



# STATE OF DECONSTRUCTION WORKSHOP

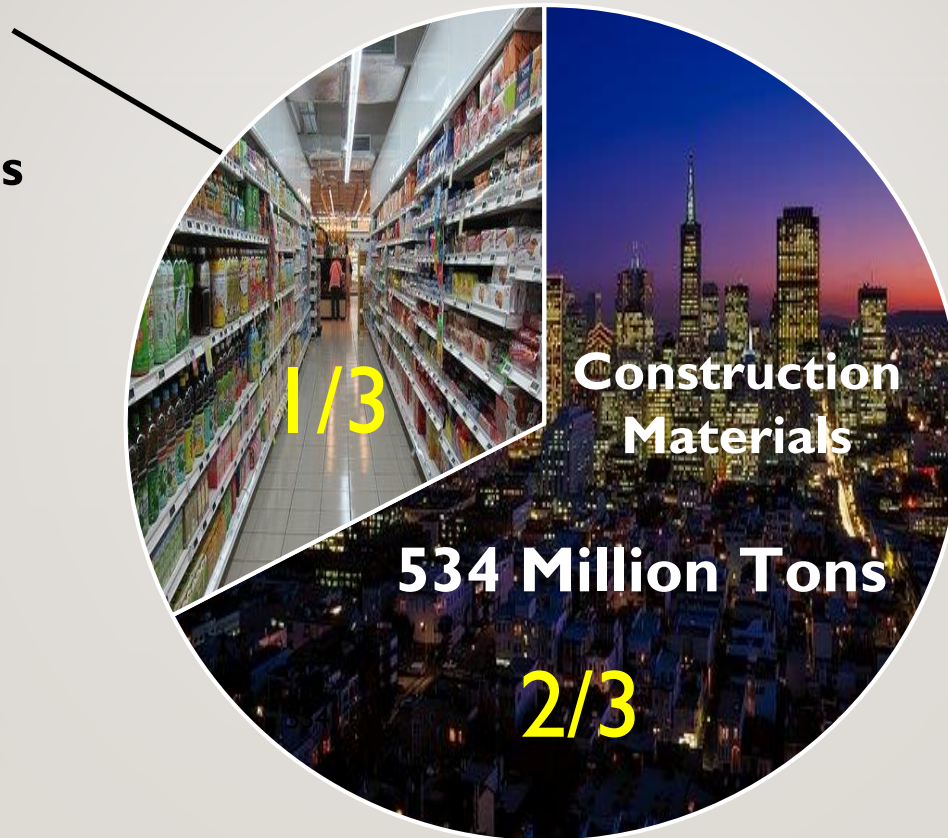
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DECEMBER 14, 2017

# Annual U.S. Materials Generation (EPA, 2014)

Home &  
Office  
Materials

258  
Million Tons





# Design for Deconstruction - Reuse - Adaptation

EPA/BMRA/AIA Lifecycle Building Challenge: <http://www.lifecyclebuilding.org>

# EPA WARM MODEL

- Online Excel Spreadsheet - Converts Building Materials Reduction & Recycling to Embodied Energy & Greenhouse Gas Emissions
- Example -
  - Dimensional lumber - 25 tons reused & 5 tons composted
  - Bricks - 10 tons reused
  - Steel – 5 tons reused & 5 tons recycled
  - Copper Wire – ½ ton recycled
  - Wood flooring – 3 tons reused



## ENVIRONMENTAL IMPACTS:

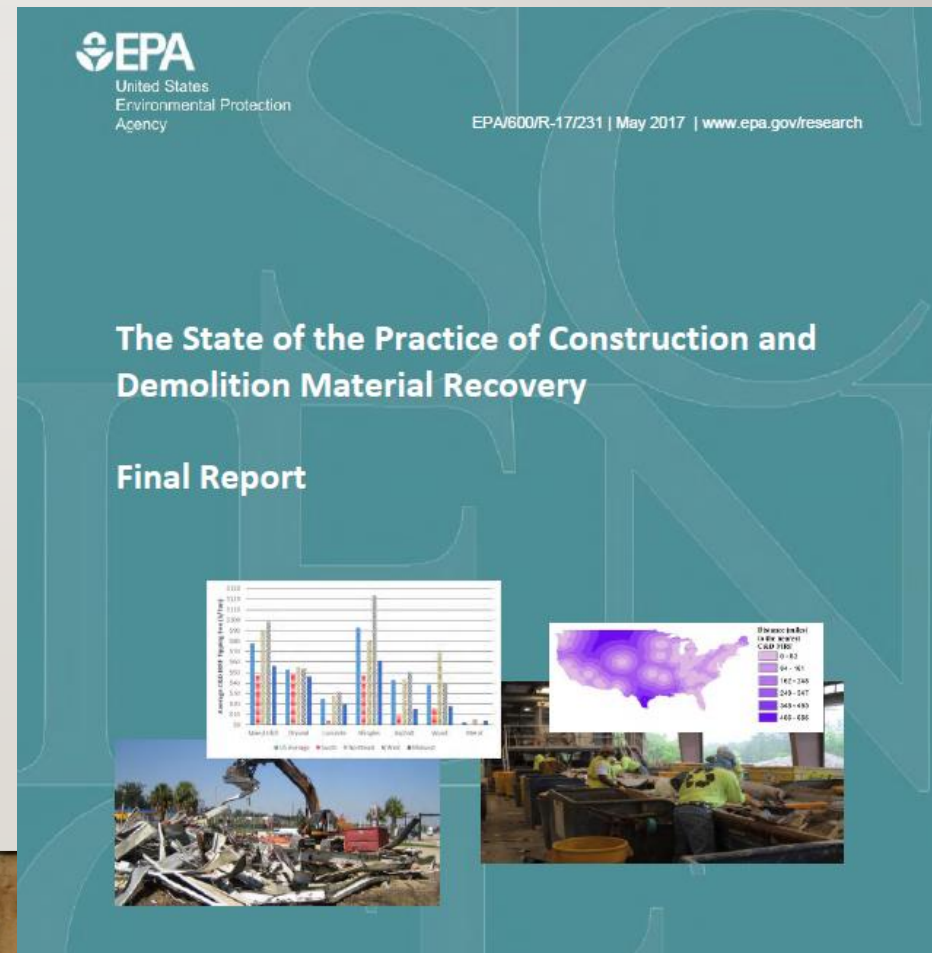
- 63 Metric Tons CO<sub>2</sub> Equivalent = 13 passenger cars off the road for a year
- 486 Million BTU = 4 households' annual energy use or 3,914 gallons of gas

# NEW EPA REPORT

## The State of Practice of Construction and Demolition Material Recovery (2017)

### Table 3-2 Policy Options for Promoting Solid Waste Recovery

In addition, as demonstrated in Portland (OR), **cities can adopt ordinances or building codes requiring deconstruction** for particular types of buildings or historic buildings (City of Portland, 2017b).



# EPA TRIBAL SOLID WASTE PROJECT MOBILE HOME DECONSTRUCTION

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- Mobile homes: a large share of tribal housing for tribes
- Tribal members often acquire these at the end of their useful life – free for the cost of moving them onto tribal lands
- Occupied homes frequently lack adequate water, sewer, electric hook-up



# RECENT MOBILE HOME DECONSTRUCTION TRAINING FOR TRIBES

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Two California tribes asked us for help with mobile home deconstruction and demonstration


- Hopland Band of Pomo Indians
- Chemehuevi Indian Tribe

Topics addressed:

- Environmental hazards
- Structural hazards
- Setting up efficient job site
- Tool use
- Material storage and resale



Abandoned Mobile Home Deconstruction Toolkit & Videos:  
<https://www.epa.gov/smm/toolkit-about-abandoned-mobile-homes>

A lush green forest with a dirt path leading through the trees. The trees are tall and thin, with dense green foliage. The path is in the foreground, leading towards the center of the image.

**Thank You!**  
**U.S. EPA Region 9 - Zero Waste**

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