



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)

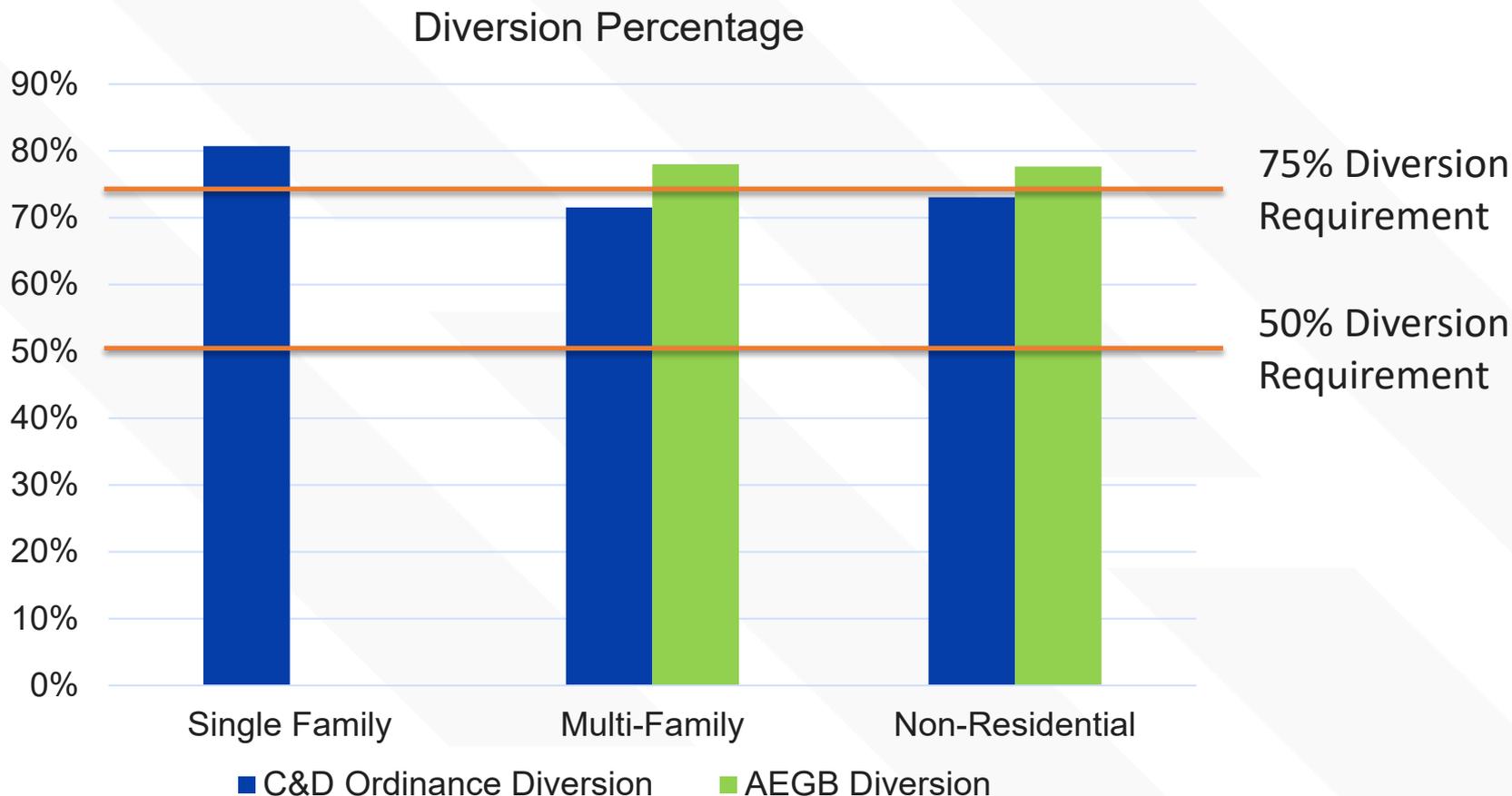
Data Analysis

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





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.

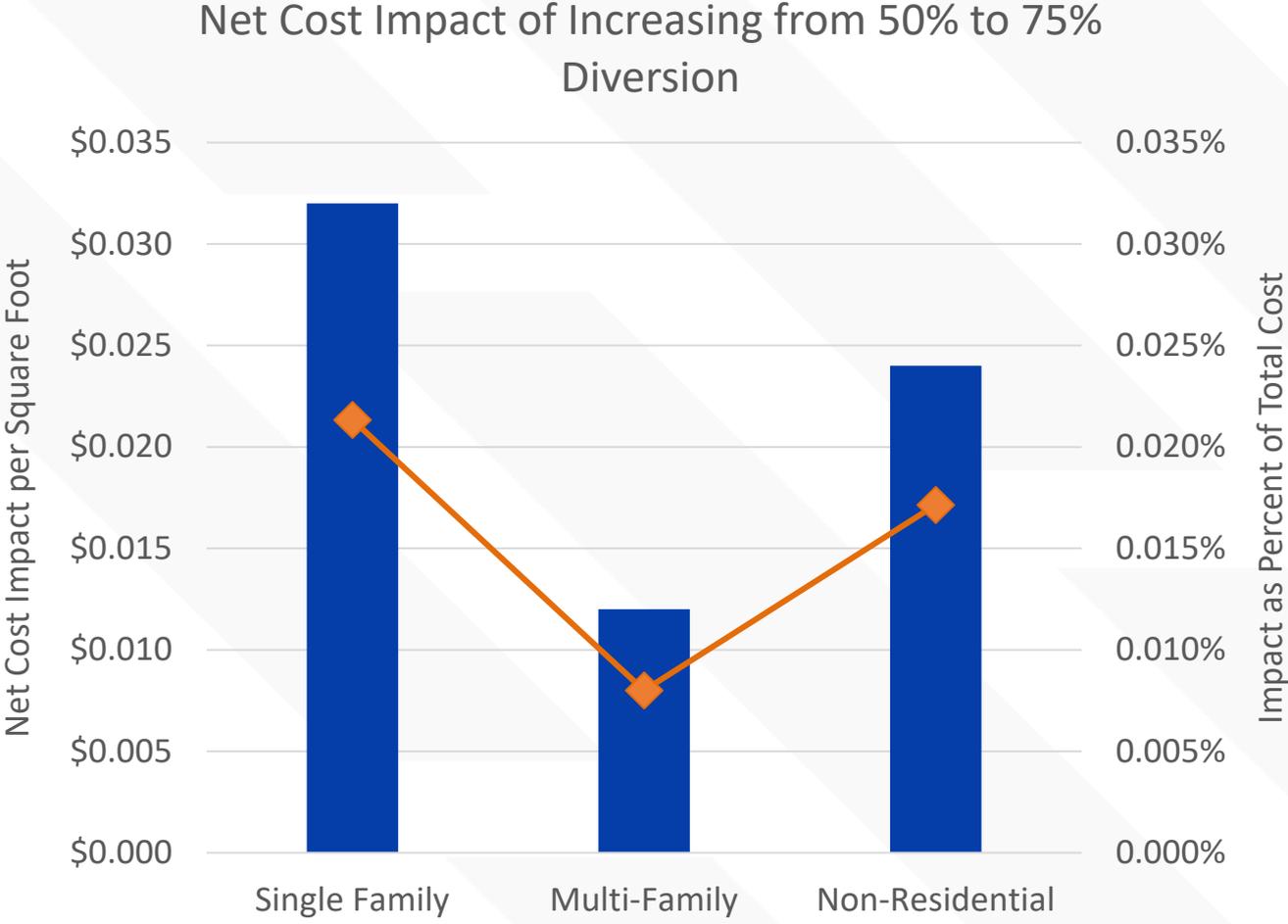


Challenges to Justify Increased Diversion Requirements

- ▶ 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?