

Multifamily Recycling & Composting Education Program

Update to Solid Waste Advisory Committee

Socorro Medina

Multifamily Recycling & Composting Education Program Manager

04/03/2019

Seattle Public Utilities



City of Seattle

Outline

- Program partners
- Stats & metrics
- Recommendations for new buildings
- Evaluation

Program Partners



3R Sustainability Consulting & Services

Sara Alula



Internal

- Solid Waste Inspection & Compliance
- Customer Service Call Center
- Environmental Justice & Service Equity

Core Outreach Team



Multicultural consultants & SPU environmental educators that collectively speak 10 different languages

Multifamily Recycling & Composting Outreach

- Technical Assistance
- Resident Education
- Property Manager Workshops
- Tools (food waste baskets, bins)
- Signage (flyers, posters, decals)
- Ambassador Program (FORC)
- Direct mailers, Newsletters, Website
- Tabling & Presentations
- Other



Multifamily Recycling & Composting Outreach

- **Technical Assistance**
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Technical Assistance

Visit properties to:

- Evaluate
- Troubleshoot and
- Improve solid waste collection
 - Focus on food waste

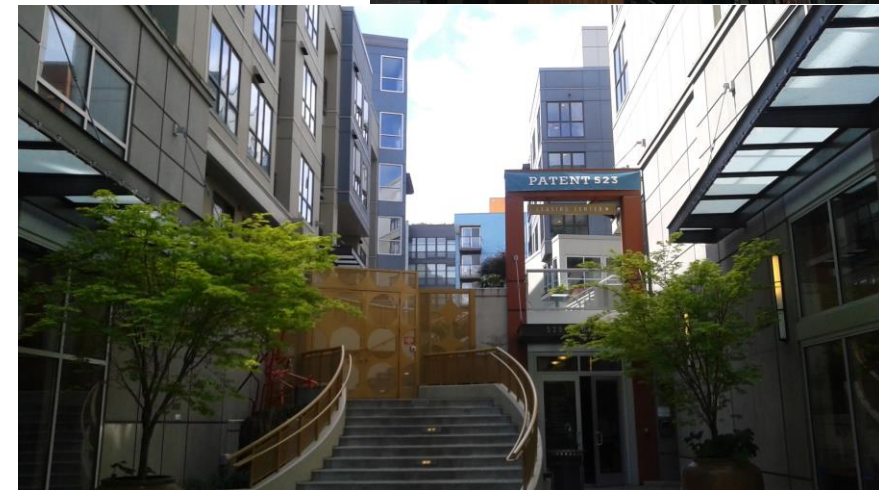


Technical Assistance Stats

- 2.5 years (Jan 2016-Jun 2018)
- 589 assistances conducted
- Focused on large buildings (100+units)



| | |
|--|-----|
| Total # of bldgs in Seattle | 286 |
| # of assisted bldgs | 271 |
| # of bldgs with performance metric collected | 230 |

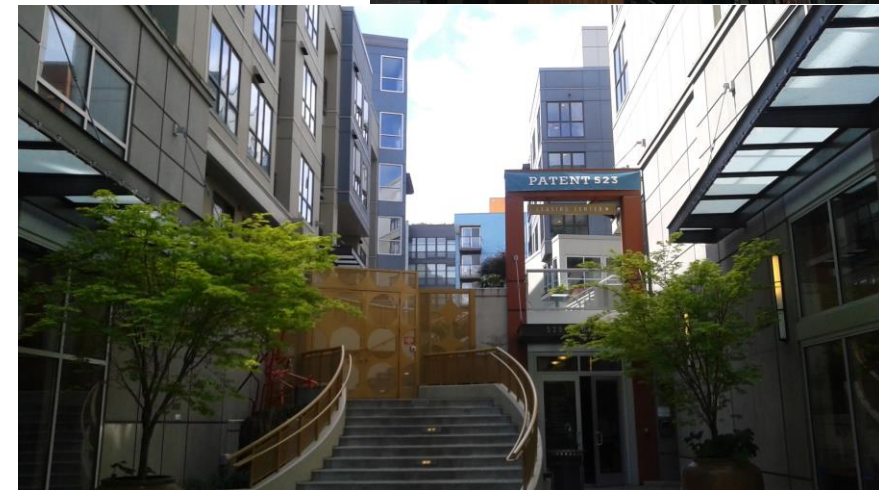


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Which waste streams are available on every floor, which ones just on one level?

On-floor trash rooms

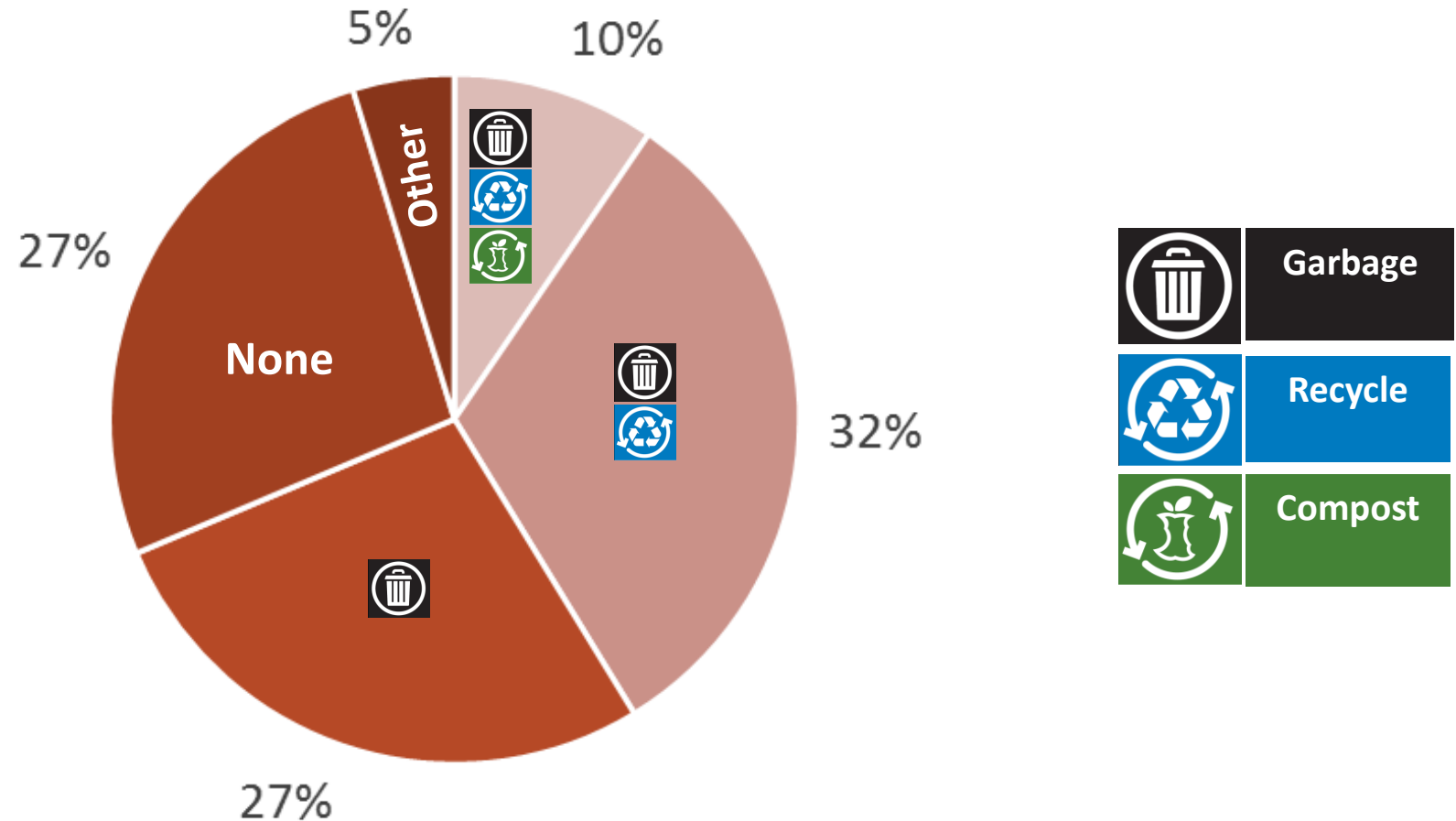


Outdoor enclosure



No stream avail on every floor

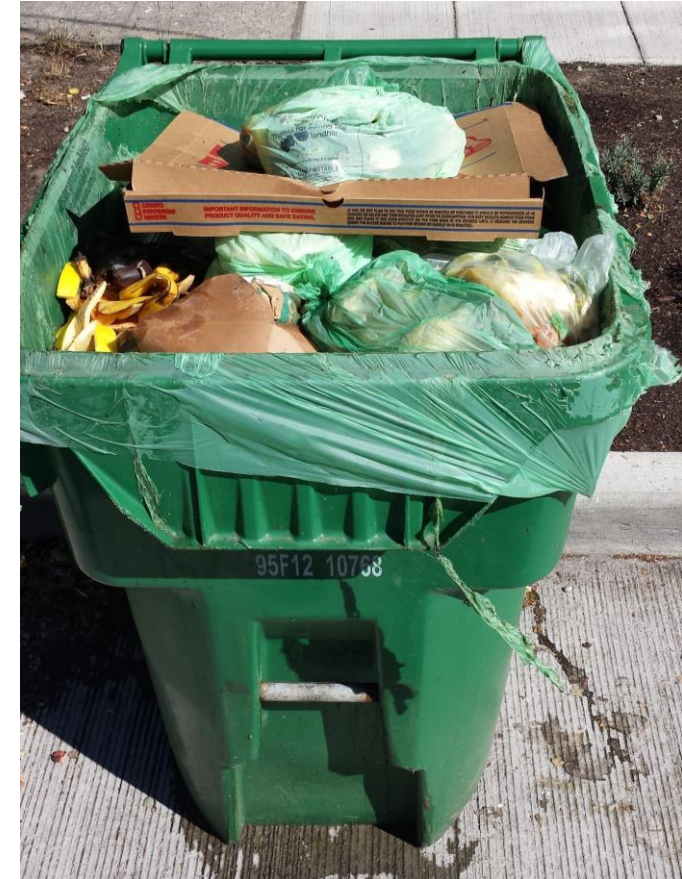
% of large buildings with different # of streams on every floor



How to measure food waste collection performance?

→ Subjective Food Waste Rating:

How robust is the food waste collection system on a scale of 1-4, where 1 is strong and 4 is weak?



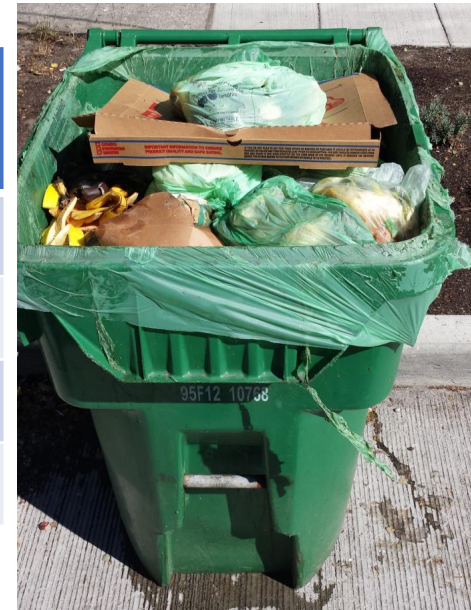
How to measure food waste collection performance?

→ *Subjective Food Waste Rating:*

How robust is the food waste collection system on a scale of 1-4, where 1 is strong and 4 is weak?

| Summary Statement of Food Waste Collection System* | Food Waste Rating |
|---|-------------------|
| System is not working | 4 |
| System is workable but inconsistent/chaotic | 3 |
| System works | 2 |
| System is important & works for manager, maintenance, & residents | 1 |

*There are clear and specific descriptions for each category



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The condition of the compostable bag/liner is a helpful guide!

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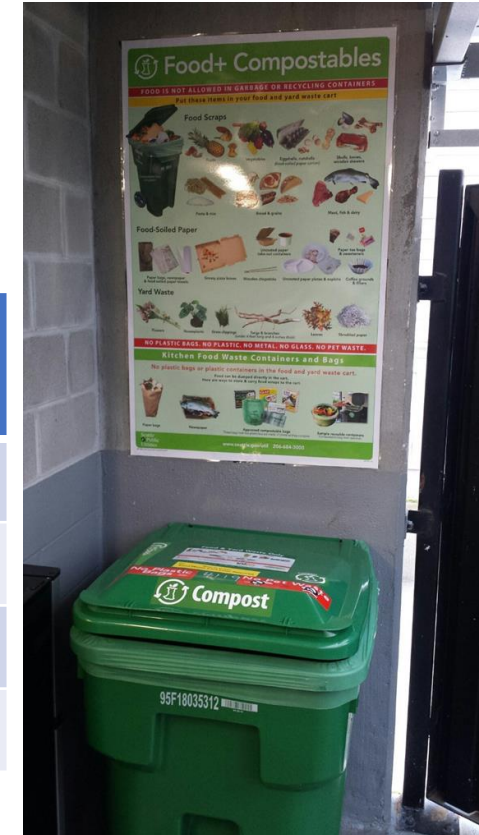
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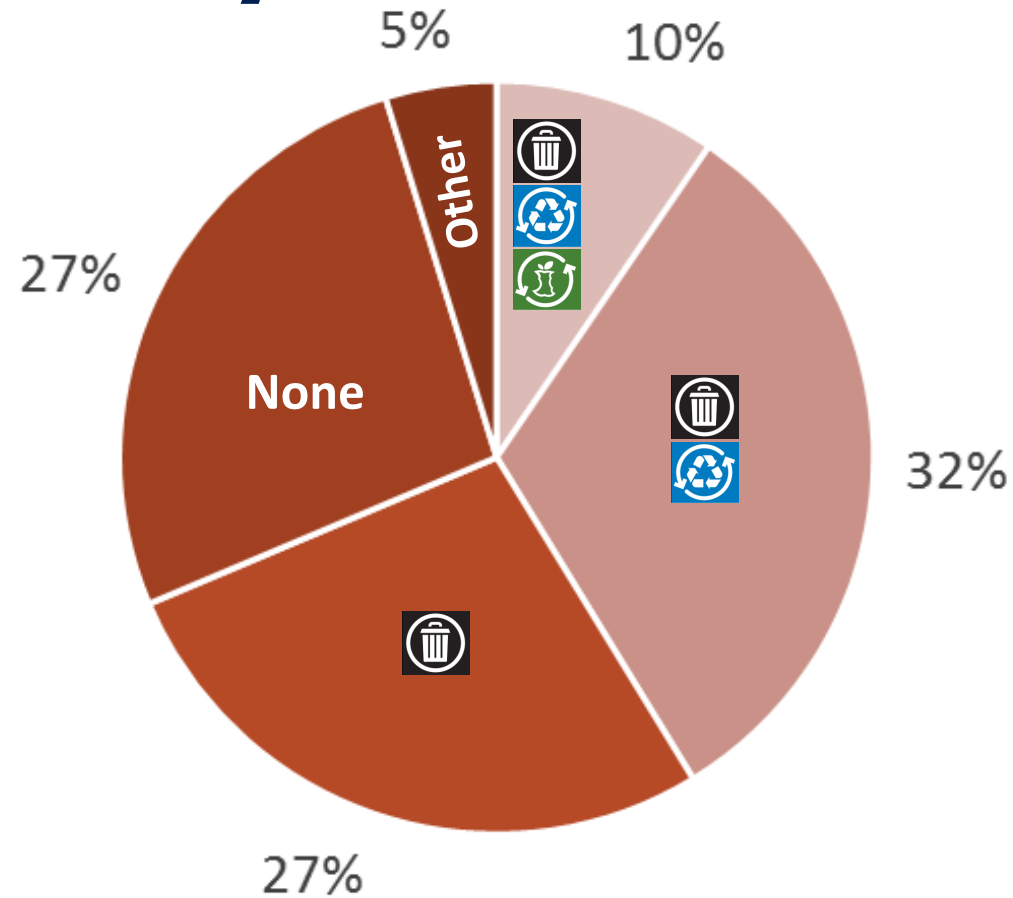
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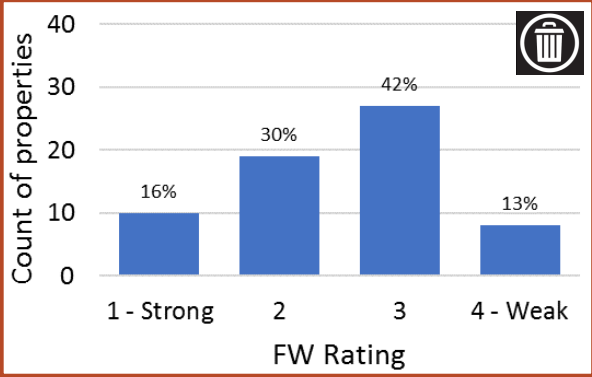
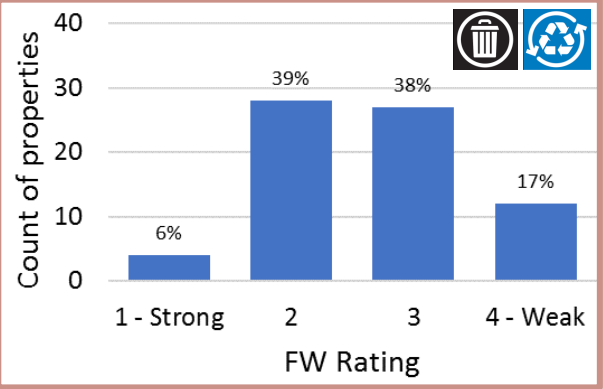
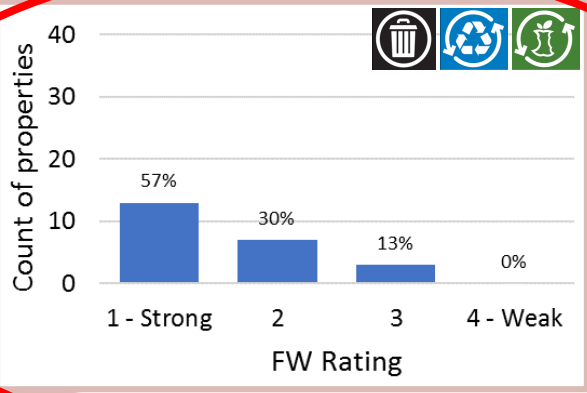
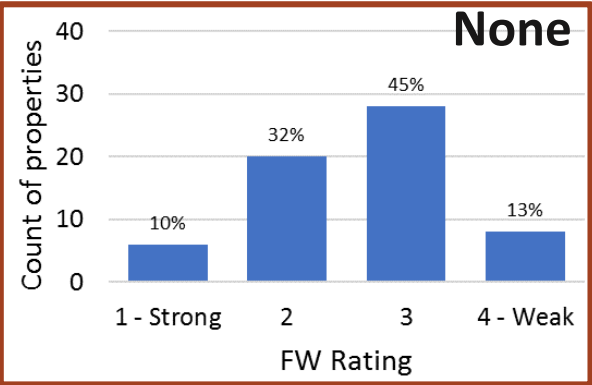


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% of large buildings with different # of streams on every floor



Food waste rating distribution by # of streams on every floor



Recommendations for new buildings

- Collection of garbage, recycle & compost on each floor
 - Land-use code updates
- Study on benefits & challenges of food waste chutes:
 - Sample: 16 buildings in Seattle, Bellevue, San Francisco, & Toronto
 - Triple chutes for garbage, recycle & compost best serve diversion goals and minimize maintenance
 - Avoid diverter chutes: Issues with system operations and user interaction
 - Caveat: Small sample size. However, results reinforce findings from previous research on various chute systems





Evaluation: Technical Assistance

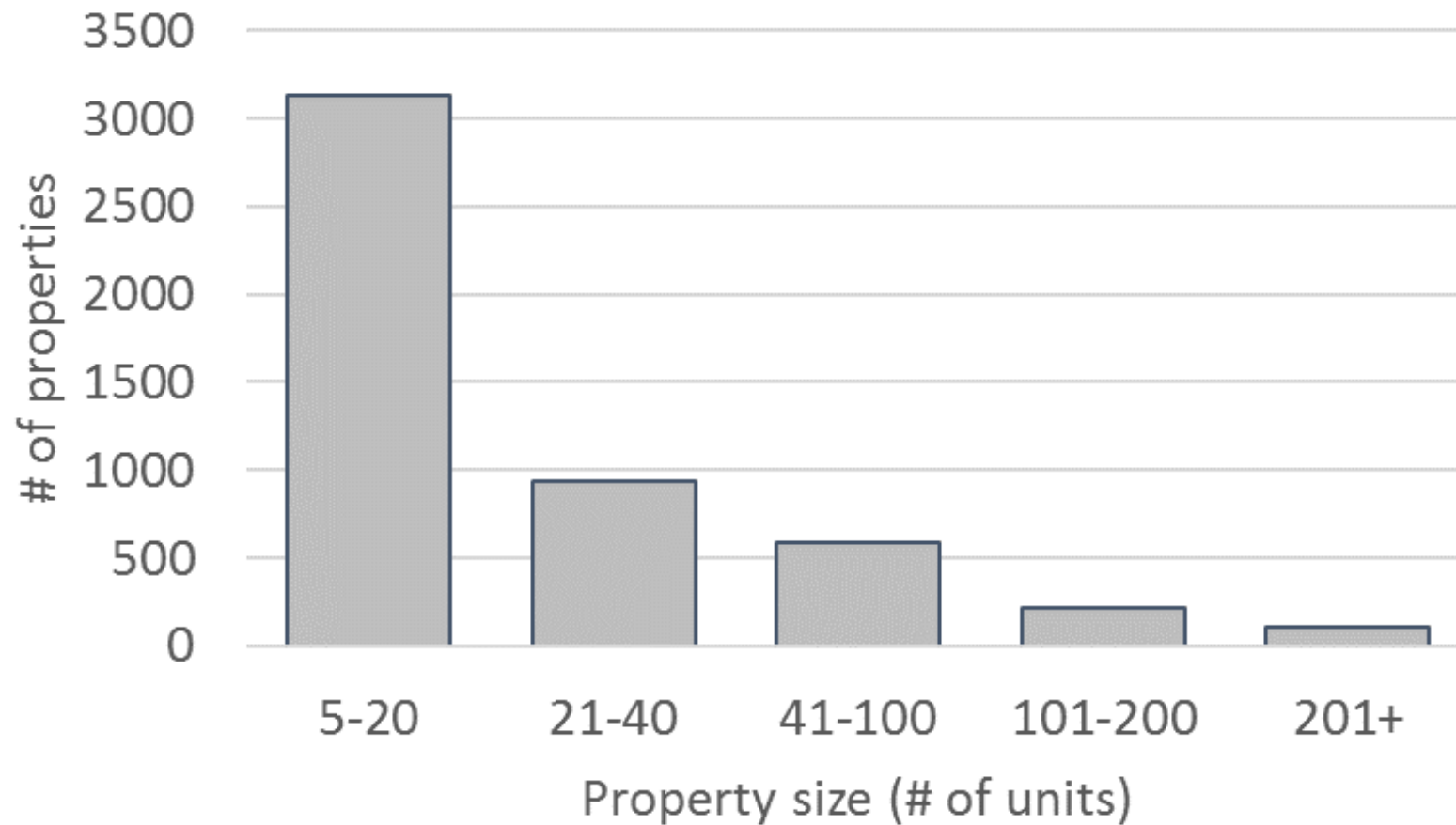
Evaluation Results (Technical Assistance)

- PERIOD: 2.5 years (Jan 2016-Jun 2018)

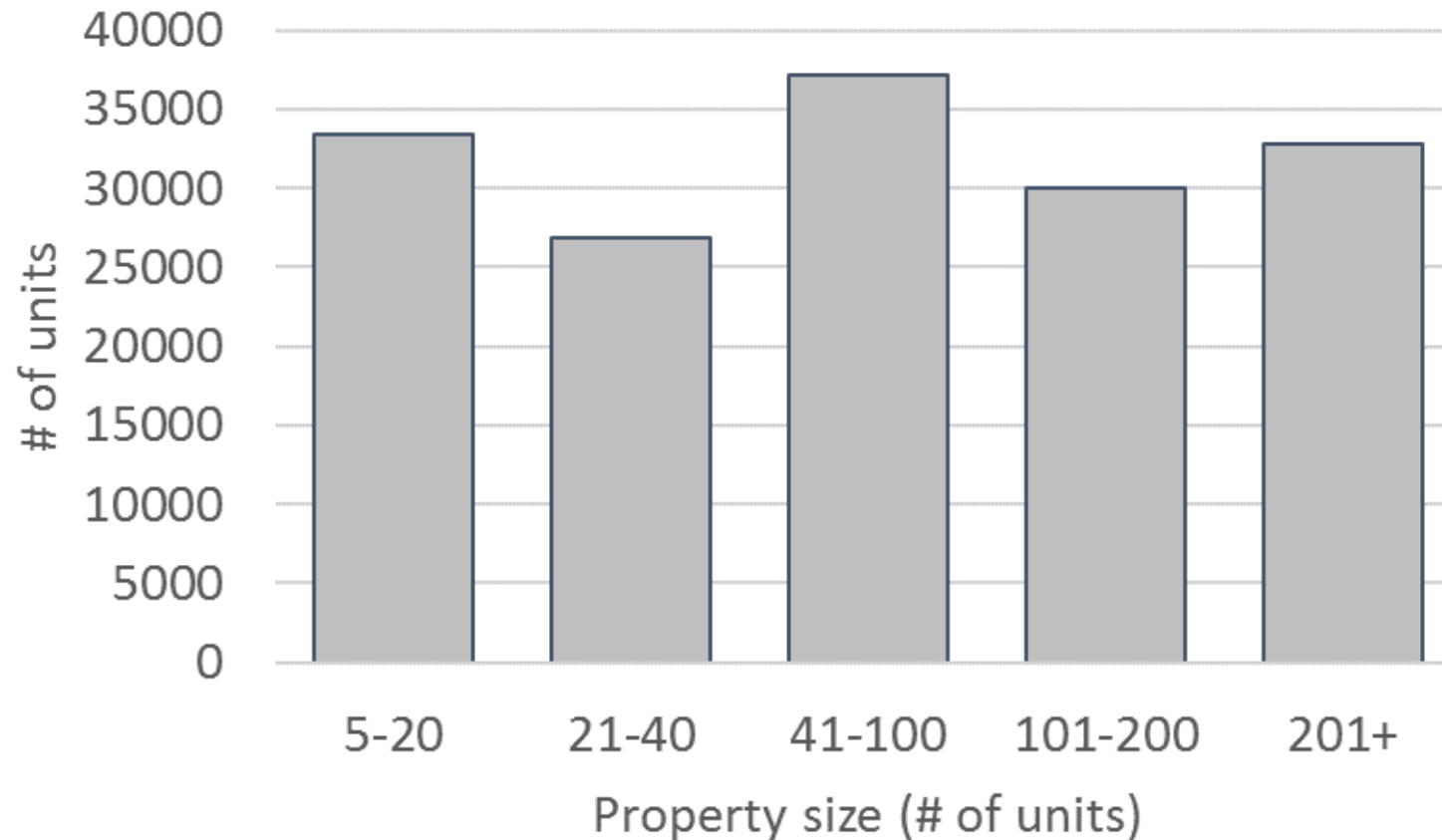
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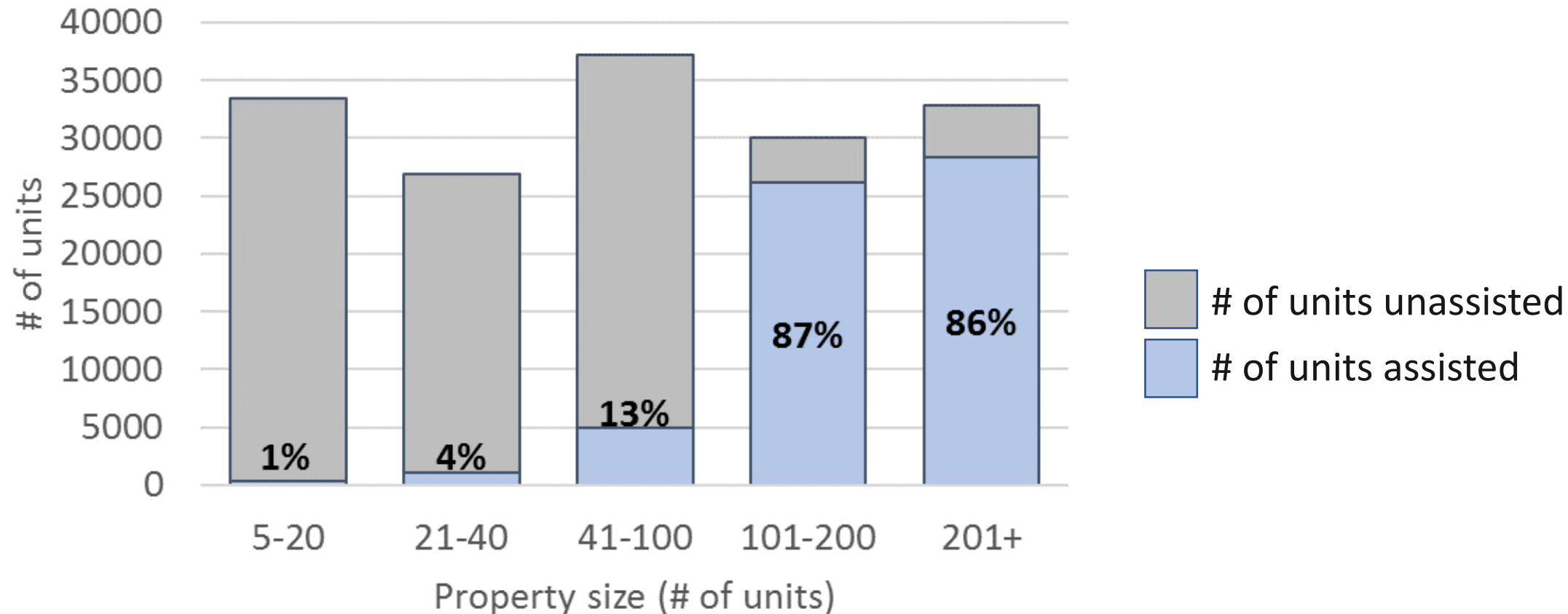
Number of properties by their size (dwelling units)



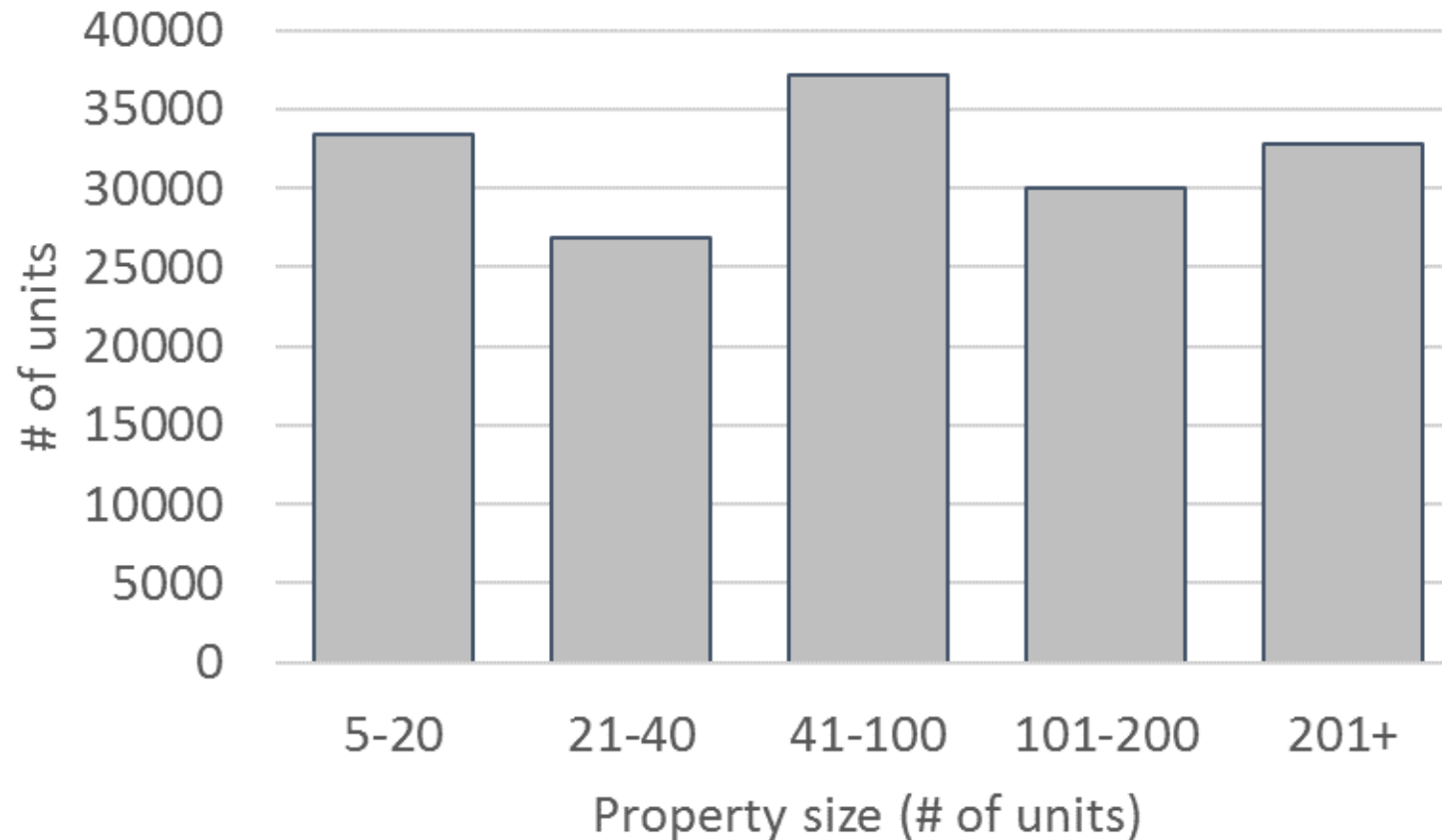
Aggregated number of dwelling units by building sizes



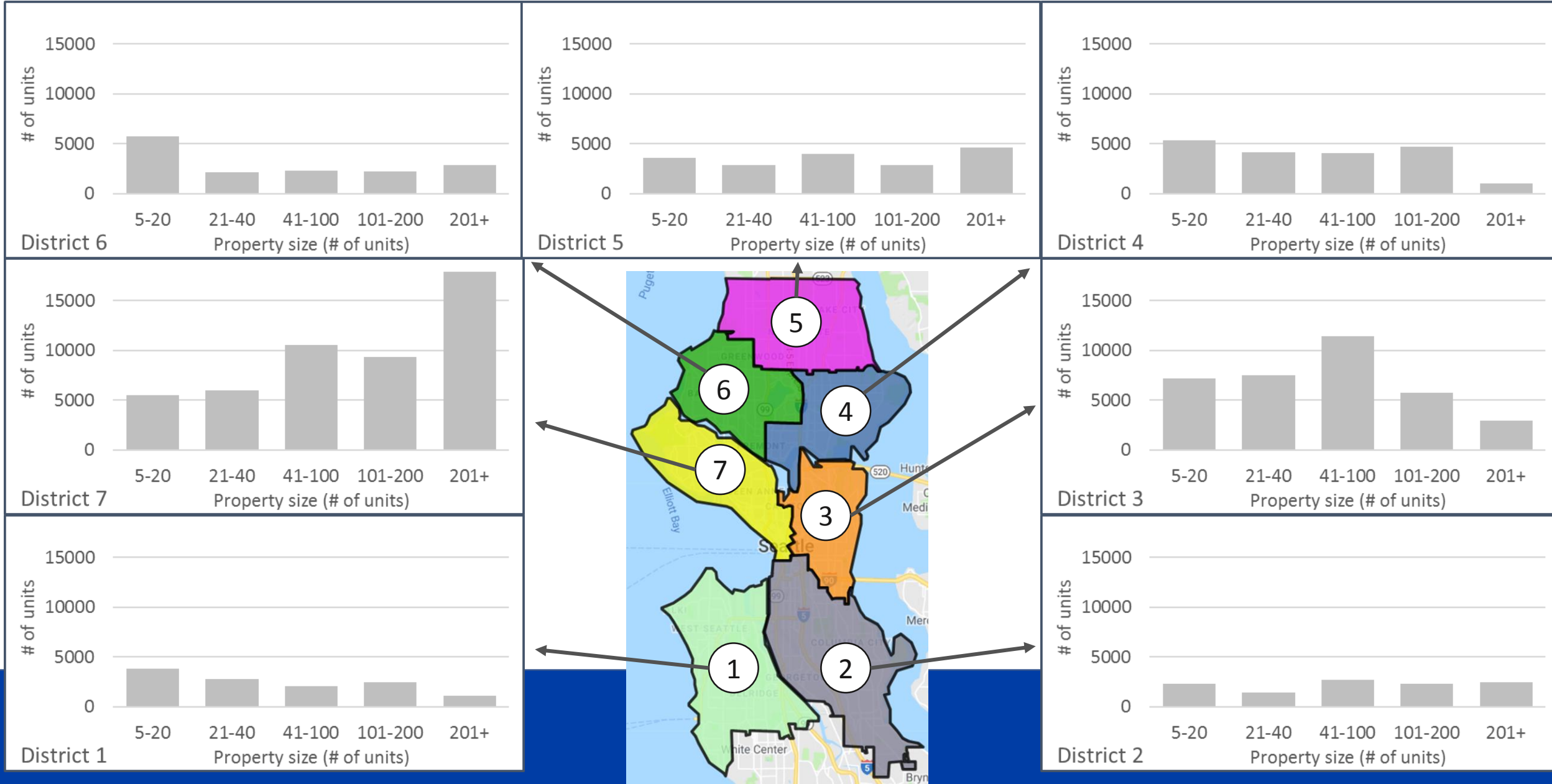
Aggregated number of dwelling units by building sizes (gray) Technical Assistances conducted by building size (blue)



Aggregated number of dwelling units by building sizes

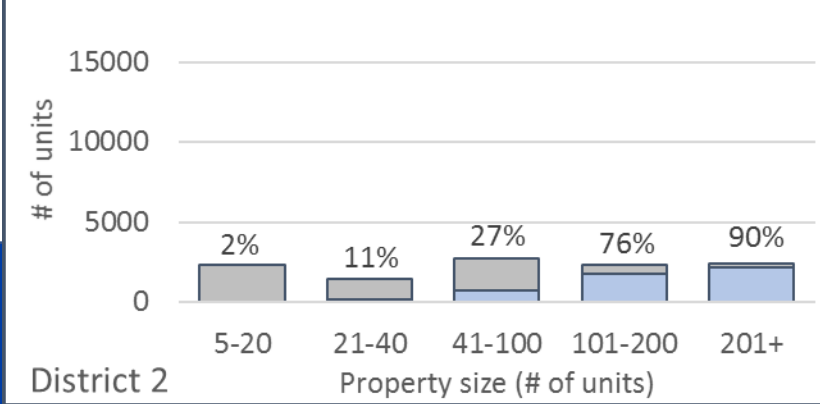
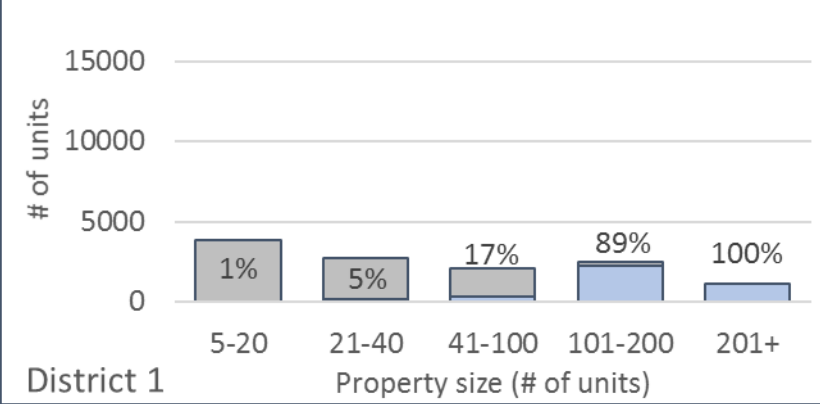
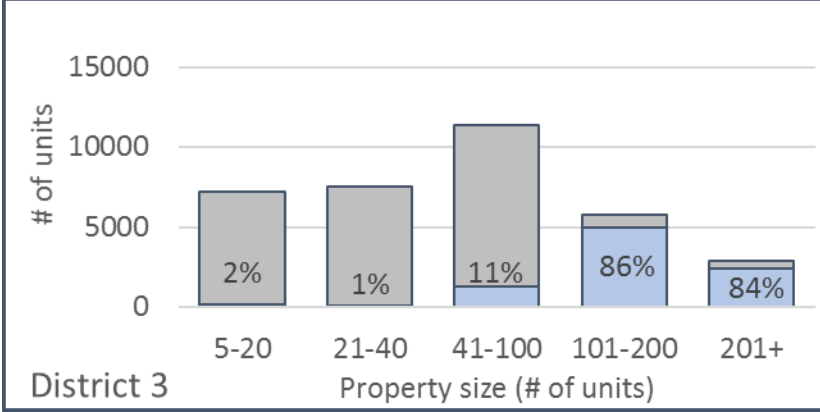
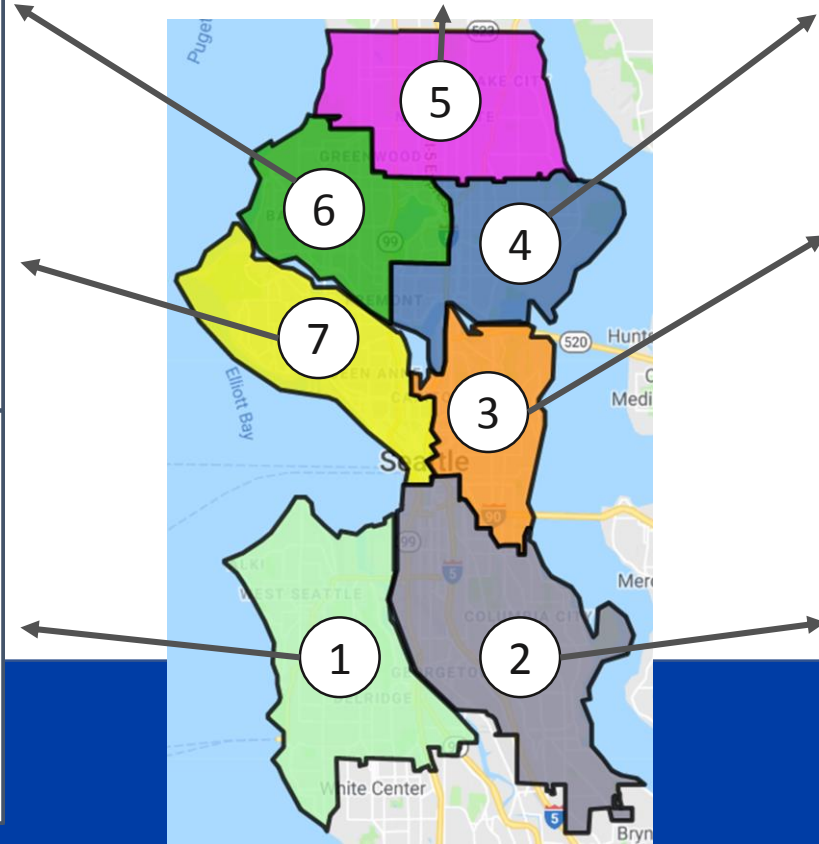
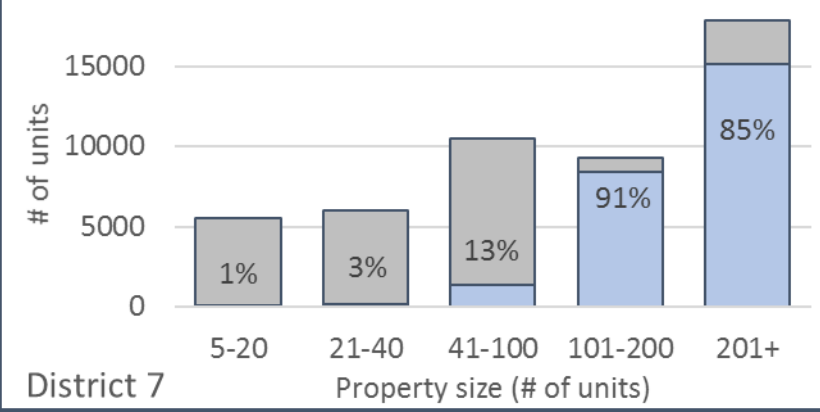
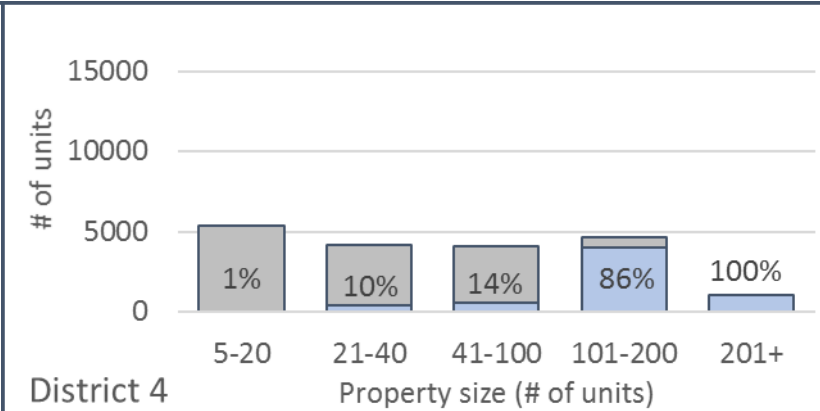
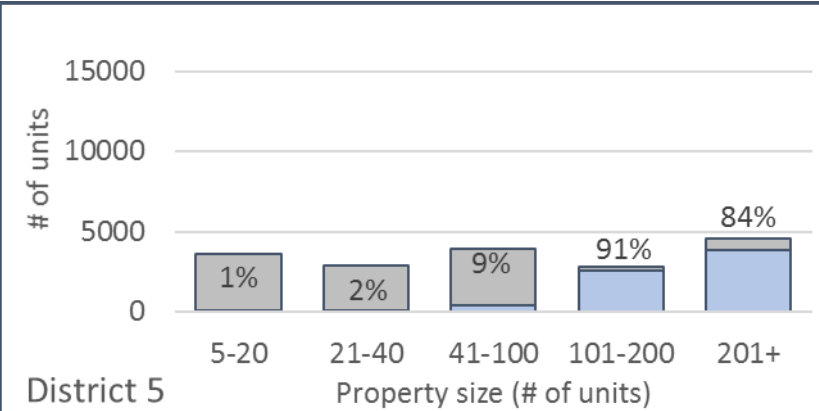
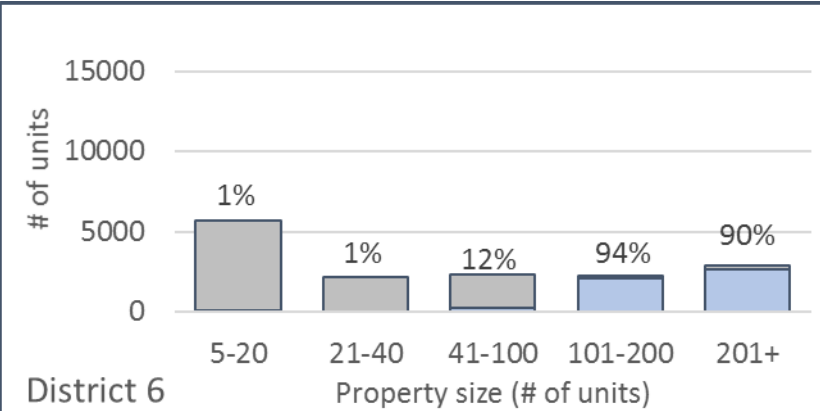


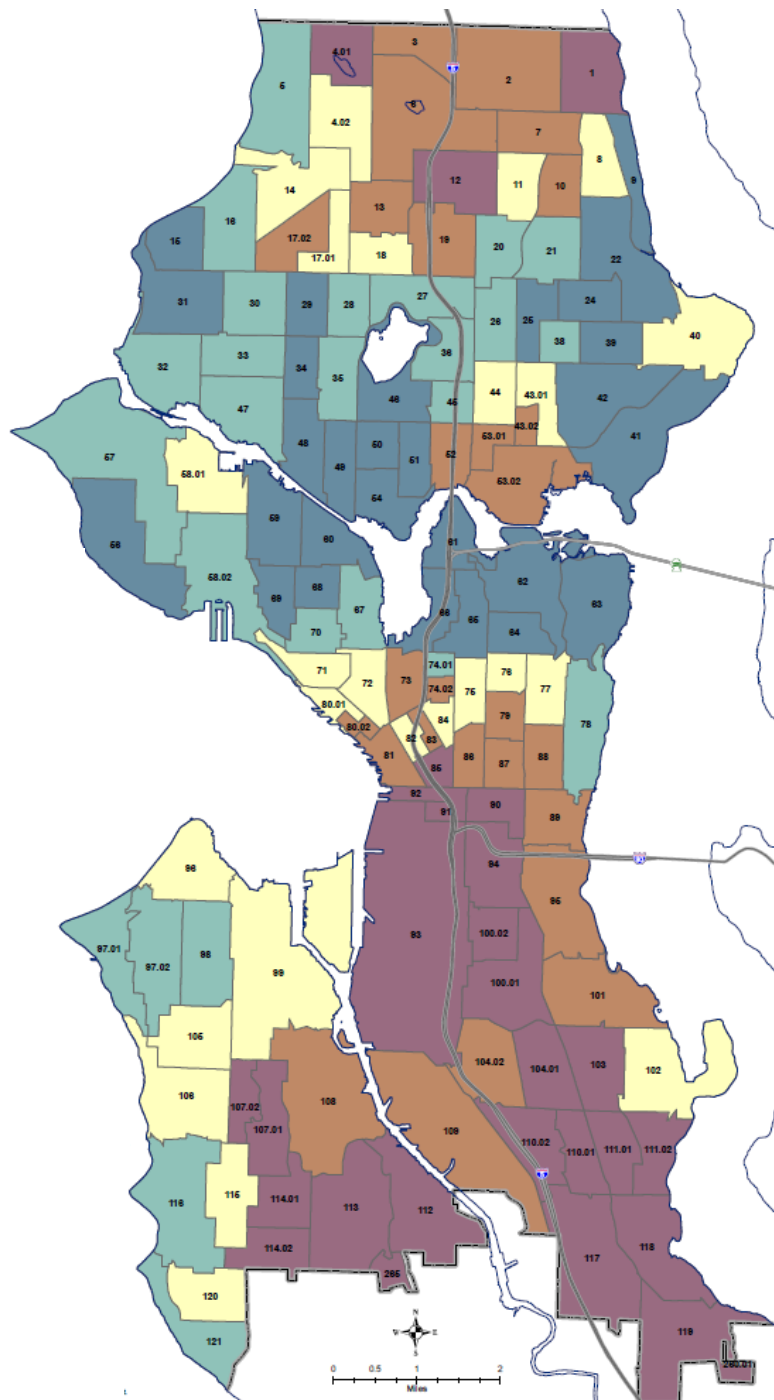
Distribution of units by district & building size



Distribution of units by district, building size, & assistance conducted:

of units unassisted
of units assisted





Racial and Social Equity Index:

- Race, English Language Learner & Origin
- Socioeconomic Disadvantage
- Health Disadvantage



Lower disadvantage & priority



Higher disadvantage & priority



City of Seattle

Evaluation: Preliminary results

- PERIOD: 2.5 years (Jan 2016-Jun 2018)
- OUTPUT: Percentage of MF units that have been assisted by
 - Building size
 - Geographical area
- OUTCOMES: Changes in subjective Food Waste rating

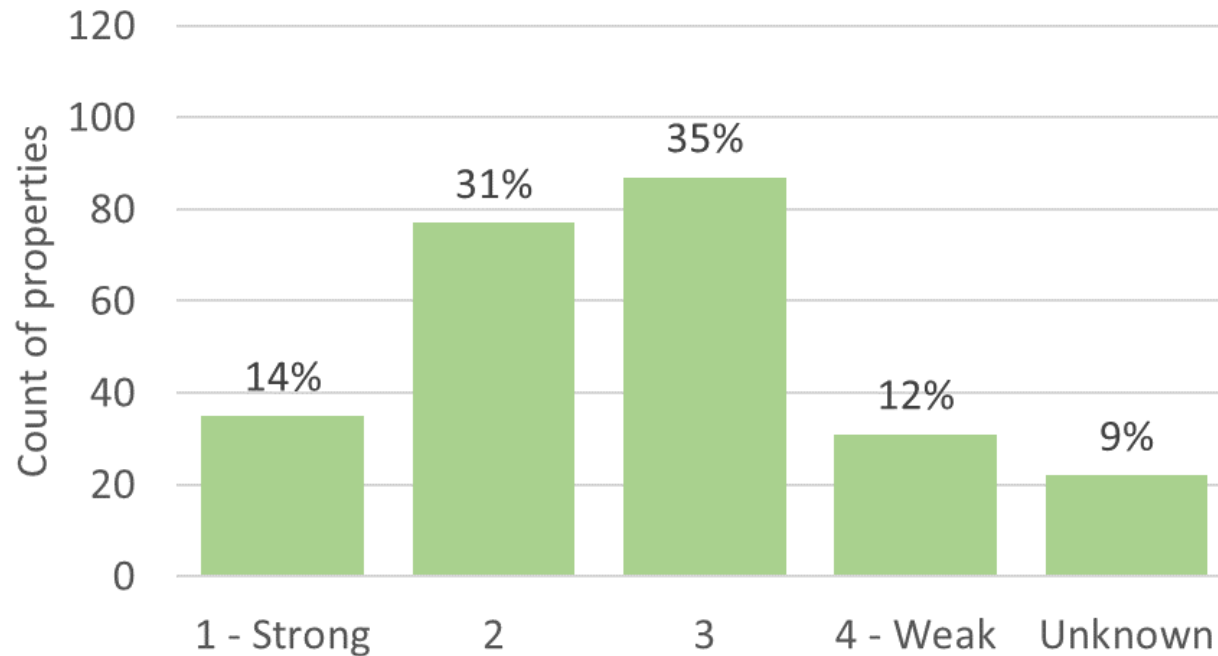
Changes in subjective food waste rating

- Ratings collected at two different times for 104 large buildings



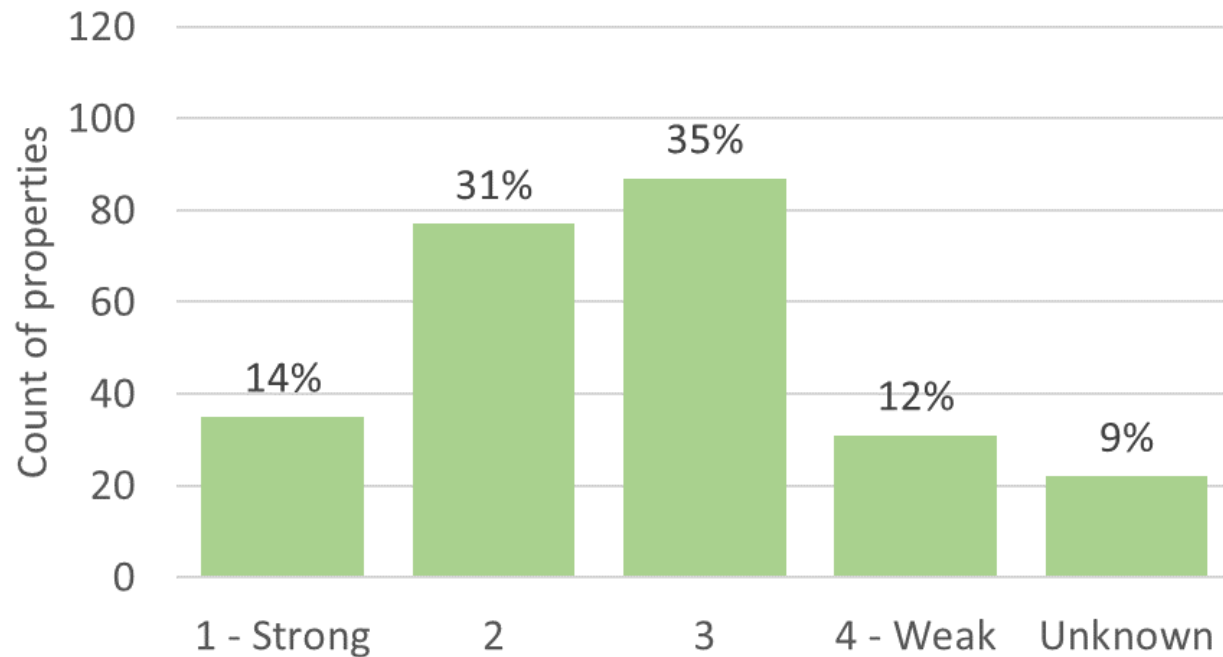
Food Waste Rating Distribution

- Earliest visit

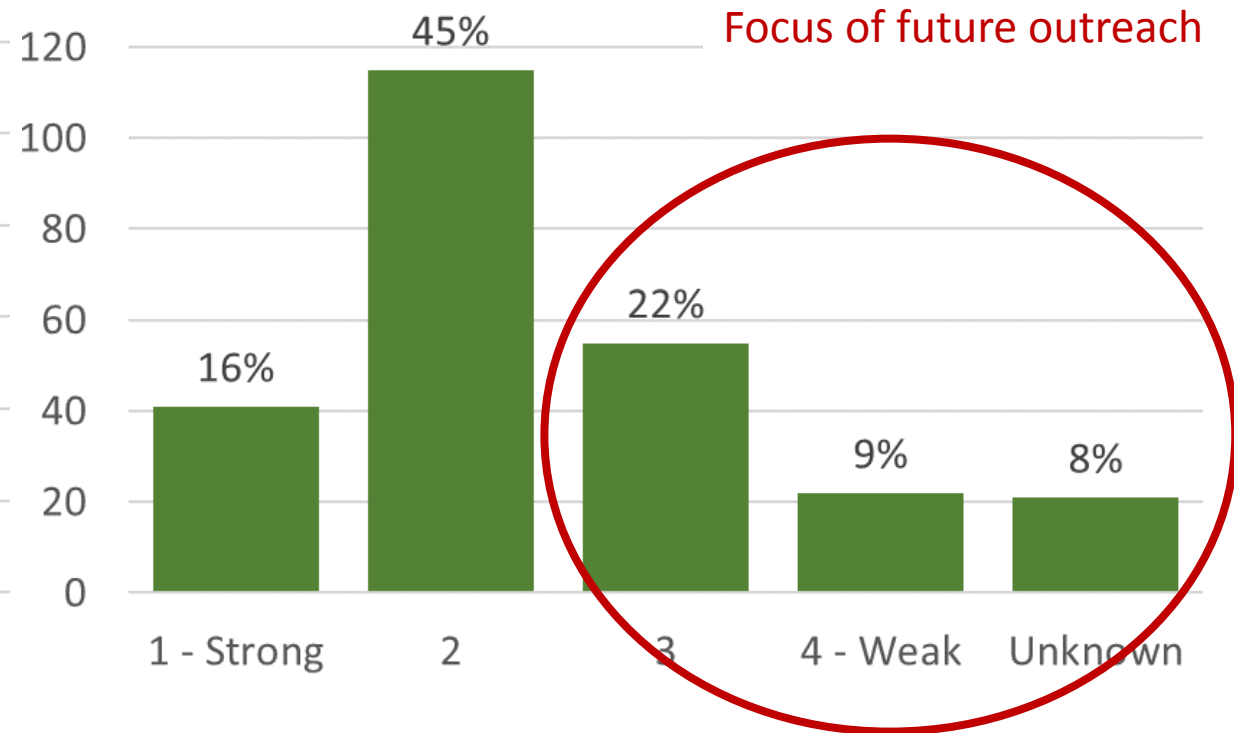


Food Waste Rating Distribution

- Earliest visit



- Latest visit



Next Steps

- Determine what is needed to improve bldg. with weak food waste rating:
 - Enhanced assistance by Education and Compliance teams
 - Build proposal for optimizing SW capacity & diversion that may provide savings to property
- Better serve buildings with less than 100 units
- Make sure new MF buildings have “single-family style” convenience

Thank you!

Materials to distribute:

- Mailer for property managers
- Mailer for MF residents

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