FOOD WASTE PREVENTION DISCOVERY PHASE FINAL REPORT

March 20, 2025







FOOD WASTE PREVENTION DISCOVERY PHASE FINAL REPORT

EXECUTIVE SUMMARY	3
Root Causes of Food Waste	4
Considerations Around Systems at Play	4
SPU's Role: Next Steps	5
BACKGROUND AND METHODOLOGY	7
KEY LEARNINGS	8
Is Food a Connector?	8
How Can Businesses and Organizations Influence Consumers and Vice Versa?	8
Root Causes of Food Waste	9
Positive Examples and Community Strengths Around Food Waste	10
Considerations Around Systems at Play	10
Necessary Stakeholders	12
Define SPU's Role	13
ASSUMPTIONS/CONSIDERATIONS	17

EXECUTIVE SUMMARY

This executive summary follows the report's structure to help readers unfamiliar with the Discovery Phase grasp its process, insights, and recommendations. Those already familiar can use it as a concise reference with hyperlinks to key sections.

Seattle Public Utilities (SPU) partnered with the Global Impact Collective — a purposedriven strategy consultancy focused on food systems — to understand and imagine how consumer-facing food businesses and city residents could work together to reduce food waste.

Through this Discovery Phase, SPU aimed to understand the intersectionality of Seattle businesses, community groups, and consumers. In short, our goals were to:

1

Test the notion of food as a community connector.

Determine whether businesses can serve as messengers to consumers, and conversely, whether consumers can influence businesses to prevent food from going to waste.

3

2

Isolate root causes of food waste and identify community strengths in combatting it.

Understand the systems at play in the Seattle community surrounding food and food waste and incorporate learnings.

5

Identify the people and organizations critical to solving the problem of food waste.



Define the role that SPU could play and envision partnerships/opportunities that could be used to bring community together to prevent food waste.

The results of the study found that food is an overwhelmingly powerful connector. In addition, we discovered that businesses and organizations can indeed serve as messengers to consumers and vice versa — how this is implemented depends on the nature of the business/organization. Large anchor businesses, small food businesses, community organizations, and residents all have a unique role to play:

- **Seattle residents** have the potential to change consumer preferences that reduce the demand for waste at the business level.
- **Community organizations** can cultivate equity and food sovereignty across the city, driving grassroots advocacy with trusted voices.

- **Food-focused businesses and associations** can create stronger communities of practice among food experts and leverage the credibility of chefs who can imagine delicious ways to reduce waste.
- Anchor businesses and institutions can leverage the scale, technical resources, and organization power of major organizations.

Root Causes of Food Waste

The root causes of food waste identified during the study include:

Food Businesses	Consumers
Labor Costs Associated with Food Waste Prevention: While the rising cost of food raises the cost of food waste, labor costs to save the food also must be considered.	Lack of Connection to Source of Food: Many participants reflected on the fact that people are disconnected from food sources, making it feel less worth saving.
Lack of Easy-to-use Resources to Track Waste: In the restaurant industry, waste logging systems are often seen as cumbersome and expensive.	Lack of Culturally Relevant Food: It is important that food reflects the preferences and cultural identity of a community to avoid wasted food.
Consumer Culture of Abundance : Food businesses perceive a consumer expectation of abundance. Customers will complain about small portions and spartan displays.	Lack of Knowledge/Inspiration: Residents may not know the impact of food waste and "food waste prevention" does not sound appetizing.

Considerations Around Systems at Play

This study unearthed numerous considerations around the systems at play in Seattle at large and around food waste prevention, which SPU should address or incorporate in future initiatives:

Partnership Considerations:

- Valuable Community Voices Have Been Marginalized in Previous Government and Business-led Initiatives. It's critical for SPU to engage frequently marginalized groups early and often to provide a strong foundation for this work.
- Many Food Businesses are Struggling in the Current Economic Climate. This could hinder or enhance focus on food waste prevention depending on the approach.
- **Businesses Need a Clear Reason to Partner**. Partnerships must be relevant to the partner organization's strategic goals to make them viable.

Messaging Considerations:

- **The Difference Between Prevention and Diversion Can Be Confusing**. The difference between technical terms like "food waste diversion" from garbage (i.e. donation or composting) and "food waste prevention" (reducing the need for diversion) can be confusing and may make more sense for consumers in concert.
- Emotions (Not Just Data) are an Important Part of Behavior Change. Many participants discussed that understanding the scale of food waste is important, but data alone is not a sufficient motivator for behavior change. There must be an emotional component to inspire action.
- **Seattle has an Appetite for Unity**. Many participants expressed the need to come together now more than ever, and food could provide that connective tissue.
- There are Clear Avenues to Develop Communities of Practice. Associations and other informal networks of food businesses demonstrated an interested in coming together to share best practices and address food waste.

SPU's Role: Next Steps

Global Impact Collective identified the following recommendations for next steps:

Step 1: Define SPU's Role. These roles include **convener**, **implementer** of technical assistance, **messenger** / **amplifier**, **policymaker**, **and funder**.

Step 2: Choose a Partnership Model. The Global Impact Collective recommends SPU consider a joint project or joint program with an individual organization or small group of partners initially and then grow to include more and bigger partners in the future.

Step 3: Identify Implementation Partners and Continue Workshopping. The Global Impact Collective found that there was interest across all listening sessions to work with SPU to address food waste. Contacting select organizations and businesses to better understand how they would like to engage in a partnership could unearth creative opportunities for implementation, funding, or sponsorship. SPU may want to consider a human-centered design workshop to bring together partners for brainstorming.

Step 4: Continue Research and Listening. This study focused mostly on businesses over consumer behaviors. The Global Impact Collective recommends SPU continue research on food waste prevention among residents, especially around addressing expectations of abundance. Listening sessions also identified many organizations and individuals that would be valuable resources in this work and are worth continuing conversations.

Step 5: Initiate Select Pilots by Leveraging Existing Programs and Behaviors. Piloting activities that leverage existing programs — both internal and external — can demonstrate some quick wins with low barriers to entry. Here are a few examples:



Funder: Expand micro-funding for Food Waste Prevention.



Messenger: Create dynamic FWP resources in diverse languages for community organizations and businesses.

Amplifier: Facilitate FWP activations during events such as Food Waste Prevent Week, Seattle Restaurant Week, and FIFA 2026.



Ļ

Technical Support: Help businesses prioritize FWP programs and increase awareness of those services.

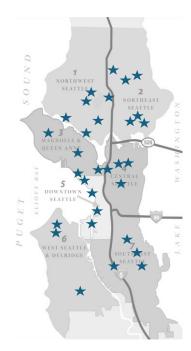
Convener: Foster pre-competitive, hyperlocal spaces to share best practices.

Step 6: Broader Implementation. Take the learnings from the Discovery Phase study to develop a broader framework, theory of change, and more sophisticated program or initiatives. This framework should include learnings from the study such as:

- Build connection to food. •
- Question assumptions around abundance.
- Elevate marginalized voices.
- Promote cultural relevance.
- Demonstrate empathy for food businesses.
- Build strategic relevance for partnerships.
- Use positive framing, making emotional connections.
- Leverage an appetite for unity.
- **Foster Communities of Practice.** •

BACKGROUND AND METHODOLOGY

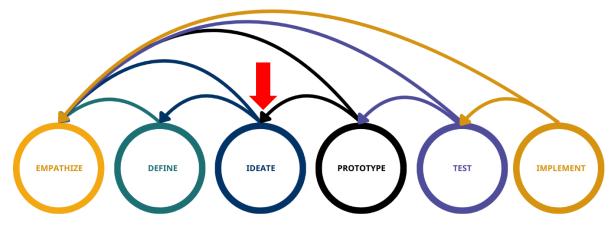
The Global Impact Collective uses design thinking to help clients understand the context of an issue and clearly define the problem without presupposing solutions. To do this, the Collective conducted desk research, facilitated discussions with key SPU stakeholders, and led 36 key informant interviews and listening sessions, representing over 100+ individuals in 19+ neighborhoods. The team interviewed consumer-facing food businesses, academic institutions, large anchor businesses (such as Amazon, Google, and Starbucks), sports venues, nonprofits, assisted living facilities, and community associations with a focus on diversity across race, age, socioeconomic status, and geographic location. 38% of interviews were represented by Black, Indigenous and People of Color (BIPOC) participants or allies representing heavily BIPOC communities. Our research culminated in an Insights-to-Action Workshop to distill the ideas from the listening sessions and begin thinking about next steps towards implementation.



The Discovery Phase Process



The study was qualitative in nature and does not represent a comprehensive distillation of all opinions on the issue of food waste reduction. However, key learnings emerged, presenting a way forward for future study, ideation, and project implementation. Correlating to the human-centered design process pictured below, this report concludes the Empathize and Define stages, bringing us to the Ideation stage.



KEY LEARNINGS

Is Food a Connector?

Participants shared that food is connected to personal identity; Food is intrinsic to everything; Food is a unifier, a communal experience that connects families and friends. It connects producers and consumers, rural and urban communities. Food can nurture our mental health and build emotional stamina. However, a few outliers found the concept of food as a connector confusing or felt that food was invisible and overlooked. For some, food is seen more as a necessity for survival rather than a connector.

How Can Businesses and Organizations Influence Consumers and Vice Versa?

There is indeed a clear role for both businesses and consumers to shift the culture around food waste. Key takeaways include:

- **Power of Community Groups**. Community groups and nonprofits are wellpositioned as trusted messengers to deliver food waste prevention messages, especially in culturally appropriate ways and in diverse languages.
- **Reach of Anchor Businesses**. Large anchor businesses (i.e. Amazon or Google) were not necessarily perceived as strong messengers to the broader Seattle community, but they reach thousands of employees during mealtime and therefore have the capacity to shift cultures in the office and potentially at home.
- **Creative Authority of Chefs**. Chefs have necessary authority, knowledge, and creativity to make "food waste prevention" delicious, especially when using a positive frame of saving food.
- Consumer Perception: Perceptions of consumer preference heavily influence business decisions. The hospitality industry is particularly concerned about sustainability efforts being perceived by consumers as cost-cutting measures. Similarly, grocery stores want to match consumer expectations of abundance on

the retail floor and fear negative brand associations from discounting goods, which can be perceived as low quality when they near their expiration.

Root Causes of Food Waste

While there are many factors contributing to food waste, the following causes rose to the top among listening session participants.

Food Businesses

Labor Costs Associated with Food Waste Prevention: Restaurants and other food businesses are often struggling to make ends meet. While the rising cost of food raises the cost of food waste, labor costs to save the food also must be considered.

Lack of Easy-to-use Resources to

Track Waste: In the restaurant industry, waste logging systems are often seen as cumbersome and expensive. While some restaurants have created solutions that work for them, there are learnings that could be shared across the industry.

Consumer Culture of Abundance:

Culturally, most consumers have an expectation of abundance (demonstrated by plentiful displays) and will complain when displays look spartan or portions are too small, accusing businesses of cutting back. However, "plate waste" (food that is left on the plate and not taken home) can be a major driver of food waste in restaurants.

Consumers

Lack of Connection to Source of Food: Many participants reflected on the fact that people are disconnected from food sources, making it feel less worth saving. Farmers markets and community organizations in particular can play a crucial role in connecting people to their food, bridging the gap between where and how food is grown and where it is sold.

Lack of Culturally Relevant Food: It is important that food reflects the preferences and cultural identity of a community to avoid wasted food. Participants with experience in K-12 education that students who have access to foods they want to eat, are more likely to consume lunch on campus which results in better learning outcomes and reduced absenteeism overall. Cultural relevance is also important in drawing human connections around food.

Lack of Knowledge/Inspiration:

Participants talked about how "food waste prevention" does not sound appetizing so consumers don't think to seek out recipes or resources at home to repurpose leftover or food scraps. It also takes a negative frame centering around food waste, which may not inspire action as much as saving food in the first place.

Positive Examples and Community Strengths Around Food Waste

The study found numerous exemplary food waste prevention efforts, including:

- A **bakery chain** reuses unused dough for reimagined baked goods and partners with a grocery store and a nonprofit to create value-added products such as croutons out of day-old bread. This partnership was years in the making.
- A **chef** has taken pickling and preserving as a center piece of a "nose to tail" cooking methodology.
- A **sports venue** is working with fans to slowly shift culture from buffet to plated orders, thus reducing food that cannot be donated. They also solicit insights from a network of sports venues to better understand fan behavior patterns before a travelling show. The better the venue understands fan behavior, the better they can prepare for their food needs and avoid waste.
- Several **community groups** focus on serving culturally relevant food to ensure that the people they serve are more likely to eat it and thus not waste it.
- A number of **anchor businesses** are part of major voluntary agreements and collective impact organizations like the <u>U.S. Food Waste Pact</u> and the <u>Pacific Coast</u> <u>Collaborative's Pacific Coast Food Waste Commitment</u>, which creates external incentives for them to prevent food waste.

Programmatic, individual, and community efforts like these, coupled with a strong and diverse food culture, make Seattle ripe for positive food waste prevention messaging.

Considerations Around Systems at Play

This Discovery Phase study unearthed a number of reflections on the systems at play in Seattle at large and around food waste that SPU should consider. They also unearthed potential challenges to navigate as SPU considers its role in the food waste prevention space.

Partnership Considerations:

• Valuable Community Voices Have Been Marginalized in Previous Government and Business-led Initiatives. Small, community-focused non-profits and Indigenous groups expressed that they sometimes feel used by larger entities, including government agencies. Indigenous groups have historically been consulted very late in the process when most key decisions are already made on municipal initiatives. Although this is improving, it's critical for SPU to engage frequently marginalized groups earlier to provide a strong foundation from the beginning.

- Many Food Businesses are Struggling in the Current Economic Climate. The restaurant, hotel, and grocery industries are experiencing challenges, from labor, to cost of food, to shrinking markets, and more. SPU must take these dynamics into consideration as it approaches businesses about partnerships that may take employees away from core business activities. Along these lines, many restauranteurs reflected that even Restaurant Week can be a burden as it requires additional effort for little financial gain. This is an opportunity to find ways to help food businesses with noticeable marketing efforts or cost savings.
- Businesses Need a Clear Reason to Partner. Partnerships must be relevant to the partner organization's strategic goals to make them viable. This has potentially been a sticking point for city government engagement with large anchor businesses in the past as they are laser focused on accomplishing their strategic, economic, social, and environmental goals. Without a clear connection to those goals, the way forward can be unclear. The sweet spot of partnership sits at the shared value between business opportunity, social need, and corporate assets and expertise (pictured to the right).



Messaging Considerations:

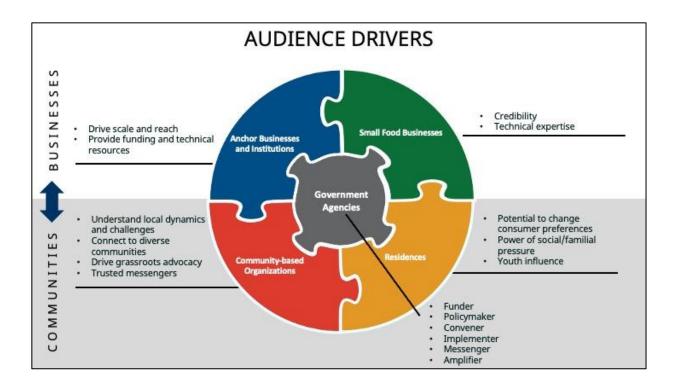
- The Difference Between Prevention and Diversion Can Be Confusing. Despite this study's focus on *prevention, NOT diversion from garbage* (i.e. donation or composting), many participants found it challenging to separate the two concepts. This presents an opportunity to bring both together in future messaging and ensure that Seattle businesses and residents understand the <u>EPA Waste Food Scale</u>, prioritizing prevention of food waste before it gets donated, sent to animal feed, compost, or, as a last resort, landfills.
- Emotions (Not Just Data) are an Important Part of Behavior Change. Many participants discussed that understanding the scale of food waste is important, but data alone is not a sufficient motivator for behavior change. There must be an emotional component to inspire action. Participants supported the study's notion that negative "blaming and shaming" messaging was not a strong motivator for behavior change. Instead, many participants preferred messaging that empowers individuals through engaging storytelling and vivid visuals.

- Seattle has an Appetite for Unity. Many participants expressed the need to come together now more than ever. In other words, they would be receptive to programs designed to build unity around food as something that everyone can agree should be saved.
- There are Clear Avenues to Develop Communities of Practice. Participants in the restaurant industry in particular shared the challenges of bringing people together in a post-pandemic world. At the same time, there was a clear interest in sharing information as a "rising tide lifts all boats." Associations or other informal networks in the restaurant industry could play a key role in facilitating information sharing in junction with SPU.

Necessary Stakeholders

Through discussions with diverse communities aligning with the criteria established during this Discovery Phase, it was clear that there is a role for food waste prevention across all levels of Seattle communities. The Global Impact Collective narrowed down these categories into four major drivers of food waste prevention from the bottom-up (residents and community organizations) and from the top-down (anchor businesses and food-focused businesses), each with a unique theory of change.

- **Seattle residents** ("the public") have the potential to change consumer preferences that drive demand for waste at the business level. Participants talked about the value of reaching children early as it is easier to establish positive behaviors early than change behavior later.
- **Community organizations** can cultivate equity and food sovereignty across the city, driving grassroots advocacy with trusted voices.
- **Food-focused businesses and associations** can create stronger communities of practice among food experts and leverage the credibility of chefs who can imagine delicious ways to reduce waste.
- **Anchor businesses and institutions** can leverage the scale, technical resources, and organizational power of major organizations.



Define SPU's Role

Step 1: Define SPU's Role. Discussions with SPU surrounded whether SPU was best suited as a **convener**, **funder**, **implementer** for technical assistance, **messenger** / **amplifier**, **policymaker**, or something else entirely. The Global Impact Collective found that SPU can have roles in all of these areas to varying degrees with the right partnerships. With limited funding and resources, it will be essential for SPU to leverage existing platforms and behaviors in combination with new efforts.

Step 2: Choose Partnership Model. There are many different partnership models that range from simple to complex, starting with joint projects on the simple side and ending with collective impact models on the more complex end (pictured below).

	JOINT PROJECT	JOINT PROGRAM	STRATEGIC ALLIANCE	COLLECTIVE IMPACT
Pros	 Fast Targeted Provides data, testing 	 Builds on project Efficient Easily measurable 	 Shared risk, skills, knowledge, resources Potential for high impact 	 Drives large-scale change over time Amplified, scaled, sustained outcomes
Cons	Limited scale and scope	 May not achieve scale Limited in scope 	 Slower time to execution Complex governance can create bureaucracy 	 Varied agendas among stakeholders Possible barriers to equity and inclusion
				the Global Impact Coll-

Food waste prevention is a complex issue with many different contributors and will require large-scale change over time. As such, a collective impact model is conceptually the most relevant organizational model for this type of challenge. However, a collective impact model is also a heavy lift for an organization of SPU's size and resources. For many organizations, it is easiest to start at the joint project level and expand over time.

The Global Impact Collective recommends SPU first consider a joint project or joint program with a single or small group of partners and can consider more complex partnership models in the future.

Step 3: Identify Implementation Partners and Continue Workshopping. The Global Impact Collective found that there was interest across all stakeholder groups in working with SPU, but a clear way forward will need further development and discussion. We found that there were two primary roles of partners in this initiative:

- **Funding Partners:** Begin discussions with anchor businesses and institutions to assess interest, strategic relevance, or incentives for a potential partnership. As mentioned previously, there must be shared value for all parties. Partnerships can center around funding, sponsorship, message and brand amplification, as well as implementation.
- **Implementation Partners:** Begin discussions with associations, community groups, and businesses at the ground-level to discuss implementation partnerships.

SPU may want to consider a human-centered design workshop to bring together partners for brainstorming.

Step 4: Continue Research.

- **Consumer Behavior Change Research:** This study focused mostly on businesses over consumer behaviors. The Global Impact Collective recommends SPU continue research on food waste prevention among residents, especially around expectations of abundance. Additional research should also test terms other than "food waste prevention" (which can often have a negative connotation) to identify terms/words/visuals that positively resonate with customers and businesses.
- **Continued Listening Sessions**. Listening sessions identified many organizations and individuals that would be valuable resources in this work. The Global Impact Collective recommends future conversation and exploration with additional state and county entities, culinary schools, secondary schools, museums, religious institutions, and unions. Many participants specifically talked about the value of working with schools and young people.

Step 5: Initiate Select Pilots by Leveraging Existing Programs and Behaviors. Piloting activities that leverage existing programs — both internal and external — can demonstrate some quick wins with low barriers to entry. They could serve as high impact, low effort initiatives ("low-hanging fruit") to start making progress toward building stronger communities of practice and conversation around food waste prevention.



Funder: Expand Micro-Funding for Food Waste Prevention. SPU already has a Waste-Free Communities Matching Grant; however, the focus is broader than food waste prevention. With appropriate funding and advertising/outreach in new and more diverse communities, SPU could fund innovative ideas like many that came out of listening sessions. This is an opportunity to bring in marginalized voices who have not previously considered applying for funding.



Messenger: Create Dynamic Food Waste Prevention Resources in Diverse Languages for Community Organizations and Businesses. Leveraging regular food-related programming and cooking classes at establishments like PCC, The Pantry, makerspaces, farmers markets, or community organizations and gardens, SPU can support these programs with food waste prevention resources and communal messaging in multiple languages to build on the residential-focused resources it developed for the <u>Love Food Stop Waste</u> campaign.



Amplifier: Facilitate FWP Activations during Events such as Food Waste Prevent Week, Seattle Restaurant Week, and FIFA 2026. While restaurants have expressed their reluctance to engage in additional lifts for Seattle Good Business Network's (SGBN) Restaurant Week, there may be opportunities to brainstorm ways to draw marketing attention to restaurants through food waste prevention demo videos and other ideas. SGBN is highly engagedx in FWP and offers technical assistance to members already so may be able to facilitate resources. Similar efforts could be further amplified during Food Waste Prevention Week and FIFA 2026 with celebrity spots.



Technical Support: Help Businesses Prioritize FWP Programs and Increase Awareness of Those Services. SPU already offers technical support to food businesses in various ways. Many listening session participants seemed interested but unaware of ways that SPU could help around food waste prevention and diversion. SPU can better advertise and market those services to new audiences.



Convener: Pre-Competitive, Hyperlocal Spaces for Sharing Best Practices. Formal pre-competitive spaces already exist at restaurant and hospitality association events/meetings as well as other informal restaurant events. These are an opportunity to share food waste prevention best practices and create "communities of practice." By beginning with and building off existing groups and associations, SPU can meet restaurants where they are without imposing top-down solutions that haven't been ground tested. Some restaurants are already using alternative food waste prevention best practices or tools designed for restaurants who do not feel they have the resources for complicated waste logging software. This could also be an opportunity to create an informal competition amongst restaurants to compete for funding, if it could be made available.

Step 6: Broader Implementation. Working on smaller pilots in the short term will give SPU time to further develop more comprehensive programming and create a framework that brings disparate projects together into one cohesive program. The Global Impact Collective worked with SPU to begin to develop this framework, centered around a common message and four major audience groups with sample initiatives as examples (pictured below).



This framework should consider the learnings unearthed in this Discovery Phase study at every level:

- Build connection to food.
- Question assumptions around abundance.
- Elevate marginalized voices.
- Promote cultural relevance.
- Demonstrate empathy for food businesses.
- Build strategic relevance for partnerships.
- Use positive framing, making emotional connections.
- Leverage an appetite for unity.
- Foster Communities of Practice.

ASSUMPTIONS/CONSIDERATIONS

Feasibility. The ideas discussed in this report are ones that generated excitement among participants during listening sessions and workshops, and SPU vetted to be generally feasible. Some ideas were excluded for lack of viability, though this study did not conduct a full feasibility assessment.

Legislative Impact: While many participants talked about the importance of legislation's role in food waste prevention, this framework does not touch on legislative and policy issues because most relevant legislative issues go beyond the city, and this scope is focused on the Seattle community alone. Future food waste prevention work should consider the impacts of expiration labeling, limitations on donations, and other related issues.

Upcoming Events: The **ReFED Food Waste Summit** is in June 2025 and the **FIFA World Cup** will be in Summer 2026. Both are important opportunities to leverage the food waste prevention discussion in Seattle and are quickly approaching.