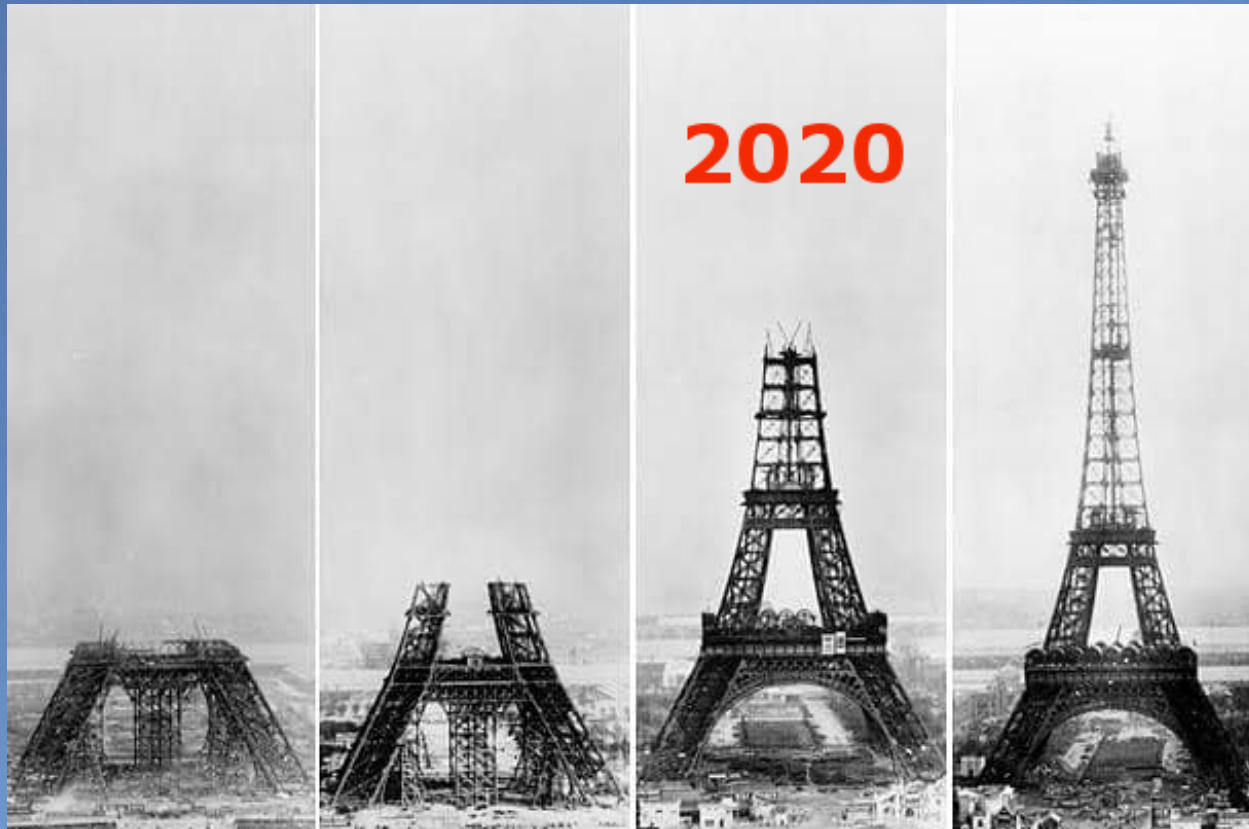
<u>Lbs.</u>	<u>Material</u>
264	Bitumen
7,797	Ceramic
3,207	Concrete
3,018	Doors
1,757	Glass
40,935	Masonry
2,168	Metal
308	Miscellaneous
1,825	M.E.P.
456	Plastic
0	Soil
24,988	Wood
<u>1,000</u>	<u>Cardboard</u>
<b>87,723</b>	<b>Total Pounds</b>
<b>43.8</b>	<b>Tons</b>



Donation to Collection Ratio: 99%    Average Month: 45 tons



**Landfill Diversion to Date: 5,400 tons.  
Eiffel Tower: 7,700 tons.**



**We are small but seek cultural and technical changes by  
getting involved in everything.**

## Advantages:



**Demand always rises to meet supply.**

**No pricing is needed.  
No funds are exchanged.  
Less security is required.**

**Little to no outreach is  
required on the demand side.**

**Processing is minimal.**



**Both pristine and imperfect  
materials are reused because  
they are free.**

**Our staff is  
small and  
efficient.**

**Operating  
costs are low.**





## Advantages:

We compliment other reuse facilities by accepting and distributing their clearance materials.

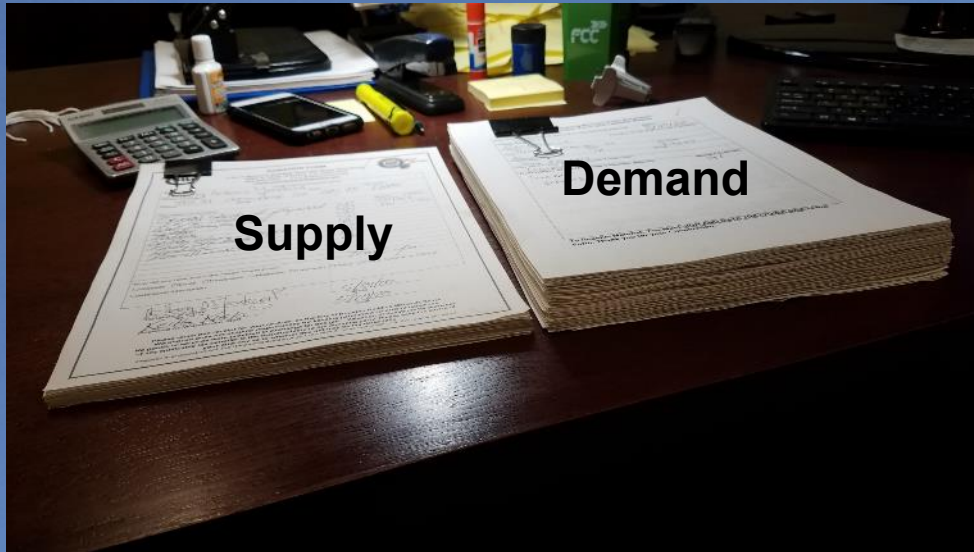


Unexpected.

The leading donor to the Reuse Warehouse:

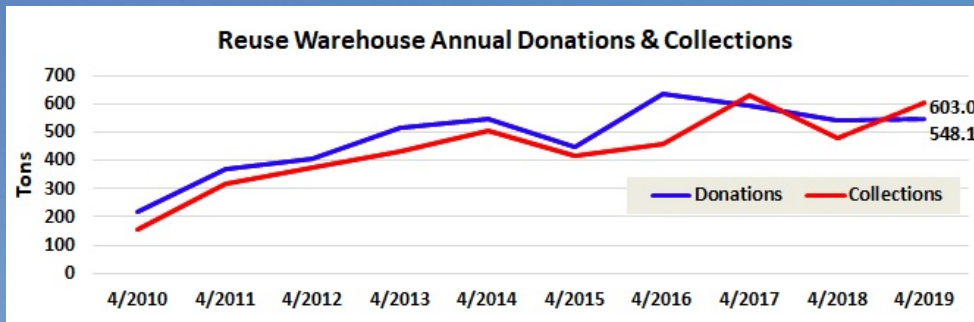


## Challenges:



More time and effort is required to manage the demand side (Non-profit shoppers)

More outreach is required on the supply side (Donors). Less time and fewer resources are Available.



If we double our intake, shoppers double their efforts. The building never fills up.



## Phased Landfill Disposal Bans 2012 - 2020

Seattle Municipal Code 21.36.089 prohibits the disposal of certain C&D materials in construction site disposal containers and the disposal areas of transfer stations and sets a schedule for banning them from disposal. [SPU Director's Rule 405.3 Revision 4](#) (pdf) adopts a new implementation schedule for certain targeted items:

- Asphalt Paving, Bricks, and Concrete (2012)
- Metal (2014)
- Cardboard (2014)
- New Construction Gypsum Scrap (2014)
- Unpainted and Untreated Wood (January 2015)
- Carpet (July 2020)
- Plastic Film Wrap (July 2020)
- Tear-Off Asphalt Shingles (July 2020)

## Challenges: Enacting complimentary policies to meet diversion goals.



austintexas.gov

Resident Business Government Departments

sizes will also have to meet the ordinance requirements.



### Ordinance Requirements

#### Diversion Requirements

General contractors for Affected Projects must do at least one of the following:

- Divert from the landfill at least 50 percent of the construction project debris.
- Dispose no more than 2.5 pounds of material per square foot of floor area in the landfill.

There are several options for [hauling and processing construction debris](#).

#### Reporting Requirements

When a general contractor requests a Final Building Inspection for an Affected Project, the contractor must [report](#) how much construction debris was landfilled, reused or recycled. Contractors failing to report are subject to a Class C misdemeanor.

**Successes:**

**Oak Forest Library deconstruction**



**Transitional Housing  
Ecclesia Church, 2011.**



## Deconstruction



## Super Bowl 51, 2017

**Diverted:**

**160 tons of material.**

**¾ million square feet of carpet.**

**5 miles of fence scrim.**

**“Best and most complicated effort in 25 years.”**



## Fine Arts Crates, a -0- to 100% diversion.



MFA  *The Museum of Fine Arts, Houston*

**Fine Arts Crates, a -0- to 100% diversion.**





# Hurricane Harvey, 2017: non-profits sponsor individuals rebuilding their homes. 200 tons of new and reused material put into use.



We ALL Nosey In Baytown

I Serve 365



Unexpected.





# TEXAS REUSE CONTEST

August 17 to October 20, 2020

**DID YOU MAKE SOMETHING COOL FROM REUSED MATERIALS THIS YEAR?**

Show off your reuse project for a chance to win a prize & bragging rights!

## How to Enter

- 1** Complete a reuse project in 2020. Projects will be scored on creativity & originality (10 pts), quality of the project (20 pts), and percentage of reused materials (30 pts).
- 2** **FREE TO ENTER!** Submit online entry form by October 20 at [bit.ly/3kTdoVh](https://bit.ly/3kTdoVh)
- 3** Submit 2 high-resolution photos: 1 "before" photo and 1 "finished" photo.

Winners will be announced mid-January

## Questions?

[reusecouncilstar@gmail.com](mailto:reusecouncilstar@gmail.com)



## Categories

1. Construction & Remodeling
2. Art, Fashion & Furniture

## Prizes

- 1st** Certificate of Achievement, bragging rights & seats to the next Reuse Tour
- 2nd** Certificate of Achievement



**1<sup>st</sup> Place, 2016 National Reuse Contest, Nestor Topchy  
Habitable Interdisciplinary Visionary Environment (H.I.V.E.)**



**Hall of Fame:**  
**Trojan Horse,**  
**Yolle Lemberger,**  
**Houston Festival Foundation,**  
**2011.**



**Stage Set, Bay Area Ballet,**  
**2013.**





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**Thanks for 11+ years!**

