

Lancaster Composting Co-op: Decentralized Community Composting

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A Case Study and an Argument



Community-led: social infrastructure is resilient infrastructure

Carbon-negative

Adaptable, flexible model

Low capital: bins pay for themselves

Volunteer-based (for better and for worse)

Composting in Lancaster: Our rationale

- No policy mandate for composting
- Little city budget / capacity for city-wide pickup
- No commercial pickups

- The eco-friendly stuff of that gives “a moral tickle.” (Van Jones)
- Typically, for people:
 - a) with back yards
 - b) with money
 - c) who don't want/don't know how to deal with food waste on their own.

The Story of the Co-Op

Timeline

2018: Our goal is to make the benefits of composting non-existent of local composting opportunities. accessible to all residents in the City of Lancaster. Small grant (\$11,000) from Center for Sustained

Engagement with Lancaster (F&M College) spurred partnership with city and community members to foster a Lancaster compost option, largely drawing upon Washington, DC's model.

March 2021: Work begins to construct the bins, gather and train the preliminary team; community outreach.

April 2021: "Officially" launched on Earth week. The first two bins were in Musser Park and the New Holland Ave Recycling Facility.

July 2021: 3rd bin began (behind Culliton Park), + \$15,000 grant from Keep Pennsylvania Beautiful / Giant Fdn.



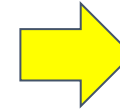
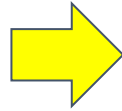
How our model works: the physical side

YES:

- Fruit and veggie scraps
- Eggshells
- Coffee and tea grounds and filters
- Small amounts of untreated yard waste / leaves
- Shredded, uncoated paper
- Shredded cardboard (tape removed)
- Straw

NO:

- Meat
- Cheese or other dairy products
- Bones
- Fish
- Oil / fat
- Flowers (unless organic)
- Pet poop or manure
- Sticks & branches over 1/2"
- Diseased plants and weeds
- Plastic, metal Styrofoam, or glass

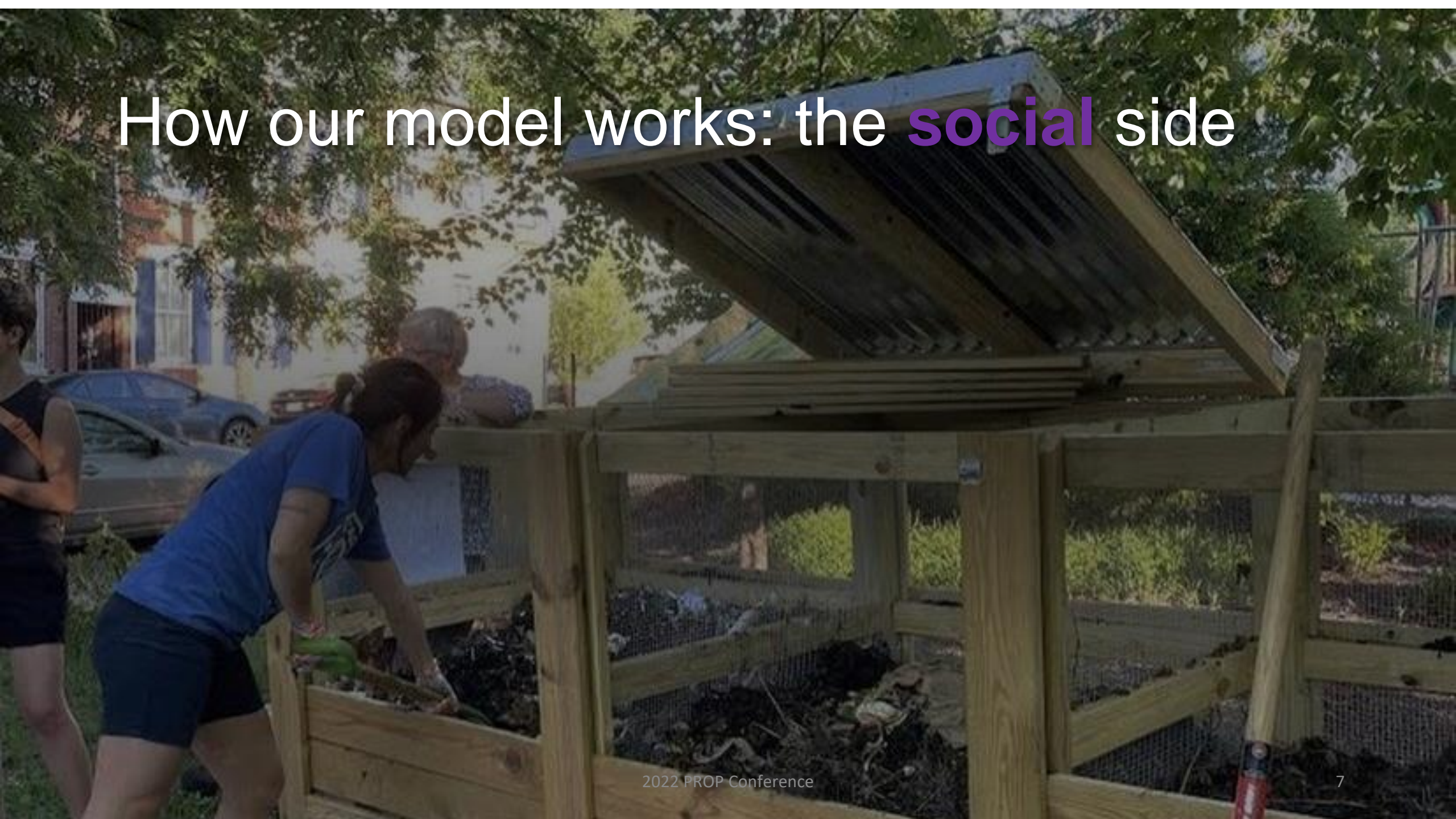


At the bins: key principles

- Smell-proof, rodent proof bins
- Lasagna method of composting: aerobic
- **Locked access:** only trained members participate in order to keep compost healthy
- **Captains:** Active communication, strong interpersonal skills and community ties, the go-to person with neighbors and members, year long commitment, 3 hrs/month
- **Members:** Participation in bin maintenance (approx. 1 hr/month), follow the guidance from member training and captain.
- Each location has own flavor/flair/spirit



How our model works: the **social** side



Orientations, Workdays, Member Agreements



1. Trainings

- Compost captains trained by Master Gardeners in train-the-trainer workshop
- Captains lead new member orientations and workdays
- 1-2x / Month workdays (“work socials”) for bin aeration, sifting, etc.

2. Community Outreach

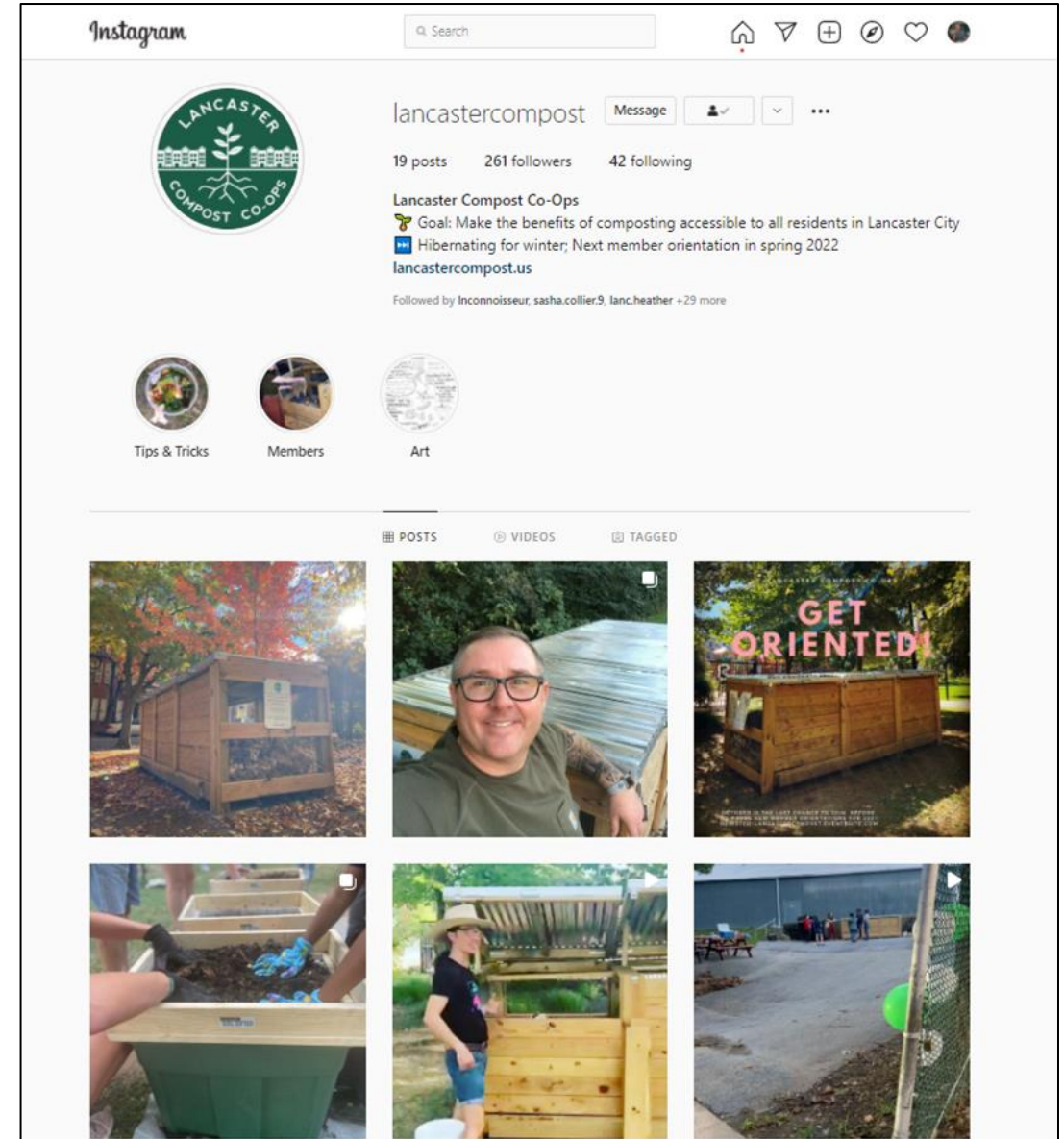
- Prior to bin launch, consultations
- Site visits
- Neighborhood flyers

3. Communications

- Website
- Eventbrite (sign-ups for orientations)
- Social Media (Facebook & Instagram: LancasterCompost)
- Email: Captains ↔ Bin members

Where we're at now

- 206 registered members
- 5 sites across the city: Musser Park, New Holland Ave Recycling Facility, Behind Culliton Park, Linear Park, Buchanan Park
- 2 bins built + captains (awaiting placement)
- Active website and social media (500+ followers on Instagram)
- Program evaluation completed for 1st year, scholarly publication in progress.
- Consulting with other groups to share the model



Our Decomposition Dreams

Create high quality compost, which will yield social, economic, and environmental benefits for all Lancaster's residents

Visions:

Bins at appropriate locations within walking distance for all Lancastrians

Reflect the full diversity of Lancaster's residents

Be an inspiration for urban sustainability initiatives for other cities

Get everyone composting... maybe leading to a city biodigester plant, or businesses that do pick-up that function as compliments to our work

Advocate for policies and programs to expand composting, promote food recovery, and reduce waste

It's about more than just compost. It's about community.

- ❖ Challenges to the model of city-as-sole service provider
- ❖ Beyond volunteering
- ❖ People's control: members make decisions
- ❖ We support each other as a network of independent groups working in shared purpose
- ❖ *We have so much fun you'll want to soil your pants.*

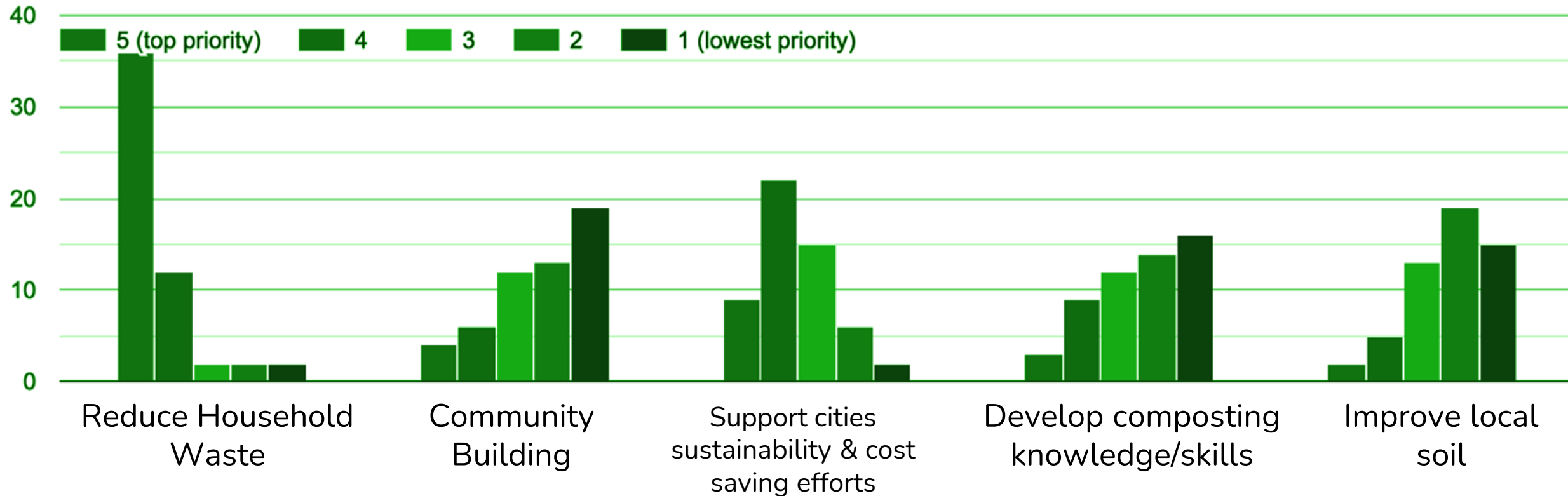


Our Membership and Experience

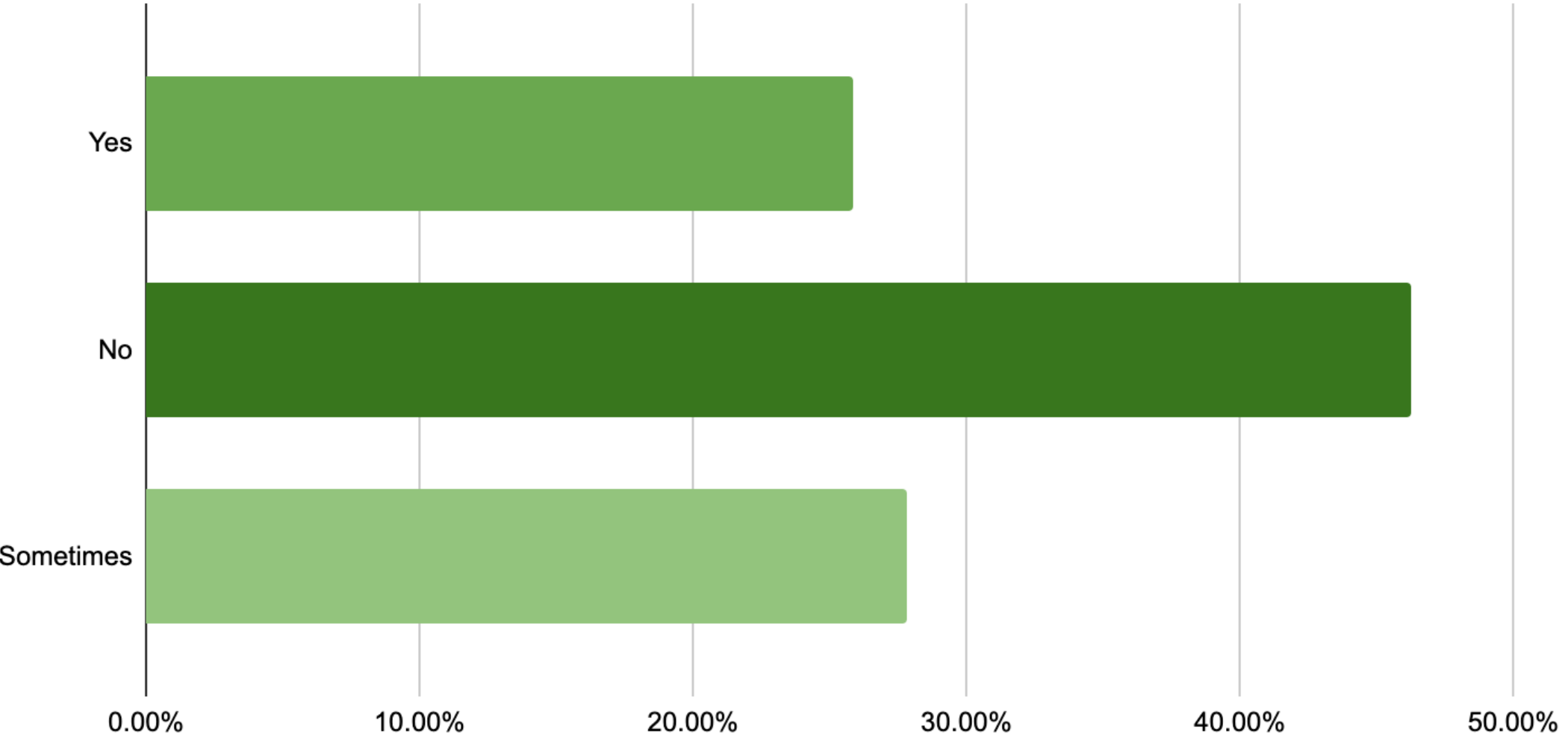


Motivations for Involvement: Reducing Household Waste a Top Priority

If you had to rank the reasons for your involvement, how would you prioritize the following motivations for joining this initiative?

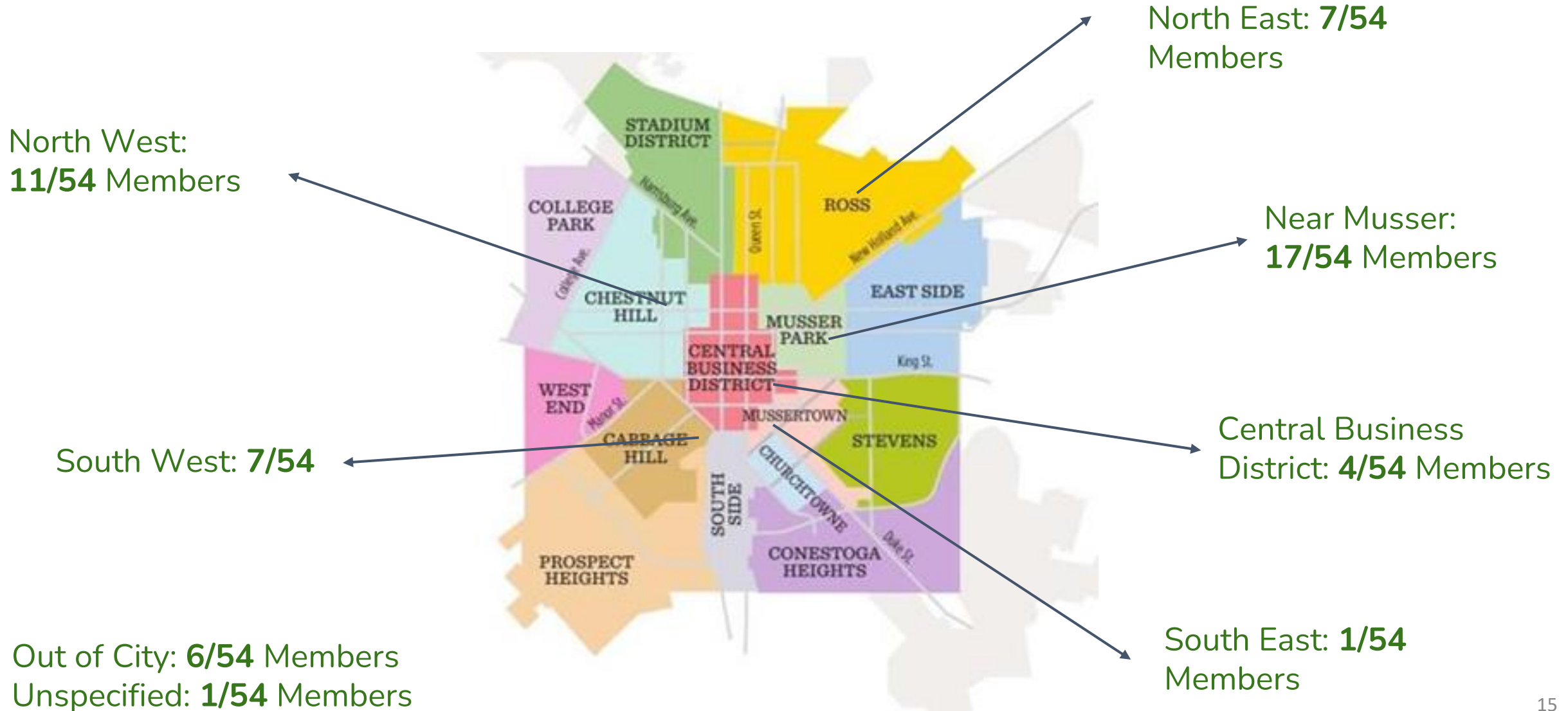


Compost Experience: Limited Experience Prior to Co-Op Participation

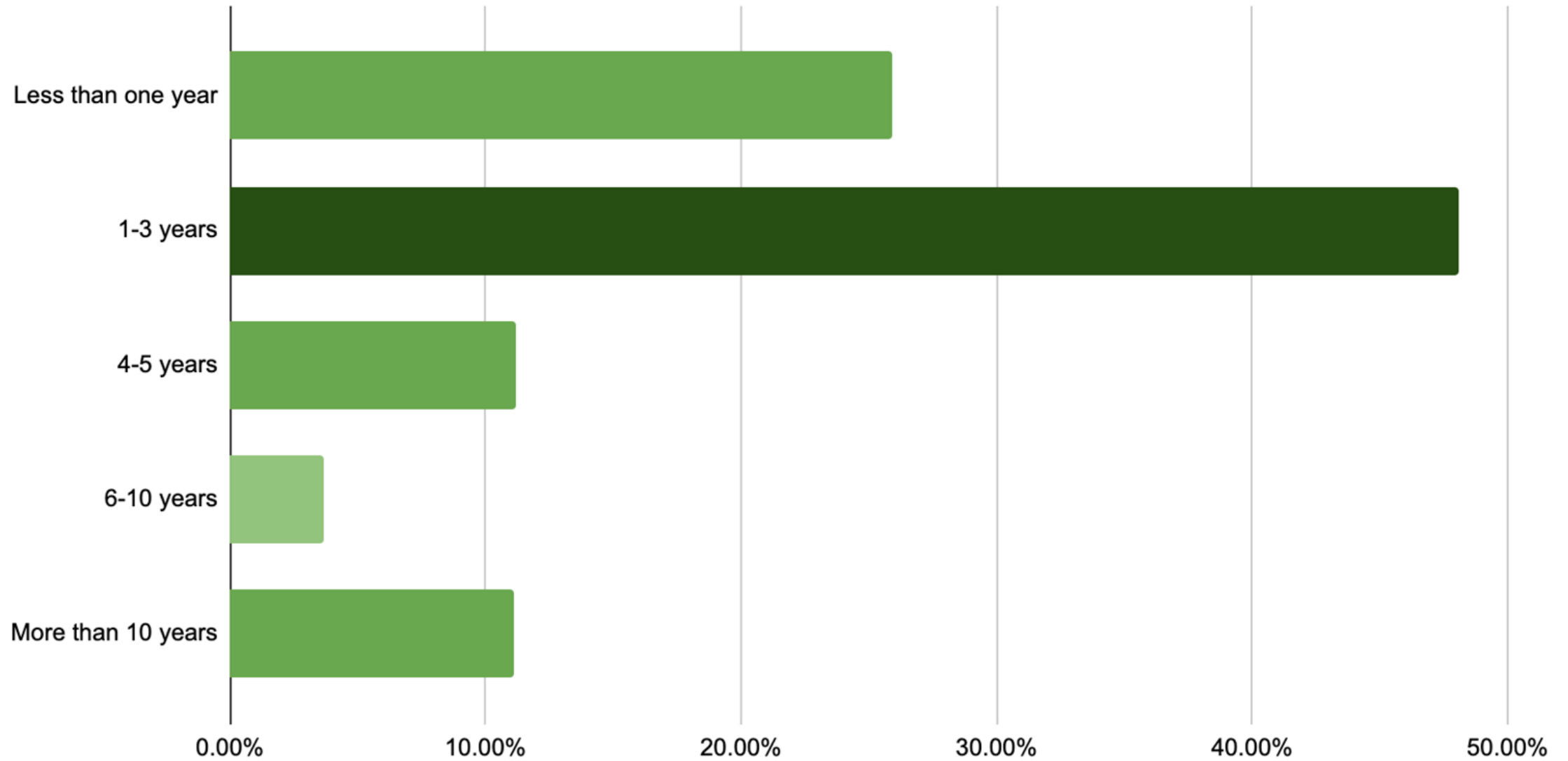


54 Responses to: Prior to your Lancaster Compost Co-op orientation, were you already composting food waste in your home?

Geographic Breakdown of Membership



Member Residency: Majority Between 1-3 Years



54 respondents answered the question: How long have you lived in the neighborhood in which you presently reside?

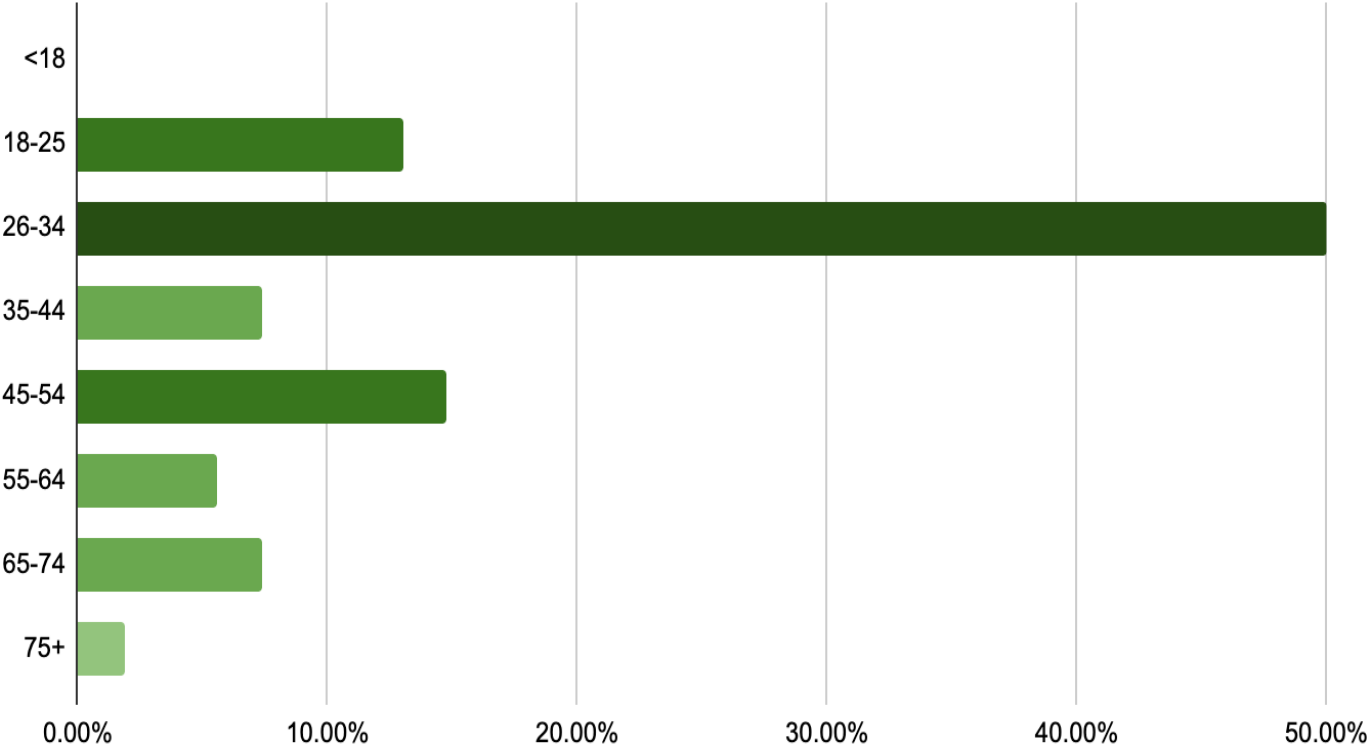
Membership Community Participation

In Other Cooperatives	In Other Community Groups
<p>92.6% (50/54) of members are not in other cooperatives at this time</p> <p>5.5% (3/54) of members are in other cooperatives at this time</p> <p>1.9% (1/54) of members are not sure of their participation in cooperatives at this time</p>	<p>Faith Based Group- 33.3%</p> <p>Local neighborhood group / Civic association- 13.9%</p> <p>Recreational interest groups- 11.1%</p> <p>Local environmental organization(s)- 25%</p> <p>Local social justice organization(s)- 27.8%</p> <p>Local or regional governmental organization- 5.6%</p> <p>No other involvement at this time- 5.6%</p> <p>Other- 30.8%</p>

Membership: More Demographics

- 90% White
- Majority ages 26-34
- 72% female

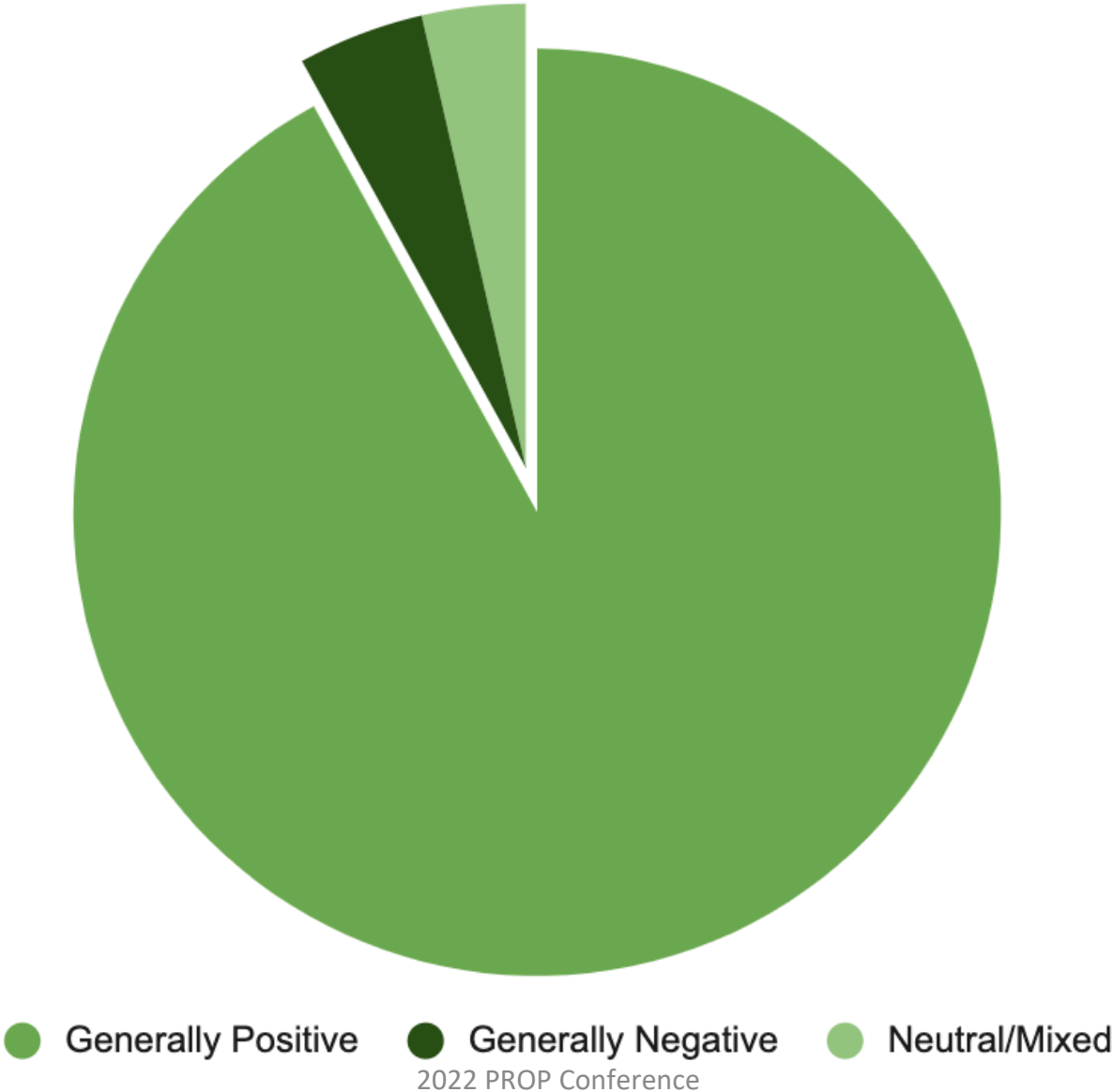
Member Age: Majority between 26-34



54 respondents answered the question: Which age group best describes you?

Bin Descriptions: Generally Positive

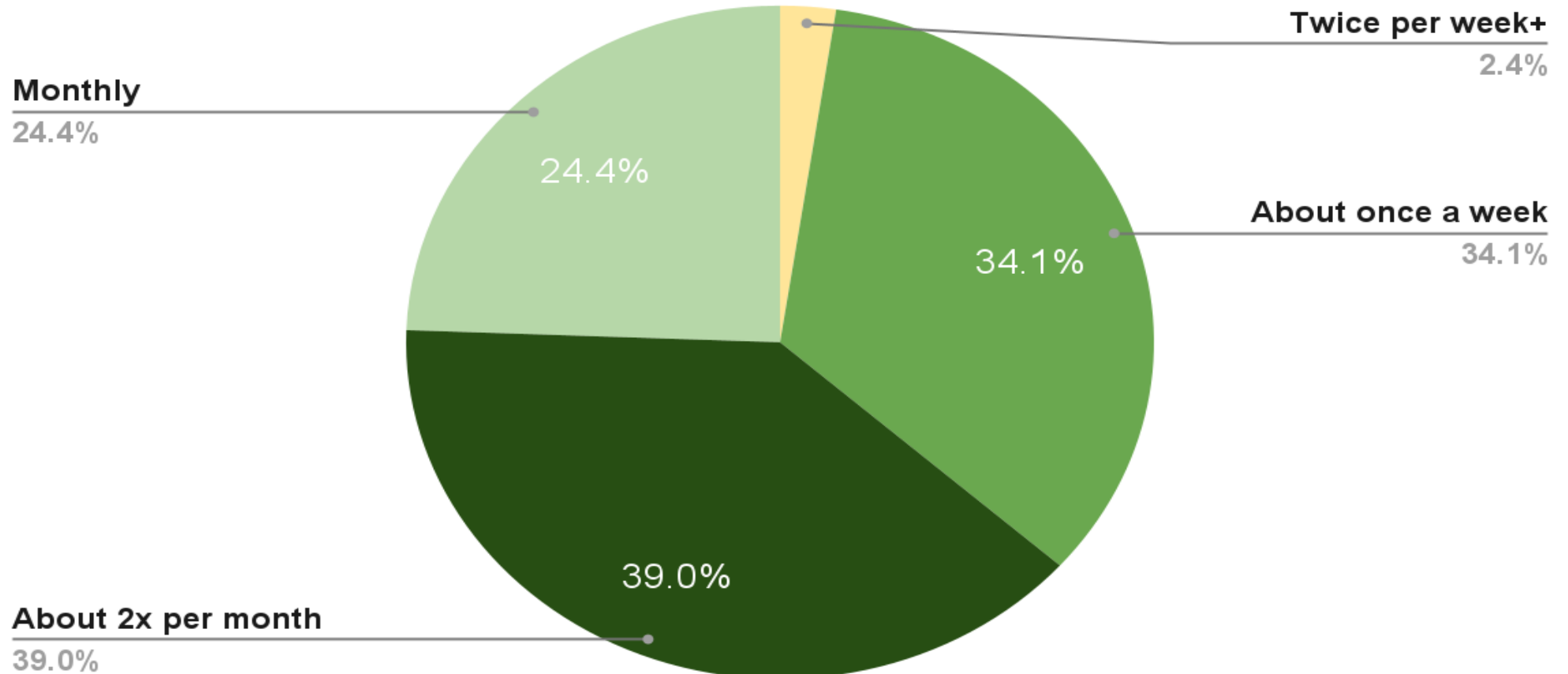
41 Responses to: Which words come to mind when you think about the compost bin that you use?



40% of drop-offs are walking trips

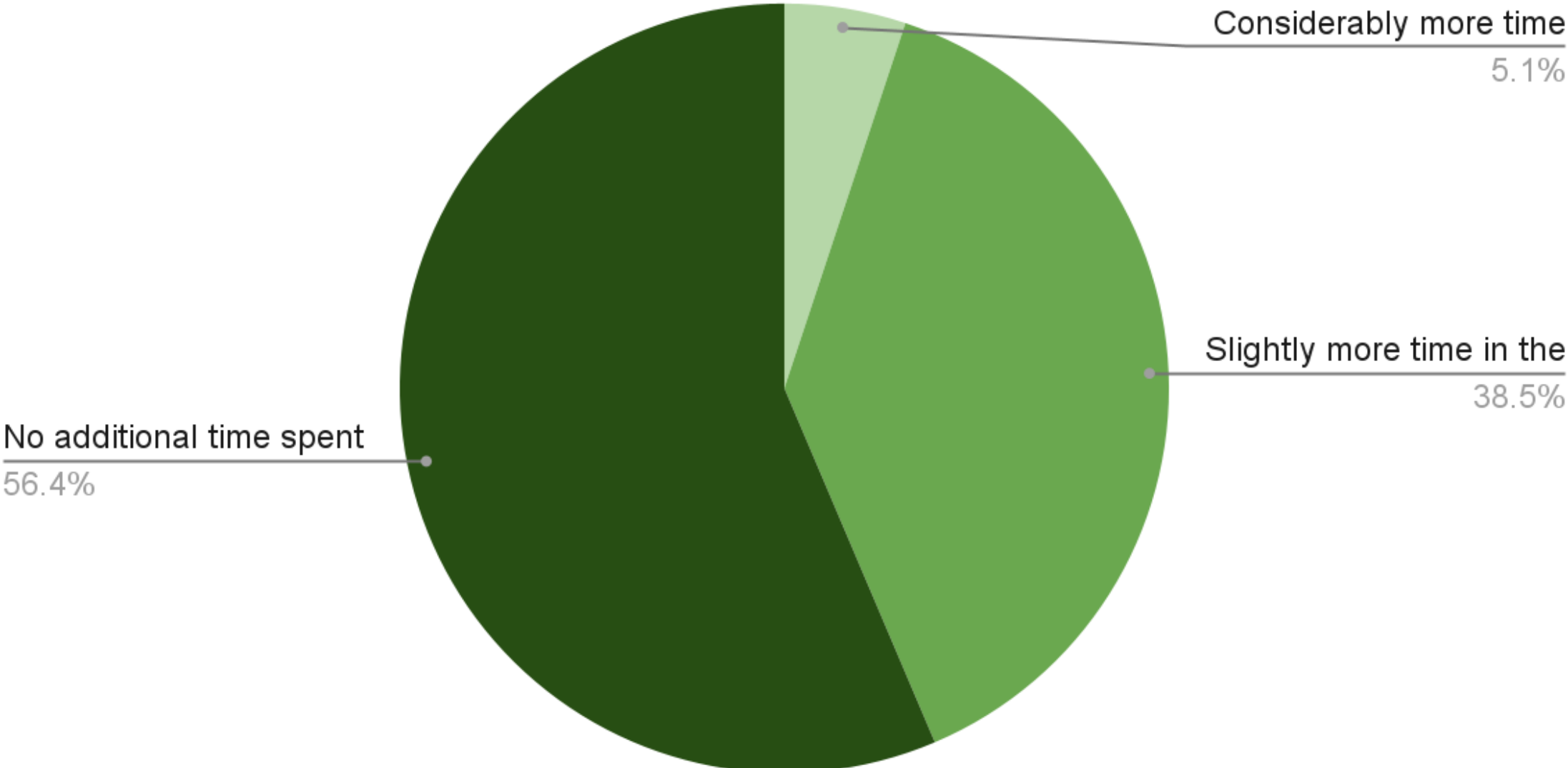
Bin Usage: Slight Majority Use Bin 2x Per Month

41 respondents answered the question: How often do you drop off your compost at the



Duration of Time in Parks: 56.4% Report No Change

39 respondents were asked: Has composting in park spaces affected the duration of time that you spend in city parks?



Lancaster Composting Co-op 1-year Data Analysis

- By diverting food waste, we reduce **16,638 lbs of food waste per month** from the solid waste stream.
*That's **199,656 lbs of food waste** being diverted per year.*
- The net greenhouse gas (GHG) emissions reductions of the initiative are approximately **39.36 tons of CO2 equivalent monthly** and **472.32 tons of CO2 equivalent annually**.
- This reduction in food waste saves the city of Lancaster approximately **\$5,215 annually** in tipping fees.
 - For reference, the cost of constructing a single 3-bay compost bin was \$2,520



Final Thoughts

- A viable alternative to a consumer approach to waste management
- As much or more than being about compost / environmental issues, people are finding and building community.
- Community engagement takes a lot of effort; lots of challenges with new bin placement especially, but lots of additional benefits
- Flexible, adaptive model
- Low cost, high reward

Big thanks!

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