The City and County of San Francisco’s Edible Food Recovery Capacity Study - Summary of Findings

September 2021-February 2022

Abbe & Associates, Susan Blachman, Marie Mourad
Contents
Report Highlights .................................................................................................................................................. 1
Recommendations for outreach efforts and SB1383 implementation ......................................................... 2
Methodology .......................................................................................................................................................... 3
Edible Food Generation and Donation practices in San Francisco .............................................................. 4
Generators (Survey Respondents) ...................................................................................................................... 4
Current awareness and donation practices ...................................................................................................... 5
Prevention practices ............................................................................................................................................ 9
Potential to improve donations ....................................................................................................................... 10
Edible Food Recovery Ecosystem in San Francisco ....................................................................................... 10
Food Recovery Services .................................................................................................................................. 10
Types of Food Recovery Organizations (Respondents to FRO Survey) ......................................................... 12
FRO Activities .................................................................................................................................................. 13
FRO Infrastructure and Technologies ............................................................................................................. 13
Food Currently Recovered (or not accepted) ................................................................................................. 14
Potential to increase food recovery .............................................................................................................. 15
How to support food recovery efforts .......................................................................................................... 16
Capacity Analysis Results (quantification) ...................................................................................................... 17
Number of generators ...................................................................................................................................... 18
Coefficient / factors for waste generation .................................................................................................... 18
Available additional capacity ......................................................................................................................... 18
Potential additional capacity .......................................................................................................................... 18
Summary: Capacity shortfall / excess ........................................................................................................... 18
Recommendations .......................................................................................................................................... 19
Appendices ....................................................................................................................................................... 21
Food recovery infrastructure ......................................................................................................................... 21
Food Recovery Tools ....................................................................................................................................... 21
Food Recovery Organizations Specific Needs and Requests (Selected quotes from survey respondents) ......................................................................................................................................................... 22
Report Highlights

- Identified: 10 Food Recovery Services\(^1\), 374 Food Recovery Organizations (FRO), and 1,018 Commercial Edible Food Generators (CEFG): 172 SB1383 Tier 1 Generators, 618 Tier 2 Generators & and 228 unconfirmed SB1383 Tier 2 generators

About Generators

- Most Tier 1 and Tier 2 Generators train their staff about food donations or food waste prevention. However, only 30% report having a written contract with a FRO, and only 20% track donation amounts as required by SB1383.
- Almost 90% of grocery stores & supermarkets have donation programs; however, slightly under half may not be donating the maximum amount possible.
- Among surveyed wholesalers & distributors about 2/3 donate surplus food, though not always regularly; this depends upon the type of food they carry.
- Donation rates are much lower for Tier 2 than Tier 1 Generators and most do not have contracts nor measure the amount they donate.
- Most Tier 1 Generators engage in prevention practices as part of their regular operations, and a significant number donate surplus food to their staff.
- 44% of survey respondents indicated they were interested in learning about opportunities to prevent food waste and maximize food donations (technical assistance, regional collaborations, technology/software).

About Food Recovery Services & Food Recovery Organizations

- Two food recovery services support over 100 generator/agency donation relationships (San Francisco-Marin Food Bank and Food Runners) in San Francisco. The remaining 7 support a maximum of 20-30 generators/agencies.
- Only a third of food recovery organizations surveyed can pick-up food; most need food to be dropped off. A little under half can prepare or cook food, and a little more than one third can serve that food indoors.
- More than half of the surveyed FROs do not have freezer space, 25% do not have refrigerated space, less than 12% have refrigerated trucks. So fresh and frozen food recovery is a challenge.
- FROs tracking the type and amount of food they recover is very weak; 40% of respondents do use any tracking tool and about half of those use a spreadsheet.
- 52 organizations (as of May 1, 2022) agreed to be listed publicly as interested in receiving more donations. That number may increase a bit as more FROs understand this opportunity.
- Over ¾ of the FROs indicated that they would need more resources in order to recover and distribute more food including staff, storage, funding and transportation.

Capacity Analysis

- The Capacity Analysis was conducted using the CalRecycle Edible Food Recovery Capacity Planning Calculator Tool. According to the analysis, in the current year there is surplus edible food that cannot be recovered because of insufficient capacity, but based

---

\(^1\) Currently active in SF: SF Marin Food Bank, Food Runners, SF Market Food Recovery Program, Project Open Hand, Replate, Copia, Daily Bowl, Chefs to End Hunger, Food Donation Connection.
on extrapolation of the survey responses there should be enough capacity by 2024 to recover this food.

**Recommendations for outreach efforts and SB1383 implementation**

- Continue current outreach, education, and technical assistance to generators and FROs
- Improve matching between FRS, FROs, and Generators: Communicate about available resources (e.g. map, listings, or existing apps/services), and ideally create a position to carry out this work consistently (e.g. part-time in-house position at SFE)
- Encourage generators and FROs to partner with FRSs in addition to or besides the San Francisco and Marin Food Bank (SFMFB), such as Food Runners and smaller organizations that accept a wider variety of food
  - Ensure that the SFMFB cannot require generators to have exclusive donation relationships
  - Encourage Food Runners donors to ask for a contract and track their donations to ensure SB1383 compliance
- Draft local SB1383 ordinance to implement this new regulation, including penalties for non-complying businesses, and solicit stakeholder input
- Include language in the ordinance allowing Food Recovery Organizations to sell the food they receive, just as Goodwill is allowed to sell donating clothing, to help them cover the cost of recovery.
- Provide grants to enable FRO to acquire the resources and equipment needed to increase and improve donations (see above).
- Inventory potential unused resources within the City such as refrigerator and freezer space and refrigerated vehicles from other businesses that could be used as backup storage space (e.g. partnership with Seven Eleven in Orange County).
- Conduct outreach to help FROs determine how to reduce the amount of food they cannot use
- Enable FROs to privately report pounds of spoiled food donated to improve quality of donations
- Encourage Department of Education and Department of Homelessness and Supportive Housing (HSH) to improve the quality of donations in their contracts
- Do not over emphasize tracking by FROs and focus outreach efforts on encouraging donors to track; provide grants to purchase scales if needed
- Hold press conference about what SFE is doing to comply with the edible food recovery requirements of SB1383
- Offer an electronic platform where organizations can upload and store their donation contracts and/or regular donation quantity tracking reports
- Offer a waiver for businesses that do not have surplus edible food, pending appropriate documentation and a yearly update, and provide them with resources for “just in case” donations (e.g. their fridge is broken)
Methodology

- **Identified** 10 Food Recovery Services, 374 Food Recovery Organizations (FRO), and 1,018 commercial edible food generators (CEFG): 172 SB1383 Tier 1 Generators, 618 Tier 2 generators and 228 unconfirmed SB1383 generators²;
- **Online survey (Google Form³)** sent out September 2021 to 362 Food Recovery Organizations (FROs) and 563 Commercial Edible Food Generators⁴ in San Francisco;
- **Follow-up calls and emails** to obtain additional responses from FROs;
- Follow-up calls and **site visits** to obtain additional responses from generators (43 calls and 68 visit attempts);
- **153 complete/valid responses** to the Generators survey (27.2% response rate);
- **64 complete/valid responses** to the FRO survey (17.7% response rate);
- **Interviews** conducted with 8 Food Recovery Services (FRSs) operating in SF and 2 additional food recovery services (that do not currently operate in SF but could in the future);
- **Capacity analysis** conducted using CalRecycle Capacity Analysis Calculator Tool.

---

² For definitions of SB1383 generators, see CalRecycle’s *Guidance for Jurisdictions: How to Identify SB 1383 Commercial Edible Food Generators* (2021).
³ FRO Survey Link: https://forms.gle/g7wqyJEZEpS9wDV18; Generator Survey Link: https://forms.gle/eUpabdKs5UdNYpZK8
⁴ We have identified 374 Food recovery organizations and 1,018 Commercial edible food generators in San Francisco. Some did not receive the survey because their email address was not available. Yet, the vast majority of FROs and Tier 1 Generators did receive the survey. The missing email addresses were mostly from restaurants (Tier 2 Generators) or small businesses that do not actually qualify as SB1383 generators.
Edible Food Generation and Donation practices in San Francisco
Generators (Survey Respondents)

153 businesses completed the survey, including 75 Tier 1 Generators and 28 Tier 2 Generators (other respondents were not SB1383 Generators):

**Survey respondents: Tier 1 Generators (N=75)**
- 25 Food Distributors
- 12 Food Service Providers (including corporate cafeterias and catering)
- 9 Grocery stores (above 10,000 sq ft or $2 million sales)
- 3 Supermarkets
- 26 Wholesale Food Vendors

**Survey respondents: Tier 2 Generators (N=28)**
- 16 Health Facilities
- 7 Hotels (200+ rooms)
- 2 Large Events (Farmers’ market)
- 2 Large Venues
- 2 Restaurants

Response rates were higher among wholesale food vendors and distributors as well as supermarkets and grocery stores, compared to the general response rates. For example, we received responses from 31% of all distributors and wholesalers in the City.

**Food service providers do not generally qualify as SB1383 Generators** (providers not located in SF or catering companies with no regular contracts), but included in the analysis for future outreach efforts.
Additional responses (not SB1383 Generators):
- 2 responses from corporate offices (supermarket chains);
- 2 responses from farmers’ market coordinators;
- 43 from businesses that are not SB1383 Generators, mostly restaurants (34 restaurants with less than 250 seats);
- 3 from businesses that discontinued their food activity.

Current awareness and donation practices

**Awareness and Training on SB1383 and Food Donations**

29% of respondents (45 out of 153) reported receiving the Official Notice Letter and educational flyer in the mail from the City & County of San Francisco about the new state law SB1383.

**Most Tier 1 and Tier 2 Generators train their staff** about food donations or food waste prevention:
80% of Tier 1 Generators have a donation program.

Among them, 42% of donors (25 out of 60) partner with Food Runners and 35% of donors partner with the SF Marin Food Bank.

Only 30% report having a written contract with a FRO, and only 20% track donations as required.
Almost 89% of supermarkets and grocery stores have a donation program. Most of them rely on Food Runners (51%) and/or the SF Marin Food Bank (37%); some partner directly with food recovery organizations.

55% of donors (17 out of 31) appear to have a compliant program, defined as donating the maximum amount of food possible (large variety and high frequency). 45% of donors may not donate the maximum amount as indicated by infrequent donations (less than 2-3 times a week) and/or insufficient variety of donations (only bread, no produce, etc.).

4 Supermarkets and grocery stores do not have a donation program. They provide the following explanation: not enough surplus, not enough cold/frozen storage, not enough staff/bandwidth, not enough transportation. Most of them backhaul products to their suppliers. 1 business indicated that suppliers provide credit for unsold products, so they do not donate them.

32% of wholesalers and distributors participate in the The SF Market Food Recovery Program. It is used by more than 2/3 of the vendors located at the SF Market. Other wholesalers and distributors (outside of SF Market) predominantly rely on FROs to which they donate directly or on the SF Marin Food Bank and Food Runners.

Out of 20 donors, 14 appear to donate the maximum amount of food possible. Others donate infrequently or do not donate all of their available food types (only shelf-stable items, for example).

8 businesses do not donate anything:
- 5 of them are seafood (and meat) vendors, who say they do not have surplus or cannot donate. They raised the issue of sensitive food.
- 3 businesses have indicated they have no donatable surplus (small tea, noodle, and chocolate companies).
75% of Food Service providers reported having a donation program, most of them with Food Runners (corporate cafeterias, etc.).

The businesses that do not donate indicated they did not have enough surplus to make donation worthwhile; 1 mentioned liability issues (zoo café). Many reduced or stopped their food activity during the pandemic (corporate cafeterias), and have not necessarily re-started yet.

**Donation practices among Tier 2 Generators**

Donation rates are much lower for Tier 2 Generators (compared to Tier 1 Generators), which include farmers’ markets, hotels, schools, etc. A large proportion indicate they have no donatable surplus, generally because of the small scale of their operations. The vast majority of Tier 2 Generator donors do not have a written agreement for donations and do not track donations (out of 10 donors, only 2 reported tracking and a having written agreement).

1 Farmers’ markets used to donate through Replate but they stopped because they didn’t have enough surplus to donate, as did other respondents.

Many businesses said they stopped donating during the pandemic because they have less surplus (hotels, restaurants).
Prevention practices
Businesses have implemented the following practices to prevent generating surplus food in their operations. Most of these processes are part of their regular operations, and not specifically aimed at reducing food waste:

<table>
<thead>
<tr>
<th>Practice</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand forecasting, inventory management, waste management</td>
<td>40%</td>
</tr>
<tr>
<td>Nothing in particular (incorporated in daily operations)</td>
<td>35%</td>
</tr>
<tr>
<td>Discounting products that are about to expire</td>
<td>31%</td>
</tr>
<tr>
<td>Reprocessing on site (e.g. fruit salads, etc.)</td>
<td>24%</td>
</tr>
<tr>
<td>Regularly donates to staff</td>
<td>28%</td>
</tr>
<tr>
<td>Rarely donates to staff</td>
<td>20%</td>
</tr>
<tr>
<td>Donates to neighbors</td>
<td>1%</td>
</tr>
<tr>
<td>FW prevention app (including Too Good to Go)</td>
<td>4%</td>
</tr>
<tr>
<td>None</td>
<td>47%</td>
</tr>
</tbody>
</table>

A significant proportion of businesses donate food to staff (or neighbors), regularly or occasionally: **It is important that the City does not prevent these practices**, which are a form of food waste prevention. CalRecycle does not require businesses to have an agreement or keep records when giving food to hyper local community (ie families, staff, etc) in an informal manner.

The vast majority of **Tier 2 Generators do not have specific practices to “pre-distribute” surplus** (i.e. give food to staff, families, community members, or discounting products through apps like Too Good to Go). Out of 28, 2 indicate they donate to staff, 1 uses the food waste prevention app “Too Good to Go”.

The City and County of San Francisco’s Edible Food Recovery Capacity Study - Summary of Findings
Too Good To Go is used by more than 800 businesses in the City, but most of them do not qualify as SB1383 Generators (smaller grocery stores and restaurants). 44% of survey respondents indicated they were interested in learning about opportunities to prevent food waste and maximize food donations (technical assistance, regional collaborations, technology/software).

Potential to improve donations

- **How to support their efforts**
  - Better network of FROs (listings / centralized process)
  - Enable FROs to take more types food (prepared foods, seafood, short-life foods)
  - More pick-up times (nights & weekends)
  - Concerns about liability + administrative burden for small businesses
  - Financial support / tax incentives
  - Training and information

- **Potential additional donations**
  - Six Tier 2 Generators can donate more produce, two Tier 2 Generators can donate more meat or dairy, six Tier 2 Generators could donate more bread

**Edible Food Recovery Ecosystem in San Francisco**

**Food Recovery Services**

*Current food recovery services operating in San Francisco*

Food Recovery Services operating in San Francisco provided the following information:

**Free services**

- **SF Marin Food Bank:** Partners with 100+ CEFGs and 280+ FROs in the City. Generally the Food Bank recovers large quantities of food (300 lb minimum); does not accept prepared foods. Currently developing a partnership with Safeway. Have an app (MealConnect) that they use with some (not all) donors, including Starbucks, Amazon, and Safeway. Tracks monthly quantities of donations by donor and types of food, but does not track which FRO partners are recovering the food.

- **Food Runners:** Recovers all types of food, partners with 121 generators (which includes every Trader Joe’s, Mollie Stone’s Markets, and Whole Foods Markets; 86 of these generators are CEFGs which are required to comply with SB1383) and 183 FROs in the City. Now have a kitchen where they cook more than 200 meals a day with 5 paid cooks. They employ 1 paid “dispatcher”. Volunteers pick-up and distribute food using their own vehicles. Some of their donors use the Food Rescue Hero app, but the app is not used consistently. They do not reject any donations, and rarely compost spoiled food (e.g. stale bread). They do not track most of the quantities or types of food recovered and have no plans to develop a tracking system; they leave that to their donors. They do not want a formal partnership with the City but agreed to be publicized on the City website and would accept additional donations.

- **Food Rescue Hero:** Nationwide organization. App used by food recovery organizations for coordination and tracking. Charges an initial set up fee (licensing) to adapt the tool, which can be $40,000-$60,000. Currently only used by Food Runners in San Francisco (and only for a fraction of their activity). Open to working with other programs and organizations.
• **SF Market Food Recovery Program:** Program started in 2016 to coordinate donations from wholesalers and distributors at the SF Market. 16 of the 26 vendors are currently enrolled, and donate to 16 FROs. The program coordinator (Carolyn Lasar) manages donations via calls and texts informing FROs about available products and quantities and coordinating their requests on a first come, first serve basis. Currently doing outreach and providing technical assistance to vendors re:SB1383 and contractual requirements.

• **Project Open Hand:** Receives large donations of food, and served as an as-needed “hub” for food recovery during the pandemic. Largest receiver of produce from the SF Marin Food Bank (4,000lbs/week). Redirects food they cannot use (especially due to the medical and nutritional needs of their programs) to other FROs at a small scale notifying them via text and email.

• **Chefs to End Hunger:** Only accepts excess prepared food from Vesta Foodservice customers. Vesta Foodservice is headquartered in Hayward. CEH accepts the prepared food in containers Vesta Foodservice provides when dropping off their customers’ orders. The recovered food is then donated to FROs. Did not want to be listed publicly as a resource for food recovery.

**Paid Services**

• **Replate:** Nationwide organization. Employs paid drivers who use their own vehicles to pick up and deliver food and track data. Work with all types of donors (generally volumes under 500lbs and mostly hired to collect prepared food, though during the pandemic they collected more grocery items). Currently they have 10 donors in San Francisco and distribute recovered food to up to 30 FROs locally.

• **Copia:** Nationwide organization. Employs paid drivers with professional vehicles. Works with all types of donors, mostly restaurants, cafeterias, farmers’ markets, mostly prepared food. Currently have 8 donors and 19 partner FROs in San Francisco. Their technology could be used by the City as a “food recovery platform” to coordinate and report on food recovery. Copia can dispatch a driver (via Doordash, UberEats. passing the cost onto the donor) or the recipient can send a volunteer.

• **Daily Bowl:** Local organization. They pick up food in SF (ex: from Restaurant Depot, corporate cafeteria [mostly before covid], etc.) and deliver to an agency outside of SF. Currently exploring opportunities to use the food in SF. Tends to work with producers, distributors & wholesalers. Charges a fee for pick-up.

• **Food Donation Connection:** Nationwide organization. Services generators including all Whole Food Markets in California as well as restaurants. Coordinates donations, manages reporting (on line) and arranges for clients to receive documentation for taxes. Funding comes from a portion of donors’ tax savings earned from donating their surplus food. Not an app but online platform.

**Food Recovery Services that could potentially be mobilized**

**Free Services**

• **Food Rescue US:** Not active in San Francisco. Could be used as a free service to coordinate food recovery (coordination of volunteers) and tracking material. Generally supporting a local chapter or local food recovery service.
The City and County of San Francisco’s Edible Food Recovery Capacity Study - Summary of Findings

- **OLIO**: Interested in re-starting services and actively developing a pilot for SF (to be ready by mid-June). Used to be active in the Bay Area but has mostly stopped. Restarting activity in the US and could develop a platform of volunteers relatively quickly to pick-up food from generators and distribute it (for free) to the local community.

**Paid Services**

- **Careit**: App used to coordinate food donation and recovery. Could be used by the City as a “food recovery platform” to coordinate and report on food recovery (paid by the City / free for users).
- **Chowmatch**: App used to coordinate food donations and recovery. Used by Penninsula Food Runners. Could be used by the City as a “food recovery platform” to coordinate and report on food recovery (paid by the City / free for users). Users reported a lack of efficiency of the tool.

**Types of Food Recovery Organizations (Respondents to FRO Survey)**

374 Food Recovery Organizations have been identified in the City, including a wide range of organizations:

- School or Educational/training programs
- Housing Services or Shelters
- Senior Centers and Services
- Health and Wellness services
- Recovery and Support Centers
- Faith-based Organizations
- Community Centers
- Food Assistance Programs

Almost 80% of food recovery organizations are SF Marin Food Bank partners, 10% partner with Food Runners (their partnerships are not mutually exclusive).

64 completed survey + 16 provided information via a phone call, for a total of 80 FROs, which is 21% of total FROs in the City.

![Types of Food Recovery Organizations (N=80)](chart.png)
FRO Activities
34% (out of 64 survey respondents) reported they do NOT currently recover food (the list included many schools, churches, etc. that may not necessarily have food programs).

For the ones that engaged in food recovery, their activities were the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive donations of food</td>
<td>77.40%</td>
</tr>
<tr>
<td>Prepare or cook food</td>
<td>47.20%</td>
</tr>
<tr>
<td>Distribute food in a fixed location (e.g. pantry)</td>
<td>39.60%</td>
</tr>
<tr>
<td>Serve meals in a dining hall (indoor)</td>
<td>37.70%</td>
</tr>
<tr>
<td>Pick up food donations</td>
<td>34%</td>
</tr>
<tr>
<td>Distribute recovered food to other organizations</td>
<td>24.50%</td>
</tr>
<tr>
<td>Distribute food in a mobile location</td>
<td>17%</td>
</tr>
</tbody>
</table>

Only a third of FROs can pick-up food. Most organizations need food to be dropped off. 47% can prepare or cook food, and 38% can serve in an indoor setting.

FRO Infrastructure and Technologies
- 57% use paid staff for food recovery / 32% rely on volunteers;
- For the vast majority, food donors or food recovery services deliver food to the FROs because they cannot pick up food;
• More than half do not have freezer space, 25% do not have refrigerated space, less than 12% have refrigerated trucks. Fresh and frozen food is a real challenge for many FROs to recover;
• 42% have a kitchen and 21% a dining hall, so there is potential to cook and serve prepared foods (see Appendices: Food recovery infrastructure).

FROs rarely track the type and amount of food recovered:
• 40% do not use any tracking tool
• 26% use a spreadsheet

For their communication and coordinating donations, the vast majority prefer email (85%), then phone calls (49%) and texts (38%).

Food Currently Recovered (or not accepted)
Types of food recovered
• Less than half of the organizations accept food that requires refrigeration, and only 9 organizations indicate they accept seafood;
• Less than 40% accept frozen food;
• Less than 25% of the organizations accept prepared foods that needs to be warmed up, or re-packaged;
• Several restrictions: only 30% of FROs accept food past its «best by» date, 23% have nutritional requirements (no candy, soda, etc.), 13% do not accept food with allergens (nuts, etc.).

Food that cannot be distributed and has to be discarded

<table>
<thead>
<tr>
<th>What proportion of the food your organization receives cannot be redistributed to people (e.g. for safety, quality, or logistics reasons)? (N=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost nothing; less than 2%</td>
</tr>
<tr>
<td>3-5%</td>
</tr>
<tr>
<td>6-10%</td>
</tr>
<tr>
<td>11-20%</td>
</tr>
<tr>
<td>21-35%</td>
</tr>
<tr>
<td>More than half</td>
</tr>
</tbody>
</table>

62% of FROs indicated that they can redistribute almost all the food they receive and that they dispose very little (less than 2%). The remaining 38% of respondents (19 organizations) indicated that they cannot redistribute 3% to over 50% of the food they receive; 4 of these organizations noted that they have to discard more than 10% of the food they recover:
• CityTeam (discards more than half of the food)
Asian Women’s Shelter (discards 21-35%)
Curry Senior Center and Saint Anthony Foundation (discards 11-20%)

The City could follow up with them to find a solution to these inappropriate donations.

Potential to increase food recovery

- **Half of the survey respondents (n=64) declared they were interested in establishing new/additional partnerships** with donors, and 20% declared they were “maybe” interested.
- **23% could receive more food with their current resources**, and 20% could “maybe” receive more food. Yet, we do not have sufficient information on how much the quantities could increase.
- Many organizations have a **minimum/maximum quantity** that they can receive, with a **wide range** of quantities: Potential additional donations vary from 1-2 bags of produce or snacks (Project Commotion) to 10,000lbs+ (Martin de Porres) or 26,000 lbs (Saint Anthony Foundation): “we could double our output if we have more clients, more paid staff, and more space to store donations” (Saint Anthony Foundation).
- **Reporting on quantities of food the respondents can potentially recover was not reliable**;
- Additional types of food:

<table>
<thead>
<tr>
<th>What additional type of food are you interested in receiving? (N=64)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelf-stable/Non-perishable foods</td>
<td>64.0%</td>
</tr>
<tr>
<td>Fresh produce</td>
<td>57.3%</td>
</tr>
<tr>
<td>Individually packaged prepared food</td>
<td>48.0%</td>
</tr>
<tr>
<td>Bread and baked goods</td>
<td>45.3%</td>
</tr>
<tr>
<td>Eggs</td>
<td>38.7%</td>
</tr>
<tr>
<td>Frozen Food</td>
<td>36.0%</td>
</tr>
<tr>
<td>Meat</td>
<td>34.7%</td>
</tr>
<tr>
<td>Dairy</td>
<td>34.7%</td>
</tr>
<tr>
<td>Seafood</td>
<td>26.7%</td>
</tr>
<tr>
<td>Hot, ready to eat food</td>
<td>25.3%</td>
</tr>
<tr>
<td>Bulk prepared food</td>
<td>25.3%</td>
</tr>
<tr>
<td>Products past their best by dates</td>
<td>14.7%</td>
</tr>
</tbody>
</table>

52 organizations have agreed to be listed publicly as interested in receiving more donations. For details on the types of food they would like to receive: see map and resources on SFE website.
How to support food recovery efforts

**General needs**

Almost 80% of FROs indicated additional resources they would need in order to recover and distribute more food safely and effectively. The main needs are:

- **Staff**: Volunteers, paid drivers, and other paid staff (mentioned by 54.6% of FROs total)
- **Storage**: Refrigerated, frozen, and warehouse space (46.7% total)
- **Financial resources** (21.3%)
- **Transportation**: Cars, trucks, and refrigerated vehicles (17.4% total)
- **Outreach/collaboration with other organizations**
- **More nutritious food options**

![Bar chart showing percent of respondents needing each resource]

Additional needs mentioned include:

- **Have the food delivered** (rather than picking it up);
- Improve **quality of donations** (and ability to select products, including before delivery or pick-up)
- **Less administrative burden** from the City
- Donors to help **cover costs**
Specific equipment needs

<table>
<thead>
<tr>
<th>FRO equipment needs (N=64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food packaging or eating supplies (plates, utensils, bags, etc.)</td>
</tr>
<tr>
<td>Kitchen supplies and equipment/appliances</td>
</tr>
<tr>
<td>Personal Protective Equipment (PPE)</td>
</tr>
<tr>
<td>No additional need</td>
</tr>
<tr>
<td>Food preserving supplies</td>
</tr>
<tr>
<td>Food delivery supplies (crates, boxes, etc.)</td>
</tr>
<tr>
<td>Forklifts and pellet-jacks, utility carts, hand trucks</td>
</tr>
<tr>
<td>Scales</td>
</tr>
</tbody>
</table>

Specific requests

What could the State of California or the City of San Francisco do to help your organization maximize food recovery?

Many requests focused on

- **Improving coordination** between food donors, food recovery services, and food recipient agencies;
- **Improving the quality** of donations.

Many organizations have expressed specific needs and requests (see Appendices).

Capacity Analysis Results (quantification)

The Capacity Analysis was conducted by using CalRecycle Edible Food Recovery Capacity Planning Calculator Tool. This tool relies on the following methodology:

1. **Identify amount of edible food disposed** by commercial edible food generators within the jurisdiction
   - Identify the number of generators of each type;
   - Estimate “factors” of edible food disposed by each generator type;
   - Multiply the factors by the number of generators.
2. **Identify verifiable, available, unutilized capacity** at food recovery organizations (ability for FROs to recover additional pounds);
3. **Consider expanded (or reduced) future capacity**
4. Calculate total available future capacity: (2 + 3)
5. Calculate any deficiencies in capacity that would necessitate an implementation schedule: (2 + 3) – (1)
In San Francisco, we ensured that the estimated total “edible food disposed” was consistent with the total quantities of “donatable food” in the landfill and organics streams in the City’s 2020 Waste Characterization Study. Given that SB1383’s goal is to recover edible food (for human consumption) before composting it, we have included the quantities of food currently composted in “edible food disposed” (that needs to be recovered).

### Number of generators

<table>
<thead>
<tr>
<th>Tier 1</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarket</td>
<td>59</td>
</tr>
<tr>
<td>Grocery store &gt;10,000 sq ft</td>
<td>21</td>
</tr>
<tr>
<td>Food Service Provider</td>
<td>3</td>
</tr>
<tr>
<td>Food Distributor</td>
<td>15</td>
</tr>
<tr>
<td>Wholesale Food Vendor</td>
<td>74</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tier 2</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant</td>
<td>56</td>
</tr>
<tr>
<td>Health Facilities</td>
<td>11</td>
</tr>
<tr>
<td>Hotel</td>
<td>35</td>
</tr>
<tr>
<td>Large Venue</td>
<td>26</td>
</tr>
<tr>
<td>Large Event</td>
<td>23</td>
</tr>
<tr>
<td>State Agency Cafeteria</td>
<td>2</td>
</tr>
<tr>
<td>Local Education Agency</td>
<td>20</td>
</tr>
</tbody>
</table>

### Coefficient / factors for waste generation

We calculated the factors based on the CalRecycle 2018 Waste Characterization Study (at the State level) and based on NRDC research. We generally used an average of these 2 factors for each type of generators, and compared them with other sources of data (survey results, information from FRSs, etc.) to ensure the factors were consistent.

### Available additional capacity

We calculated the quantities of food currently recovered by FRS and FROs in San Francisco (we used data provided by FRS respondents + estimated the quantities that were directly donated by donors to FROs, without going through a FRS). Survey results provided little information on current, unutilized capacity. Therefore, based on survey responses, we applied a coefficient to current recovered food in order to estimate the verifiable additional capacity.

### Potential additional capacity

We used information from survey results to assess potential additional capacity. We extrapolated the results to the total number of FROs in the City.

### Summary: Capacity shortfall / excess

<table>
<thead>
<tr>
<th>Current Reporting Year Edible Food Disposal (lbs./year)</th>
<th>Current Reporting Year Total Verifiable Accepted Capacity at Food Recovery Organizations (lbs./year)</th>
<th>Current Reporting Year Verifiable Capacity Shortfall(- ) or Excess (lbs./year )</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,678,878</td>
<td>309,331</td>
<td>-7,369,547</td>
</tr>
<tr>
<td>Current Potential Total lbs. Accepted per year at New or Expanded Organizations (lbs./year )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9,758,628</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Sum of Verifiable and Potential Capacity Shortfall(−) or Excess (lbs./year )**

2,389,081

For more in-depth understanding, see detailed capacity analysis (spreadsheets).

**Recommendations**

*External outreach efforts and SB1383 implementation*

- Continue current outreach, education, and technical assistance to generators and FROs
- Improve matching between FRSs, FROs, and Generators: Communicate about available resources (e.g. map, listings, or existing apps/services), and ideally create a position to carry out this work consistently (e.g. part-time in-house position at SFE)
- Encourage generators and FROs to partner with FRSs in addition to or besides the San Francisco and Marin Food Bank (SFMFB), such as Food Runners and smaller organizations that accept a wider variety of food
  - Ensure that the SFMFB cannot require generators to have exclusive donation relationships
  - Encourage Food Runners donors to ask for a contract and track their donations to ensure SB1383 compliance
- Draft local SB1383 ordinance to implement this new regulation, including penalties for non-complying businesses, and solicit stakeholder input
- Include language in the ordinance allowing Food Recovery Organizations to sell the food they receive, just as Goodwill is allowed to sell donating clothing, to help them cover the cost of recovery.
- Provide grants to enable FRO to acquire the resources and equipment needed to increase and improve donations (see above).
- Inventory potential unused resources within the City such as refrigerator and freezer space and refrigerated vehicles from other businesses that could be used as backup storage space (e.g. partnership with Seven Eleven in Orange County).
- Conduct outreach to help FROs determine how to reduce the amount of food they cannot use
- Enable FROs to privately report pounds of spoiled food donated to improve quality of donations
- Encourage Department of Education and Department of Homelessness and Supportive Housing (HSH) to improve the quality of donations in their contracts
- Do not over emphasize tracking by FROs and focus outreach efforts on encouraging donors to track; provide grants to purchase scales if needed
- Hold press conference about what SFE is doing to comply with the edible food recovery requirements of SB1383
• Offer an electronic platform where organizations can upload and store their donation contracts and/or regular donation quantity tracking reports
• Offer a waiver for businesses that do not have surplus edible food, pending appropriate documentation and a yearly update, and provide them with resources for “just in case” donations (e.g. their fridge is broken)

Future internal outreach efforts
• Refine list of Tier 2 Generators: Schools and Universities, restaurants (based on size), etc.
• Identify SFE internal targets that are not necessarily SB1383 generators (corporate cafeterias, catering companies, restaurant/café chains, etc., some of which have already been listed as such in the Generators internal list), identify the best contacts within these organizations, and educate them about donation opportunities
Appendices

Food recovery infrastructure

What infrastructure/equipment does your organization use for food recovery?

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Number of Organizations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerated trucks</td>
<td>6</td>
<td>11.3%</td>
</tr>
<tr>
<td>Trucks or vans (not refrigerated)</td>
<td>19</td>
<td>35.8%</td>
</tr>
<tr>
<td>Cars</td>
<td>16</td>
<td>30.2%</td>
</tr>
<tr>
<td>Bikes</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Freezer Space</td>
<td>24</td>
<td>45.3%</td>
</tr>
<tr>
<td>Refrigerated Space / Fridge</td>
<td>33</td>
<td>62.3%</td>
</tr>
<tr>
<td>Storage space (not refrigerated)</td>
<td>22</td>
<td>41.5%</td>
</tr>
<tr>
<td>Kitchen</td>
<td>11</td>
<td>20.8%</td>
</tr>
<tr>
<td>Dining Hall</td>
<td>2</td>
<td>3.8%</td>
</tr>
<tr>
<td>Online platform/software</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Mobile app</td>
<td>3</td>
<td>5.7%</td>
</tr>
<tr>
<td>None</td>
<td>3</td>
<td>5.7%</td>
</tr>
</tbody>
</table>

Food Recovery Tools

What tool, app, or software do you use for coordinating and/or tracking donations?

<table>
<thead>
<tr>
<th>Tool</th>
<th>Number of Organizations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical workbook</td>
<td>3</td>
<td>5.7%</td>
</tr>
<tr>
<td>Spreadsheet (Excel, Google...)</td>
<td>14</td>
<td>26.4%</td>
</tr>
<tr>
<td>MealConnect</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Salesforce</td>
<td>3</td>
<td>5.7%</td>
</tr>
<tr>
<td>Chowmatch</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Copia</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Replate</td>
<td>9</td>
<td>17%</td>
</tr>
<tr>
<td>Fusionware</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Recyclist</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>None—We do not use any tool</td>
<td>21</td>
<td>39.6%</td>
</tr>
<tr>
<td>I do not know</td>
<td>7</td>
<td>13.2%</td>
</tr>
<tr>
<td>email</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Whole Foods site <a href="http://www.harvest">www.harvest</a>...</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>AirTable</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>NetSuite</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>we work with FoodRunners...</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Depending on what we are doing...</td>
<td>1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Email</td>
<td>1</td>
<td>1.9%</td>
</tr>
</tbody>
</table>
Food Recovery Organizations Specific Needs and Requests (Selected quotes from survey respondents)

What would your organization need in order to recover and distribute more food safely and effectively in the future? (Provide details on your needs)

“We do not have enough refrigerator space at our shelter to store the amount of donated food that we could potentially use. Additionally, we have a …pantry that provides only non-perishables to residents. If we had a refrigerator and/or freezer, we could distribute perishable items and increase the quality of life for the residents.” (Community Forward)

“Our organization could use 8 additional 2 or 3 shelved heavy duty utility carts, allowing our staff access to equipment with more carrying capacity when distributing various elements into the grocery bags we pack each day. An additional 6 general purpose hand trucks and 8 convertible hand trucks would help immensely with the loading in of our bulk grocery and donated items. […] The most beneficial action California and/or the City of San Francisco could do to help Groceries for Seniors maximize food recovery would be to contribute additional funding to our program. Currently we’re relying on a staff of 15 volunteers, most of whom are Seniors or have disabilities, to help us distribute and process over 8,000 lbs of food each week. With additional funding, we could afford to hire able body individuals to our team to assist with heavy lifting and transporting food to our clients. Our group would also like to work with the City of San Francisco on designating a parking space for our delivery van out in front of our building, as we’re currently spending over $100.00 each month in parking meter fees while we load and unload our delivery van between 7am and Noon, Monday through Thursday each week.” (Groceries for Seniors)

“At St James Infirmary we have no shortage of food needs. We see approximately 2,000 people a month who request food (meals and groceries). We would love more resources for staffing to be able to secure more food donations from local businesses or be linked to other programs similar to Food Runners and better organization of trips to the Food Bank. An additional vehicle with a parking space would help us to secure more food regularly as opposed to relying on staff with cars. And lastly we spend our general funds on things like bottled water and snack bars and would love to be able to secure items like this for free or receive funds to be able to continue to confidently purchase these items.” (St James Infirmary)

If we could receive food from one of the markets in our neighborhood, we would have capacity to pick it up. (Project Commotion)

What could the State of California or the City of San Francisco do to help your organization maximize food recovery?

“Partner our organization with an agency that provides us with food.” (Civic Center Secondary School)

“Improve food quality at all of our housing sites. Department of Homelessness and Supportive Housing (HSH) establishes contracts with the caterers, not us.” (Five Keys Schools and Programs)

Connect us to more stores and restaurants distributing food so we can choose what would be best and most used by our clients. This way we can minimize food being tossed and maximize satisfaction and variation for clients (they indicate a 6-10% rate of discarded food)” (San Francisco Safehouse/ Hope Center)

“Hard to answer, this is a challenging thing in general. Create a central org that can match donors with those receiving it and man the logistics. This is no easy task, but that would solve this area of inefficiency for the topic in general.” (Project Open Hand)

“Connect us with wholesalers, big box stores, and distributors who have large quantities of food they need to move. Food manufacturing facilities as well. Connect us with more clients who need food distribution” (Saint Anthony Foundation)

“Provide funding for at least one staff person to focus on food recovery across all of our programs. Connect us and other non-profits to larger corporations that would be able to donate regularly.” (Saint James Infirmary)