



**BURNS**  **MCDONNELL**

# **Economic Impact Study on C&D Diversion Requirements**

**City of Austin, Texas**

June 10, 2020



# Agenda



Goals & Objectives



Outreach and Data Analysis Overview



Economic Impacts of C&D Diversion



Reuse Markets



C&D Debris Markets



Key Findings & Recommendations



# Goals & Objectives

- ▶ Evaluate economic impact of the ordinance on household affordability
- ▶ Assess capacity of local reuse markets
- ▶ Assess material markets and processing capacity for additional C&D recycling
- ▶ Evaluate whether City should implement next diversion milestone per C&D Ordinance

# Outreach and Data Analysis Overview



## Outreach

- Interviewed C&D-Related Entities: City departments, haulers, processors, associations, Non-government organizations (NGOs)

## Data Analysis

- Analyzed City provided data (ARR, AEGB, DSD)
- Quantify cost per square foot by project sector for disposal and diversion

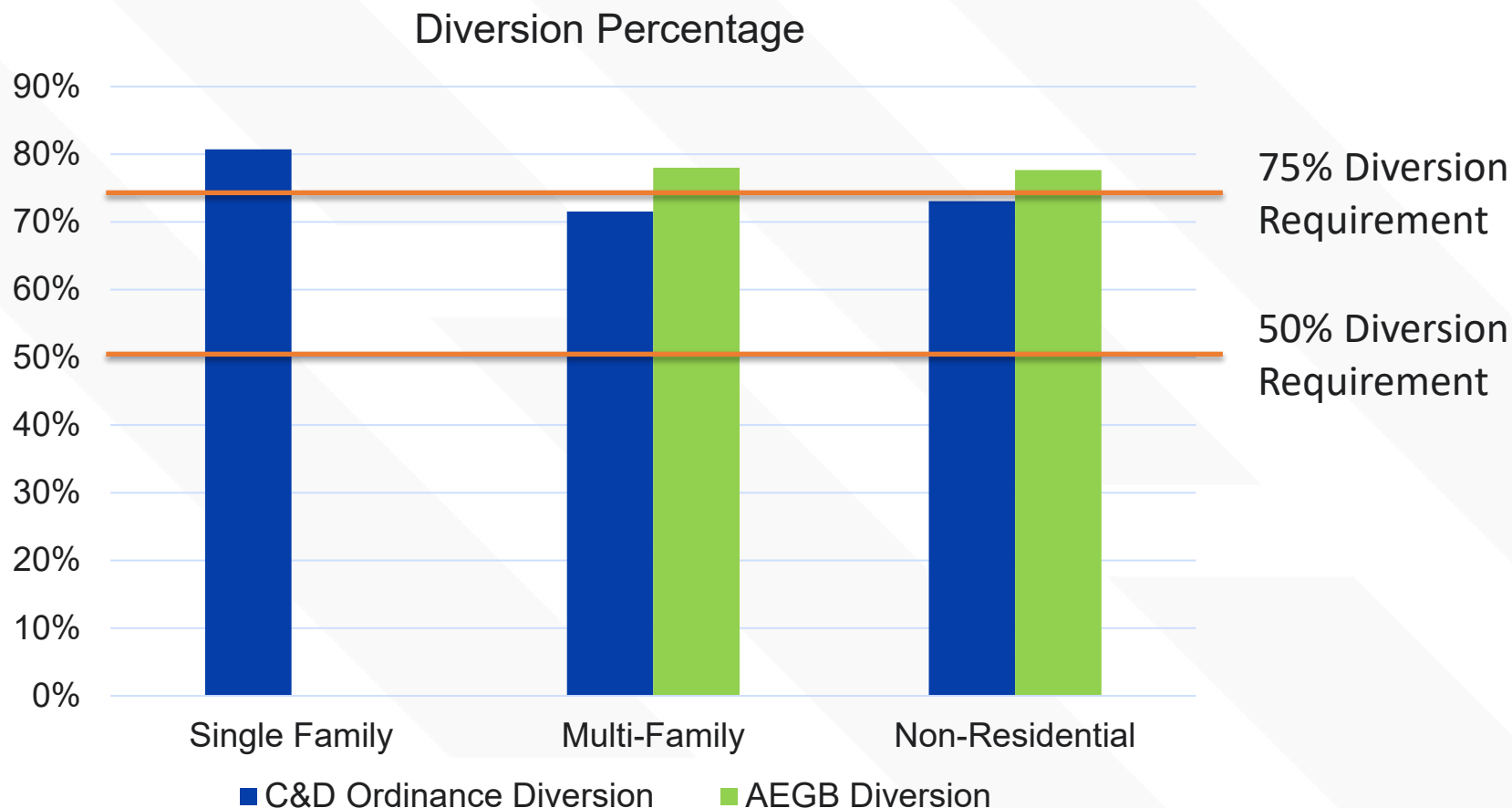


AUSTIN ENERGY  
**GREEN  
BUILDING**

**Development** CITY OF AUSTIN  
SERVICES DEPARTMENT



# Diversion Performance Under C&D Ordinance and AEGB Based on Available Data



- ▶ Note: Austin Energy Green Building Program does not track diversion of single-family projects and all projects are completed voluntarily.

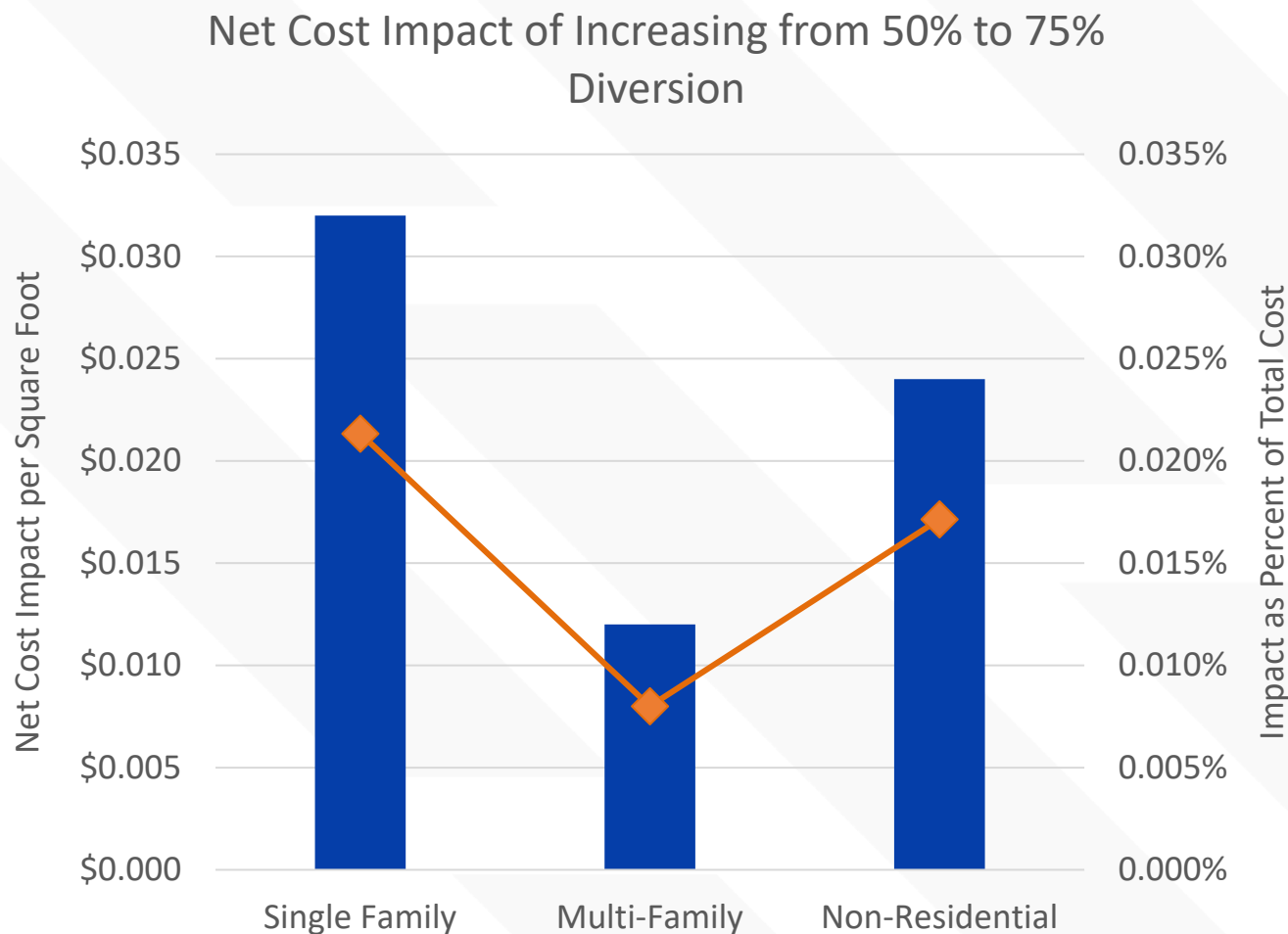


# Challenges to Justify Increased Diversion Requirements

- ▶ C&D Ordinance data reports indicate projects are capable of meeting higher diversion levels
- ▶ Low reporting rate may skew diversion performance upward, and therefore reported numbers may not be representative of all projects
- ▶ Challenges to justify increased diversion requirements
  - Number of reporting projects decreased from 163 to 73 between 2018 and 2019
  - Demolition projects have only had to comply since October 1, 2019
- ▶ ARR staff currently (1) developing enforcement program under C&D Ordinance to increase reporting rate going forward and (2) planning to analyze demolition project data to inform decision-making



# Minimal Economic Impact to Household Affordability





# Small Number of Relocation and Deconstruction Projects



- ▶ Material targeted for reuse include:
  - Windows, doors, cabinets, light fixtures, metal roofing, unused tile, cabinets, counters, toilets, sinks, antique bricks
- ▶ Limited number of relocation or soft-strip projects conducted annually
- ▶ The ReUse People have completed 25 soft-strips and 28 relocation projects since 2015
  - Soft strips projects typically yield three to seven tons of material
  - Focus is on single-family homes – few covered under C&D Ordinance
- ▶ Private contractors complete a limited number of deconstruction projects
  - Detailed data on private contractor's deconstruction projects is unavailable







# Limited Reuse Outlets in City

- ▶ Habitat for Humanity ReStore only outlet identified for reuse of deconstruction material
- ▶ Current capacity sufficient to handle increased volume associated with C&D Ordinance diversion requirements
- ▶ May reach capacity limits if deconstruction projects increase on City-wide basis





# Encourage Deconstruction Projects

- ▶ Deconstruction currently focused on single-family projects
- ▶ Consider voluntary incentives for commercial and multi-family projects, as appropriate:
  - Weight reuse material higher toward diversion requirements under C&D Ordinance
  - Provide rebate of permitting fees
  - Establish tax incentives based on volume or value of salvaged material

# Demand for Construction & Demolition Materials



Material	Construction	Demolition	Local End-Market Demand
Concrete/Aggregate		✓	High
Cardboard	✓		High
Metal	✓	✓	High
Plastic	✓		High
Untreated Lumber	✓	✓	Medium
Gypsum (Drywall)	✓		Medium
Shingles		✓	Low

- ▶ Markets for individual materials determine extent processors can separate and divert
- ▶ Demolition presents additional challenges for recovering uncontaminated recyclable material

# Challenges Associated with Material Handling



- ▶ Processors require recycling loads with consistently low contamination
- ▶ Job sites may not be large enough to place and service dedicated co-mingled recycling roll-offs
- ▶ City can provide technical assistance, education and outreach related to best practices on configuring job sites and reducing contamination



# Limited Processing Capacity Available to Third-Party Haulers

- ▶ Market constraints due to limited processing facilities for third-party haulers
- ▶ Four of 58 active C&D haulers own/operate processing capacity for co-mingled C&D recycling
- ▶ One qualified processor available – accepts limited third-party material
- ▶ Third-party haulers struggle to compete with haulers that own or contract with processing facilities on projects that must comply with the C&D Ordinance
- ▶ Consider opportunities to support haulers that do not own processing or disposal facilities to recycle C&D debris as part of ongoing Zero Waste Master Plan update



# Key Findings

1. Minimal economic impact to household affordability associated with increased diversion requirements
2. Demolition projects have only been part of the C&D Ordinance requirement since October 1, 2019
3. There has not been sufficient time to collect data from demolition projects
4. Low percentage of projects reporting under C&D Ordinance may skew diversion performance upward
5. Processors able to handle increased volume if key materials are not contaminated
6. Third party haulers struggle to compete on C&D Ordinance projects or AEGB projects because limited processing facility access available



# Recommendations

1. Delay decision on increasing from 50 to 75 percent diversion - **consider phased approach with increased enforcement and third-party verification**
2. Analyze submissions from demolition projects to identify if they should be treated the same as new construction
3. Increase resources dedicated to enforcement under C&D Ordinance to increase reporting rate
4. Support generators to reduce contamination of co-mingled recycling loads through technical assistance, education and outreach
5. Consider opportunities to support haulers that do not own processing or disposal facilities to recycle C&D debris as part of ongoing Zero Waste Master Plan update



# Questions?