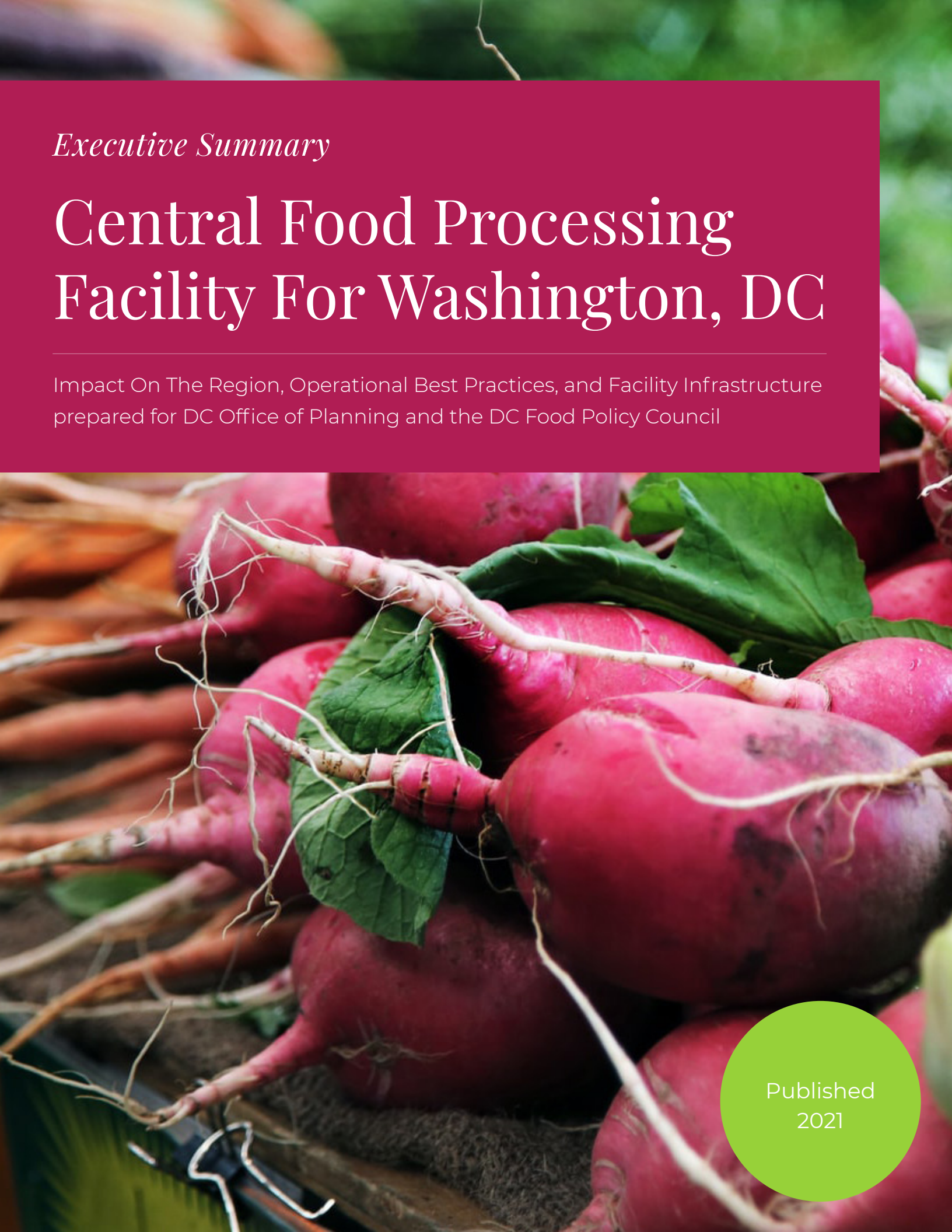


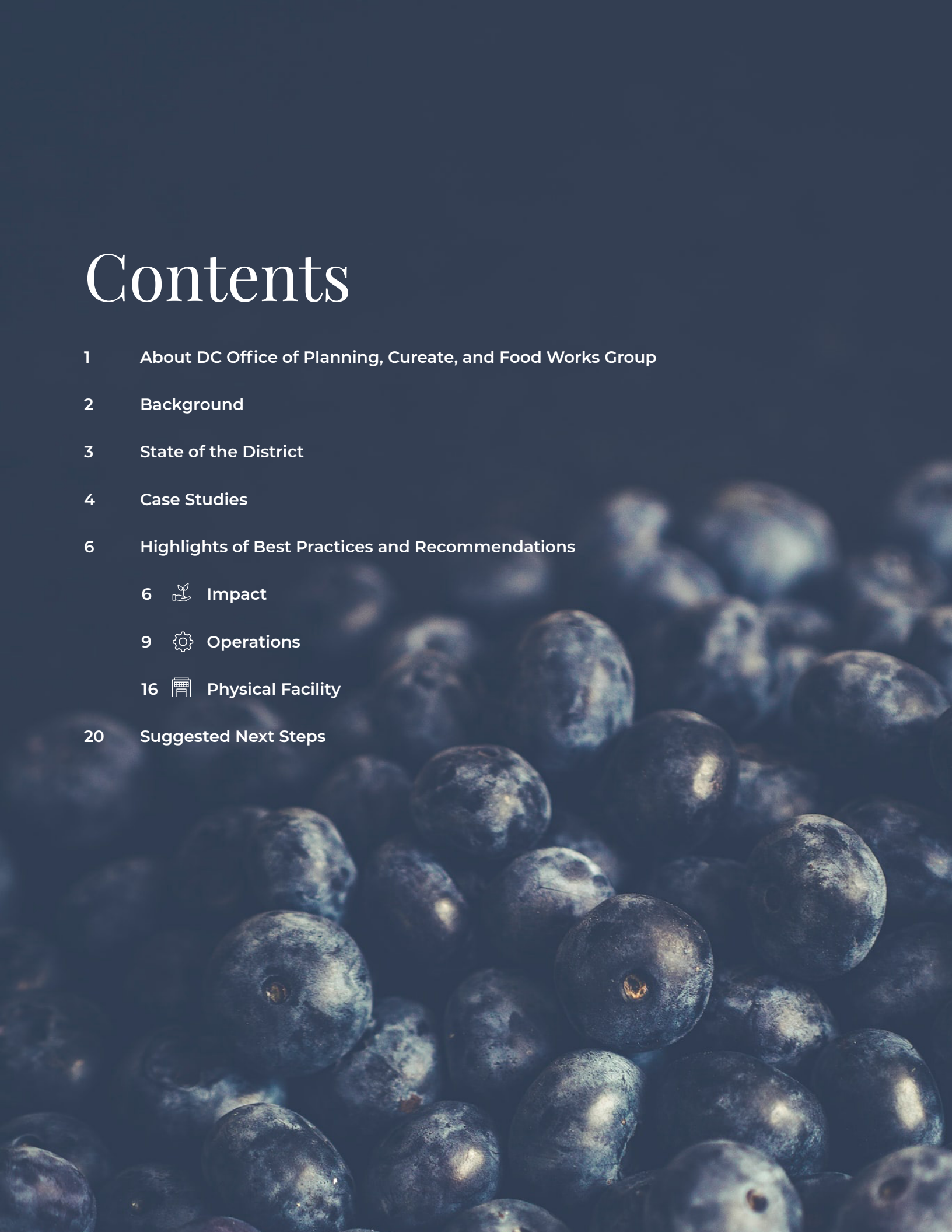
Executive Summary

Central Food Processing Facility For Washington, DC

Impact On The Region, Operational Best Practices, and Facility Infrastructure
prepared for DC Office of Planning and the DC Food Policy Council

Published
2021

Contents



About DC Office of Planning, Cureate, and Food Works Group

DC Office of Planning is tasked with planning for the long-term growth of the District of Columbia, in which all District residents can thrive, regardless of income, race, age, or background. OP guides development in the District of Columbia's distinctive neighborhoods by engaging stakeholders and residents, performing research and analysis, and publishing various planning documents.

DC Food Policy Council is a coalition appointed by Mayor Muriel Bowser to drive policy towards a more equitable, healthy, and sustainable food system in the District. The FPC works with District agency and community partners to increase food security, and identify and alleviate food access barriers for residents and businesses, and promote the local food economy.

Cureate is a social enterprise, woman-owned business building an empowered food & beverage supply to meet a changing consumer demand. We exist to build an interconnected and diverse supply system by shifting dollars back into local small business through procurement, entrepreneurship education, and consulting. Our focus is on the food & beverage industry, which deeply touches all of our lives, and where there is an immediate need to change how we do business. We provide strategic counsel to help both big and small businesses navigate shifting consumer tastes and interests, as well as work with city government partners in understanding the economic impacts of fundamentally reimagining the supply chain.

Kim Bryden, *Founder and CEO*
Project Co-Lead

Food Works Group is a women-owned consulting practice that specializes in devising solutions and measuring progress across the food system. The group has implemented programs devoted to food business management, food hub networks, culinary operations, and food production, with a specific focus on regional supply chains and food security. With over two decades of experience in food systems management, Food Works Group designs studies to measure program feasibility and assess best practices, and helps clients find new opportunities to work collaboratively and efficiently. Clients of Food Works Group include non-profit, for-profit, and governmental entities, including city and county governments, agricultural food hubs and networks, shared-use kitchens, hunger-relief organizations, and commercial food accelerator programs.

Wendy Stuart, *Co-founder and Principal*
Project Co-Lead

Emily Paul, *Food Works Group's Senior Consultant* and **Dana Rocks**, *Cureate's Director of Strategy* added immeasurable value to this study.

Background

A District Central Processing Facility (CPF)[1] can be a powerful, well-positioned asset, and key catalyst to underpin food systems change in the District and Mid-Atlantic region.

This study is the next step towards developing a centralized food processing facility or a "centralized kitchen", first commissioned by the Healthy Schools Act of 2010 and later identified as a key priority by the DC Food Policy Council. This report provides analysis and recommendations meant primarily for District government officials and policymakers focused on food procurement, workforce, and economic development; DC's food non-profit organizations and businesses; and potential financial partners. As envisioned in this study, a CPF's core functions would be to (1) use fresh and locally-sourced ingredients to prepare meals and other healthy food products for the District's institutions, (2) provide aggregation, storage, and co-manufacturing space for small food businesses and regional farms, and (3) create workforce development opportunities in the food sector. Through these core functions, a CPF could play a key role in reaching Mayor Bowser's vision for promoting health equity, the local food economy, and sustainability in DC.

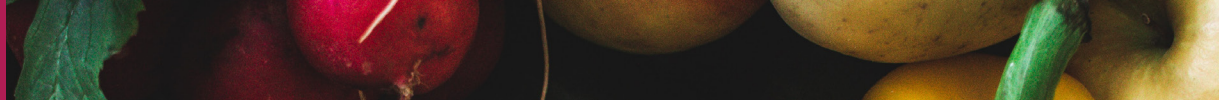
This facility, which would be a combination of a commercial kitchen, warehouse space, offices, classrooms, and other community spaces, would enable the District to centralize food operations and prepare more of its food here in the District, with more control over the quality of meals served in public institutions. It would also enable the District to hire local to prepare and distribute this food. In addition to consolidating some operations, the facility would also be a lifeline for small food businesses throughout the District and region, providing much-needed aggregation, storage, and kitchen space to help local businesses provide high quality, affordable food to District residents. Lastly, the facility could play a key role in creating career pathways in the food sector by hiring District residents and graduates from the many excellent culinary workforce development providers in the District, providing on-the-job training and professional development as well as high-quality employment opportunities, particularly in need as the food industry recovers from the devastating impacts of the COVID-19 public health emergency.

Over 60 industry leaders and District food systems experts were interviewed for this study in the spring and summer of 2020. Their expertise concludes that a CPF would support revenue streams feeding back into the local economy, and support job creation and career development.

A central processing facility would promote health equity, the local food economy, and sustainability in the District by:

- Enhancing consistency of minimally-processed product for school and other institutional food
- Facilitating the purchase of regional product, year-round, by schools and others
- Supporting nutritional standards
- Providing space to store and preserve regional food throughout the year
- Providing equitable access to regional food
- Supporting producers in the region, including small, urban, emerging, and Black, Indigenous, and People of Color (BIPOC) farmers, by providing guaranteed access to storage and sales channels
- Addressing key infrastructure gaps in the supply chain

[1] Based on conversations with CPFs across the country, the research team concluded that the term, "Central Processing Facility" is a more appropriate descriptor than "Centralized Kitchen Facility," due to core functionality, size, and precedence.



State of the District

Research for this section included a literature review to assess the current District food landscape. Key information is presented as a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis.

STRENGTHS - *Geography; stakeholder engagement; people and organizations.*

- The District's role as a center for policy-making raises the standards and expectations for other jurisdictions around the country as they look to the capital to lead by example.
- The District is strengthened by the city's organizations and networks, and their roles in publicizing initiatives and rallying support around regionally-grown food.
- The available labor force and pool of experienced culinary talent has members of the workforce at-the-ready with interest in regional food, as well as a baseline understanding of food processing, food safety, and food service operations.
- Within the District are several anchor institutions, e.g., K-12 schools, universities, hospitals, and other stakeholders, e.g. restaurant groups, with significant purchasing power and an interest in streamlining production and enhancing quality and consistency across their locations.

WEAKNESSES - *Inequities; land access; infrastructure.*

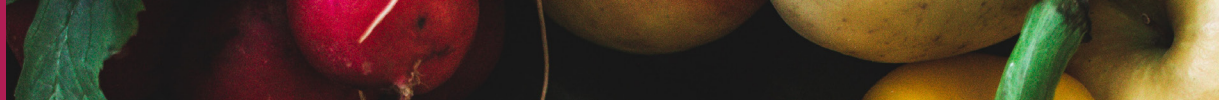
- Inequities between those leading food businesses and those working for them, as well as inequalities in pipelines to leadership roles across local communities, need to be addressed.
- Systemic disparities are aggravated by the high cost of living in the city, access to public transportation, education and training to bolster the success rates of Black, Indigenous, and People of Color (BIPOC) food entrepreneurs, and barriers to capital and financial resources.
- The U.S. incentive system for commodity food products, systemic racism in financing, and barriers to accessing traditional retail and wholesale marketplaces create and exacerbate the inequities of emerging and BIPOC farmers by limiting their access to capital and stifling their growth opportunities.
- The high cost and scarcity of land and difficulties to obtain basic inputs, such as water and electricity, are major challenges for urban and small, regional farms.

OPPORTUNITIES - *Efficiencies through co-locating operations; higher-quality institutional food; aggregation; cold storage; processing and co-manufacturing; distribution; revenue and economic growth; regional purchasing; job creation; food system equity.*

- A CPF provides the aggregation and cold storage for regional products harvested at peak and used throughout the year. Also, in a city with limited space and facilities, offering access to cold storage for community-based organizations (CBOs) food access and farming nonprofits could improve their sales, boost food recovery, address food insecurity, and more.
- A CPF creates the ability to increase the amount of regional, minimally-processed bulk food products being purchased as ingredients, thereby increasing the amount of regional food being served and streamlining production, creating efficiencies in labor, and enhancing quality and consistency across the District.
- The ability to perform contract manufacturing would bolster the District's food business sector, and create revenue generation opportunities to make a CPF self-sufficient.
- Transitioning to job creation as a means to economic vitality, with hourly jobs as well as career development opportunities, is important, given the predicted surplus of skilled food workers in the market after the COVID-19 public health emergency.

THREATS - *The cost of contract operations; emergency response; lack of food system resiliency.*

- Although the District takes steps to try to contract with small businesses, most food procurement contracts in the District still rely on the national supply chain, broadline food distributors, and national contractors, thus spending millions of dollars on products and services from other regions, which can starve local producers of their economic vitality.
- Both interruptions in the food supply and an increase in the demand for food assistance have become tangible threats during the COVID-19 public health emergency. Such threats could arise again in future emergencies.
- Food resiliency and food security are not only supply chain and logistics issues, but also public and human safety concerns which are not sufficiently addressed.



Case Studies

School districts of various sizes across the country have invested in CPFs as critical infrastructure to improve school food, generate revenue, reduce expenses, and create jobs.

The development of four case studies, Boulder, Colorado; Farmington, Utah; Minneapolis, Minnesota; and Napa, California; provides context to understand the core competencies that can be harnessed by a CPF. Each school district case study reflects on how its CPF services their district utilizing the industry best practice cook-chill method of production, for use in speed-scratch cooking in finishing kitchens at each school. The case studies show that a CPF could result in improved access, economies of scale, job creation, and serve as a cornerstone to equitable solutions across the local and regional food supply chain.

Case Study 1

BOULDER VALLEY SCHOOL DISTRICT (BVSD)

COLORADO

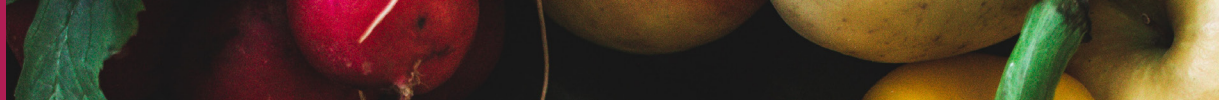
- Buildout was supported by a multi-county BVSD bond. The total project cost was $17 million, $10 million of which was covered by the original bond and the remaining by additional district allocation.
- BVSD produces 14,000 meals daily, with at least 25% of the food produced from ingredients grown or produced regionally.
- Production efficiencies at scale can decrease operations and food costs by 5-8%.
- Develop relationships with other communities and seek opportunities to contract manufacture for them as a means of revenue generation.
- Consider cost increases over time such as material cost adjustments and increased labor costs when developing a budget for facility buildout.
- Create an organizational structure that allows for cross-trained positions and on-the-job training programs that transition high-potential staff at school sites into a CPF facility.

Case Study 2

DAVIS SCHOOL DISTRICT (DSD)

UTAH

- The CPF produces 38,000 meals per day and operates off-site catering and an onsite cafe that generates income.
- DSD generates revenue by intaking commodity products, handling inventory and storage, and logging processing for “just in time” food manufacturing at a fixed margin for districts throughout the greater Salt Lake City area.
- Being a licensed USDA processing facility (for intercounty/state meat transfer) allows for contract manufacturing for other districts. Finances are structured for revenue generation to reinvest back into nutrition services programs.
- Hiring for the CPF is largely done by promoting employees from school sites. Cross-training is key to efficiently operating the facility.



Case Study 3

MINNEAPOLIS PUBLIC SCHOOLS (MPS)

MINNESOTA

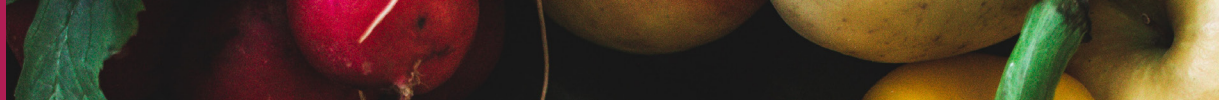
- Minneapolis's Culinary Center (CC) serves 70 schools, which collectively prepare more than 40,000 meals per day; 128 unique food items prepared at the CC per year.
- The CC functionality focuses on produce and protein processing to support farm-to-school (F2S) and local foods procurement goals.
- The buildout of a CPF space should take into account electrical capacity, drainage, sanitation and washing equipment, and overall facility workflow.
- By utilizing a CPF and building out kitchens in schools, MPS has doubled its workforce and created new jobs. By partnering with local food hub The Good Acre for vocational training, they create job pathways to positions with more regular full-time employee hours, benefits, and competitive pay.

Case Study 4

NAPA VALLEY UNIFIED SCHOOL DISTRICT (NVUSD)

CALIFORNIA

- Bond money supported a CPF and finishing kitchens at school sites, with a retrofitted CPF put into motion at the district-owned former Napa Armory.
- The Napa's Operative for School food Health (NOSH) "brand" is highly-regarded in the community, and includes catering operations and significant engagement with families and the local food community.
- The CPF accommodates contract meals production for seniors and others, as the facility is low-use starting early afternoon. A production shift model is recommended, i.e., the staff prepares meal ingredients for speed-scratch cooking in K-12 schools from 6 a.m. - 2:30 p.m., and then the next shift can use the facility to provide services to Meals on Wheels or another outsourced feeding program.
- it is important for NOSH menu development to include the cultural and dietary preferences of this large diaspora population so that students most in need of nutritious school meals will consume and enjoy them.
- The facility lead and shift manager(s) should have strong culinary backgrounds.



Highlights of Best Practices & Recommendations

Recurring themes were clustered into three main sections: **Impact**, **Operations**, and **Physical Facility**. These themes provided the basis for the best practices and recommendations in this report.

Impact

The first section, Impact, showcases outcomes that would be supported by a CPF to increase the strength of the District's food economy and create a more sustainable and equitable food system. Topics include equity, workforce development, revenue, and economic growth.

Equity

BEST PRACTICE

Written by Michael Carter, Jr., Carter Farms

1. A CPF should address the inequitable roots of the District's food system through the comprehensive learning of the history of our agriculture practices, and address the ways in which an equitable future can be co-created by building a pipeline of BIPOC farmers and entrepreneurs, design a facility with the farmer in mind, and create menu plans incorporating ingredients that are of and from our communities.

Michael Carter, Jr., Carter Farms

Carter Farms is a century farm in the Piedmont region of Virginia that specializes in growing ethnic, African tropical vegetables organically. Carter has taken over the family farm operation, converting it from a beef cattle, swine, and hay production operation to an ethnic vegetable afro-tourism teaching farm that shares its "Africulture" interdisciplinary platform.

RECOMMENDATIONS

Written by Michael Carter, Jr., Carter Farms

1a. ***Building a Pipeline of Supply.*** Involving more African Americans with opportunities in agriculture at an elementary and teenage level is critical to involving them in the producer side of the food system. Black farmers are on the verge of extinction, mainly because there is not a portal to create new farmers. Rural communities have 4-H and Future Farmers of America (FFA) programs that serve as a pipeline for new farmers and ranchers. Land access is a limiting factor, but urban participants have something rural participants don't — access to high-value markets.

1b. ***Designing With the Farmer Top-of-Mind.*** Regional farmers should be utilized as a central component of a facility. The school and processing cycle needs to assist with the farm cycle to create a regionally-grown, vertically-integrated system and facility.

1c. ***Training and Healthy Menu Planning.*** Teaching about nutrition and food safety, along with training and certification, will provide tangible work skills in the food and restaurant industry. Using culturally-relevant vegetables and recipes will assist in assuring healthier food options are not just prepared, but also consumed.

1d. ***Education and Empowerment of BIPOC Value-Added Entrepreneurs.*** Develop a hub of innovation for participants to learn from makers on how to establish, sustain, and run a food-based enterprise, as well as be an incubator and facility for entrepreneurs to develop, manufacture, and distribute their products.

BEST PRACTICE

2. A CPF that bolsters the impact of existing and new initiatives by the District government and nonprofits committed to food access and equity within the food system, better connects communities to their food supply.

RECOMMENDATION

2. A CPF should engage in sales opportunities with existing programs geared toward improved food access and equity. Additionally, government programs like WIC should issue RFPs mandating a certain percentage of spend to be on regionally-sourced products, and create a preferred vendor pipeline for current nutrition and food access programming to include products that are regionally-sourced, aggregated, and processed at a CPF.

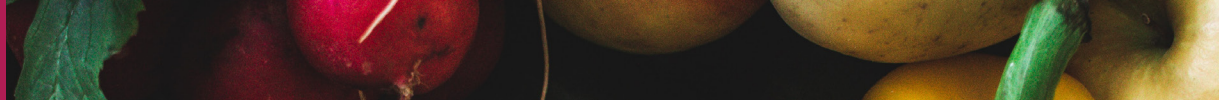
BEST PRACTICE

3. A CPF should be built with a primary end user in mind — the K-12 student — to incorporate customer feedback into the food supply system.

RECOMMENDATIONS

3a. Work with DC Public Schools (DCPS) and other local education agencies as anchor purchasers and create ways for students to provide input. For example, a CPF is an ideal venue to enable students to experience the farm-to-plate process firsthand, and learn the business and career implications of this process at a large scale.

3b. Work with partners to ensure the availability of culturally-appropriate ingredients that are accessible in students' local environments, and act as a gateway to healthy lifestyles through nutrition education.



Revenue and Economic Development

BEST PRACTICE

1. A CPF should generate surplus revenue for the District, including via private sector sales channels.

RECOMMENDATIONS

1a. Create additional revenue opportunities from area school districts, as well as other District government agencies and anchor institutions (universities, hospitals, and other enduring organizations that play a vital role in their local communities and economies).

1b. Build a CPF-made District-brand that supports wholesale and retail sales through private-sector channels such as regional grocers/retailers and corner stores.

BEST PRACTICE

2. A CPF should bolster the initiatives of DC's Food Policy Council and its working groups by creating a pipeline of supply, and holding institutional purchasers accountable for sourcing regionally.

RECOMMENDATION

2. Standardize KPIs that are currently fragmented within the food supply chain. With this centralization, institutions can be held accountable for shifting their dollars back into the local economy by purchasing products — raw goods or co-manufactured products from area entrepreneurs — out of the CPF.

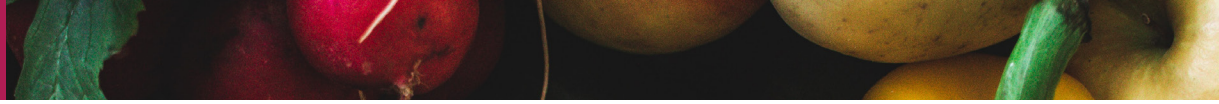
BEST PRACTICE

3. A CPF spurs food & beverage entrepreneurship and economic growth by keeping growth-stage business operations located in the District.

RECOMMENDATIONS

3a. Provide access to a CPF's co-manufacturing capabilities to create affordable pathways for entrepreneurs to scale their businesses within the District, so that they will not need to look for less expensive options elsewhere. As a consequence, related jobs, revenue, and tax dollars will also remain in the District.

3b. Non-food-specific District-based startups, such as those in technology and logistics, should be tapped by a CPF to further amplify local economic impact.



Workforce Development

BEST PRACTICE

1. A CPF should create workforce development and programming opportunities for cross-training, upskilling, and implementing entrepreneurial education curricula. Workforce development as a program of a CPF should be seen as a career pathway more than a clearinghouse for temporary positions.

RECOMMENDATION

1. Develop a flexible workforce that encourages upskilling current employees, reskilling District area restaurant and hospitality workers for food manufacturing, and cross-training positions with a focus on career-oriented advancement. The career opportunities provided by this program/facility should be creative and responsive to economic variables when facility operations commence. To maximize community impact for the most underserved workforce populations, CPF hiring should integrate opportunities for marginalized groups such as returning citizens.

BEST PRACTICE

2. A CPF should request bids and award contracts to small businesses or microenterprises (a business with fewer than 10 employees) to create contractual areas of opportunity for smaller organizations to take advantage of this multi million dollar operation.

RECOMMENDATION

2. Assess all areas of a CPF operation and delineate where there are contractual opportunities for small businesses and/or microenterprises in a continued effort to promote equity, democratization of access, and local economic development, and to provide both technical skills training and entrepreneurial opportunities.

Operations

The functions of this facility, anchored by core competencies that support primary purchasers (K-12 public schools) and the larger regional food ecosystem, are cornerstones to the operations of this building. These and other functions are explored in the subsections below.

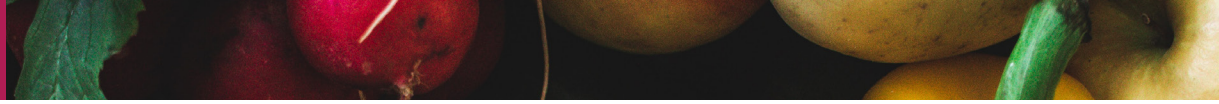
Management

BEST PRACTICE

1. The most effective models for a CPF around the country include varied functions. Assessing the range of possible functions, based on the needs of the District, ensures that the desired outcomes align with the functionality of the facility that is built.

RECOMMENDATIONS

1. District CPF should include the following core functions:
   - Distribution services for K-12 schools, District institutions, and others
   - Aggregation services, accessible to all regional producers
   - Cold and dry storage, accessible to all businesses and organizations requiring such space
   - Cook-chill processing for speed-scratch cooking in DC public schools
   - Co-manufacturing for area schools, institutions, and private businesses



BEST PRACTICES

2. A CPF could operate through a public-private partnership in one of the following four ways:
   - Directly by DCPS
   - By a values-driven food service provider (FSP)
   - By a non-traditional operator, e.g., nonprofit organization, social enterprise, food manufacturer; or by a cooperative or coalition of such organizations
   - By a District agency or a new department housed within DGS, DCPS, or another agency.

RECOMMENDATIONS

2a. A CPF could be operated by the District government or through a public-private partnership. Such management teams would support the unique needs of different customers, allow for flexible purchasing, take best advantage of a self-operating business model of schools and institutions, and be able to catalyze change to address systemic issues within the District's food system.

2b. A CPF should be a multi-stakeholder collaboration, identifying funding opportunities to build the facility and create a management team that is led by an experienced operator with business acumen and food production expertise to manage operations.

2c. Craft values-driven guiding principles that will act as guardrails to protect the integrity of a CPF vision. Create baseline requirements, milestones and a schedule of audits to measure impact, maintain accountability, guarantee transparency, and ensure equitable access to the functions provided by the facility.

BEST PRACTICE

3. Self-operated institutions are better positioned to track, mitigate, and reallocate both financial and tactical resources to operations. Additionally, expenses can be reduced by transitioning to self-operations.

RECOMMENDATION

3. Transition to self-operated models for District agencies to lower costs and provide fresh, higher-quality, nutritional food using regional products to replace lower-quality meals currently served by foodservice providers. For schools, better food should help increase student participation rates (meals consumed at schools), which means higher USDA reimbursement dollars going back into the program.

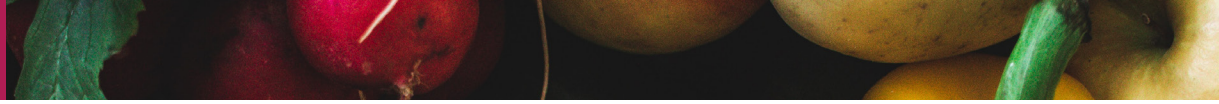
Aggregation

BEST PRACTICE

1. A CPF can consolidate and streamline aggregation, storage, processing, and distribution functions in one place.

RECOMMENDATION

1. Create a standard operating procedure that streamlines purchasing for individuals and organizations traditionally barred from such resources, and communicate with small to midsize vendors about the opportunities to sell their products into a CPF for co-manufacturing. Additionally, utilize a CPF contractually for cold storage, and/or allow vendors to conduct business with the facility similar to a traditional produce sales and distribution channel.



BEST PRACTICE

2. A CPF allows for maximum procurement of regionally-grown and -raised produce and proteins, supplemented by nationally-sourced, conventional, or commodity products as necessary. Additionally, the aggregation function provides an efficient channel for larger institutions to purchase regional produce without contracting with numerous small-scale producers.

RECOMMENDATION

2. The District should clearly define its purchasing priorities and develop a clear, transparent, and accessible RFP process which includes language translation and no-cost technical assistance for regional farmers and suppliers to equitably bid on contracts. Moreover, a CPF should analyze where conventional and commodity purchases can fill gaps in supply, and where regional farms can increase production to meet demand. Through these efforts, a CPF becomes a clearinghouse of supply and demand data, and regional farms have more of what people want, mitigating waste.

Processing and Manufacturing

BEST PRACTICE

1. The cook-chill production method is an operational best practice to support speed-scratch cooking in K-12 public schools, hospitals, universities, and other facilities that service large populations.

RECOMMENDATIONS

1a. Process cook-chill products in a CPF that customers can use in speed-scratch cooking and finished product assembly onsite to boost quality, interest and participation by students and others, enhance product consistency, and elevate food safety.

1b. Leverage a CPF's ample frozen and dry storage to allow for maximum purchases of fresh produce; whole, raw protein; and pantry staples. Utilizing such products will enrich the quality and taste of the food while decreasing unit cost over time.

BEST PRACTICE

2. The District and Mid-Atlantic region are under-resourced in co-manufacturing services and require the creation of a District based co-manufacturing facility.

RECOMMENDATION

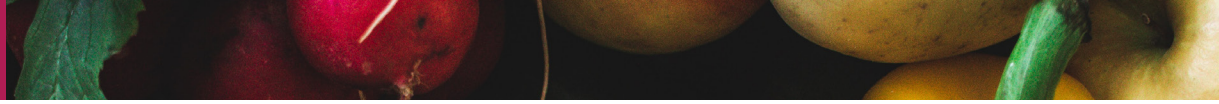
2. The co-manufacturing function of a CPF should support local food businesses as well as institutions, and could utilize much of the same equipment used to produce school meals. With co-manufacturing contracts, the facility could be operational 24 hours per day, which enhances operational efficiencies and revenue potential.

BEST PRACTICE

3. CPFs are able to take advantage of economies of scale by utilizing their facilities for multiple food service programs.

RECOMMENDATION

3. A CPF would directly receive purchased commodities to process and/or store for area school districts and other agencies with food service programs, in addition to DCPS and public charter schools.



BEST PRACTICE

4. A CPF centralizes storage of commodity and large-quantity purchases for scheduled cook-chill production over a longer period of time. This increases the purchasing power of DCPS and other public school districts and public charter schools, decreases the unit production cost, and creates an earned revenue stream with the co-manufacturing function.

RECOMMENDATION

4. Schedule cook-chill and other co-manufacturing services within the production calendar to solidify facility cash flow projections and identify gaps in the production schedule that would accommodate additional co-manufacturing customers.

BEST PRACTICE

5. CPFs are associated with the production of more healthful, less processed, wholesome meals for K-12 schools, early childhood programs, and programs for higher-risk consumers.

RECOMMENDATION

5. A CPF should include cook-chill functionality for speed scratch ingredients as well as produce processing capabilities in an effort to minimize heavily-processed food products.

BEST PRACTICE

6. A CPF that allows for dedicated, cordoned-off spaces can meet the highest level of food safety standards.

RECOMMENDATION

6. Process flow within a CPF will be developed with FSMA food safety compliance in mind and should include produce safety as well as preventive controls for human foods. The food safety plan should include prerequisite programs such as Good Manufacturing Practices (GMPs), specialized process line food safety plans including HACCP, supply chain control plan, allergen control plans, a recall plan, and a food defense plan.

Equipment

BEST PRACTICE

1. A CPF increases the use of regional products year-round through freezing and storage capabilities.

RECOMMENDATION

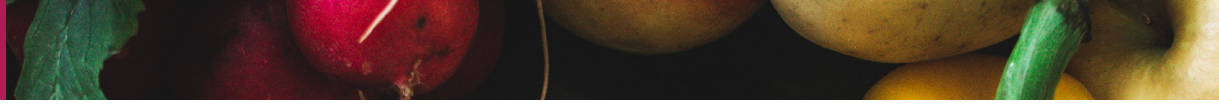
1. Explore the latest technologies at the time of CPF equipment purchase, recognizing that, while freezing and preservation solutions are a medium- to high-cost capital investment, it does substantially increase the amount of regional produce that can be purchased and used for District and other institutional meals.

BEST PRACTICE

2. Investing in high-quality equipment is money well spent, and equipment that serves multiple purposes provides the most value to a CPF's bottom line.

RECOMMENDATION

2. Invest in high-quality equipment, and ensure that resources are spent on a dedicated maintenance staff person (or upskilled janitorial or facilities staff person), trained by the vendor representatives. Additionally, equipment that can be cross-utilized or applied to several processing functions will support lean operations, lessen equipment footprint, and reduce maintenance needs.



Procurement and Contracts

BEST PRACTICE

1. Collectively, one or two anchor institutions, plus smaller purchasers in aggregate, that draw from a CPF facility for cook-chill product, processed produce, or storage services, have a positive economic impact on the region that a CPF serves.

RECOMMENDATION

1. A CPF should direct wholesale and aggregation functions for the region by creating channels to new markets for growers and suppliers, thereby acting as the conduit between farm and institution or other large purchaser. Additionally, institutional anchors, through a CPF, could provide BIPOC farmers not only contracts for their food, but also pre-payments to them, which can be leveraged by those farmers for needed infrastructure, labor, and land investments.

BEST PRACTICE

2. A CPF that is built to handle the storage, processing, and transfer of product that is regionally grown and sold through direct purchases, can help fill the gaps in a regional supply chain.

RECOMMENDATION

2. Build a CPF to minimally process and store the breadth of products available and the volume of product that the District and its stakeholders could potentially consume.

BEST PRACTICE

3. CPF operators around the country play an active role in thinking strategically and sustainably about how regional food is purchased, processed, preserved, and presented in institutional food service — especially on school menus.

RECOMMENDATION

3. Facility operations for a CPF should be focused on maximizing the utilization of regional ingredients for the production of regionally-sourced, value-added food products.

BEST PRACTICE

4. In cities or districts that have passed a formal Good Food Purchasing Program (GFPP), institutions are able to refer to that policy in their procurement bids and RFPs.

RECOMMENDATION

4. Use a CPF to create viable marketplaces with guaranteed customers that burgeoning producers need before scaling operations to meet growing demand. Additionally, a CPF can provide real-time data and reporting to evaluate success against GFPP goals for DCPS and other institutions.

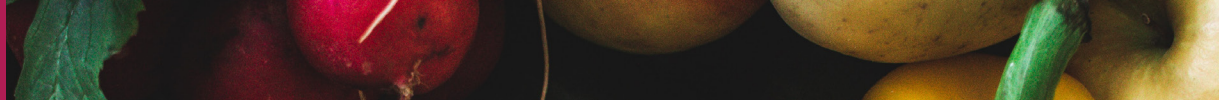
Labor, Workforce, and Personnel

BEST PRACTICE

1. Cross-trained, cross-utilized, and flexible produce processing and food manufacturing CPF staff can efficiently support the various processing functions.

RECOMMENDATION

1. Craft a staffing plan with well-trained generalists, and a few staff with specialized skills, along with ServSafe- and Good Manufacturing Practices (GMP)-certified staff, to ensure smooth, safe, and lean operations at a CPF.



BEST PRACTICE

2. Centralize the cook-chill production of certain food items currently prepared at individual school sites to lower overhead, labor, and operating costs.

RECOMMENDATION

2. Track meals per labor hour as a KPI to ensure optimal efficiency.

BEST PRACTICE

3. A CPF will thrive with an experienced general manager, exceptional management team — including a quality assurance manager, regulators, and certifiers — and a human resources manager to oversee partnerships with workforce development and other programs that are critical to the sustainability of a CPF as an equitable resource for the District food system.

RECOMMENDATION

3. Collaborate with the DC Workforce Investment Council (WIC), Department of Employment Services (DOES), and other stakeholders to create a workforce development plan to create career pathways, job opportunities, and pipelines for growth for CPF workers.

Distribution, Logistics, and Transportation

BEST PRACTICE

1. As an operational component of a CPF, distribution requirements should be considered when developing logistics around food delivery for District public schools and other purchasers of CPF products — specifically when selecting a facility location and capitalizing vehicle expenses.

RECOMMENDATION

1. In lieu of fleet ownership, a CPF should consider leasing a transport fleet, or work with a third-party logistics provider; additionally, ensure that the lease agreement includes vehicle service terms.

BEST PRACTICE

2. CPFs can provide cross-docking functionality for aggregation or temporary food-safe storage before it is transported to the end user.

RECOMMENDATION

2. Offer cross-docking services as a revenue stream for a CPF.

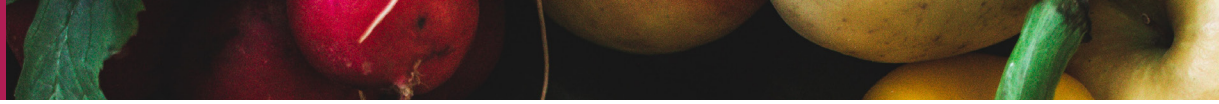
Wholesale

BEST PRACTICE

1. A CPF should aggregate regional whole produce for resale with a slight margin; aggregate produce for minimal processing, e.g., slicing, dicing, for resale with a higher margin; or play a broker role between producers and customers with a nominal handling fee. A CPF can also act

RECOMMENDATIONS

1. A CPF should explore the development of a wholesale division, and subsequent sales roles, managed by the facility operator. Three best practices models for the wholesale function are as follows:



as a price regulator on behalf of the farmer, ensuring that specialty crop growers in the region can secure fair market and living wage pricing for their crops.

RECOMMENDATIONS *(continued)*

- Identify preferred distributors in the Mid-Atlantic region and be a clearinghouse of a CPF's aggregated produce (supplier of product that a CPF purchases);
- Find a broker to sell a CPF's whole and minimally processed produce to institutional buyers (supplier of product a CPF processes);
- Purchase produce and provide inside and outside sales functions similar to regional produce wholesalers and distributors (wholesaler of all CPF food products, e.g., fresh produce and co-manufactured food items).

Additionally, a wholesale product line geared toward institutions as well as retail outposts, would benchmark the quality of institutional food.

BEST PRACTICE

2. Some producers may require training and technical assistance on product standardization, product grading, pricing, food safety, licensing, and insurance to take advantage of potential sales opportunities generated by the CPF.

RECOMMENDATIONS

2a. Create equitable access to training and technical assistance for producers and others as a key to success, and is a potential partnership opportunity.

2b. Educate wholesale customers on varietal differences and other variations as an important component of building out a regional produce wholesale marketplace.

Quality Control and Food Safety

BEST PRACTICE

1. A CPF helps to develop and maintain quality standards and nutrition consistency for various types of school food programs.

RECOMMENDATION

1. A CPF should be considered a resource for producing finished meals in response to institutional food service requests for quality and consistency, e.g., new charter schools, government agencies, DCPS summer meals program needs, other publicly-funded institutions and agencies, and in emergency response.

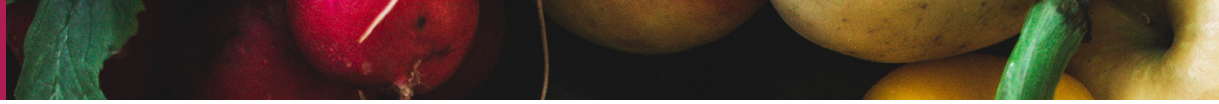
BEST PRACTICE

2. A CPF can account for production inputs from farm to table, as well as source-identify ingredients for full transparency and traceability.

RECOMMENDATIONS

2a. A CPF can determine its food safety requirements for suppliers, but Good Agricultural Practices (GAP) certification is not necessarily required in all instances.

2b. CPF inventory and logistics technology should be used to track regional food procurement.



Physical Facility

The layout of this facility, rooted in smart design, as well as thoughtfully-planned and well-executed space, supports primary purchasers (K-12 public schools) and the larger regional food ecosystem. The sections below explore building attributes that address location, capacity, flexible buildout, storage needs and benefits, food recovery, and waste management. This information demonstrates how a strategically planned space can advance the larger mission and vision of an overall CPF.

Location and Amenities

SELECTING A LOCATION

Optimizing location is critical for the success of distribution services; allows for equitable employee access and reasonable commutes, increasing the available talent pool; and ensures reliability once online, which is critical, as it will become essential infrastructure. Key criteria include:

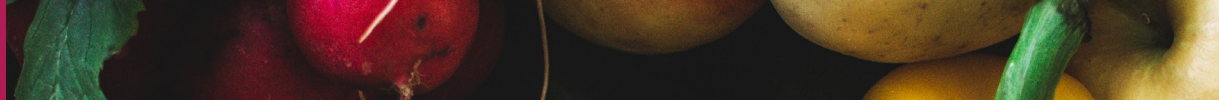
- Walkability, proximity to metro, major bus arteries, and parking to ensure easy commutes and equitable employee access.
- Location near highway hubs with easy hop-on/hop-off access to facilitate distribution.
- Good flow for vehicles and individuals accessing and leaving the building.
- Limited impact on the local community with traffic, noise, or other potential disruptions, to ensure the facility is an asset to the community where it is located.
- Redundancies in energy supply. One possibility is to locate a CPF in an area being considered for a microgrid (a local energy grid that can disconnect from the traditional grid and operate autonomously) to ensure it is protected in times of crisis. Another alternative is a location with redundancies in the electrical grid.
- Location away from high hazard areas to minimize disruptions to facility operations and avoid unnecessary operations and maintenance costs. (Note: The District has good hazard information that could help guide the location to avoid those areas.)

Creating separate production spaces dedicated to raw protein breakdown, protein cooking, and chilling, will not only establish a flow that can be adapted to the end user's needs, but will also aid in regulatory compliance and licensing requirements, as well as increase food safety.

A CPF that maintains an organic facility certification would be able to properly handle and maintain certification of organic products, as well as store and process conventional products opening up additional revenue opportunities.

CPFs are energy-intensive facilities. Green building strategies, such as those recommended by the U.S. Green Building Council's (Leadership in Energy and Environmental Design) LEED rating system to reduce electrical, water, and other utility usage, can balance some of these resource expenditures.

Dedicated spaces should be thoughtfully designed and equipped to include extra floor drains, electric, water, and gas hook-ups, a central compressed air system, and other features to future-proof the facility.



BEST PRACTICE

1. A CPF standardizes process and consistency of product for institutional food service, while also providing flexible space and reserved capacity to meet changing consumer and food system demands over time.

RECOMMENDATION

1. Create separate production spaces dedicated for raw and fresh processing, cooking and chilling that can adapt to CPF needs to aid in regulatory compliance and licensing requirements (USDA and others), as well as reduce risks for cross-contamination and increase consistency.

BEST PRACTICE

2. A CPF that maintains an organic facility certification can properly handle and maintain certification of organic products, as well as store and process conventional products creating additional revenue opportunities.

RECOMMENDATION

2. Work with a third-party organic certifier to secure organic certification early in the CPF planning process.

Layout

BEST PRACTICE

1. Green building strategies, such as those recommended by the U.S. Green Building Council's LEED rating system, to reduce electrical, water, and other utility usage can balance an energy intensive CPF.

RECOMMENDATION

1. Create a CPF that preserves natural resources, reduces pollution and waste, and lowers long-term costs through green-building practices. Take advantage of new technologies, especially those developed by District businesses, that can provide energy-efficient, earth-friendly solutions.

BEST PRACTICE

2. A CPF entails both dedicated spaces, such as wash/pack, storage, co-manufacturing, and produce processing, as well as flexible spaces that can be configured to adapt to new functions or needs over time.

RECOMMENDATION

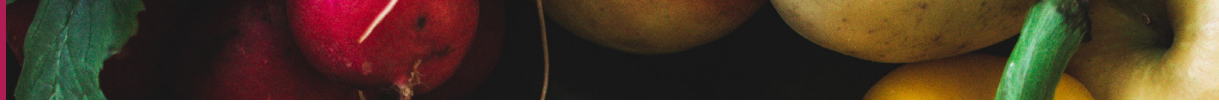
2. Dedicated spaces should be thoughtfully designed and equipped to include extra floor drains, electric, water, and gas hook-ups, a central compressed air system, and other features to future-proof the facility.

BEST PRACTICE

3. It is important to separate non-production space from food production operations. Spaces may include backup equipment storage, office space, and utility functions, e.g., dish and equipment washing room, classrooms, breakrooms, locker rooms, nursing rooms, laundry facilities, and more.

RECOMMENDATION

3. Locate facility leadership offices, meeting spaces, and classrooms near food production areas to enhance communication and understanding of daily operational functions. In addition, provide offices for District agency staff that utilize the CPF as well as for contracted co-manufacturing customers. Build in space for equipment storage, offices, and staff services in the original design.



Process and Workflow

BEST PRACTICE

1. Standardized production processes, workflow diagrams, and designated production areas create efficient and safe CPF operations.

RECOMMENDATIONS

1a. Dedicated entry points and storage of product inputs should be separate from finished goods and other product outputs to optimize process flow and enhance food safety.

1b. 1B. Reinforce food safety by building in temperature control capabilities at facility entrances and receiving points, internal transfer points, and outbound distribution points.

Cold and Dry Storage

BEST PRACTICE

1. Storage space, especially cold storage, is both scarce and cyclical in the Mid-Atlantic region, and is often the primary bottleneck for food businesses which should be alleviated by a CPF.

RECOMMENDATION

1. Build refrigeration and freezer space at a CPF with ample, multi-zone capacity to accommodate raw and minimally-processed regional produce for institutional buyers and other stakeholders to utilize throughout the year. Multi-zone cold storage should include a freezer zone (-10oF), produce (38oF), warming produce, e.g., tomatoes (55oF), as well as controlled ambient temperature zones.

BEST PRACTICE

2. Storage rental that is contracted to other food purchasers, e.g., area K-12 school districts, restaurant groups, and hunger-relief agencies, is a revenue generating function for a CPF.

RECOMMENDATION

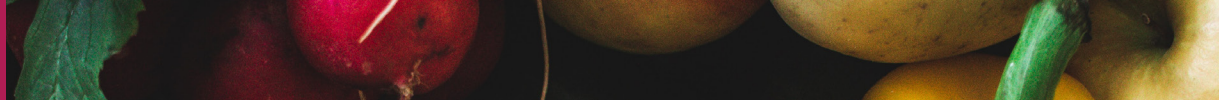
2. Storage areas within a CPF must be segmented physically and/or digitally so products by purchasers are tracked, and orders can be placed and pulled for distribution without disrupting process flow in order to create seamless revenue generation into normal operations.

BEST PRACTICE

3. A CPF should uniquely respond to the storage, processing, and logistics needs of the hunger relief community, affording established organizations such as Bread for the City, DC Central Kitchen (DCCK), and Capital Area Food Bank, the ability to flex into space if/when food insecurity surges.

RECOMMENDATION

3. Provide low- or no-cost ad hoc facility use for hunger relief organizations in the event of an emergency or supply chain disruption; and establish transparency about this resource to ensure equitable access.



Waste, Reuse, and Recovery

BEST PRACTICE

1. A CPF can provide a food-safe space to sort, process, and store food recovery items for hunger-relief organizations and others.

RECOMMENDATION

1. Assess hunger relief organizations' capacity for sorting, storage, packing, and processing to inform refinements to flexible space and financial projections for a modest revenue stream from facility utilization and storage. As an additional function, a CPF could be used to sort, process, pack, or redistribute during national crises, disasters, or public health emergencies.

BEST PRACTICE

2. Waste mitigation and minimization infrastructure should be accounted for and planned for in the implementation and buildout design of a CPF.

RECOMMENDATION

2. The CPF has two primary organic matter waste processing options: offsite composting services or an onsite anaerobic digester. The facility location will help determine the best solution, as it will take into account distance to processing facility, proximity to other residential and commercial properties, and other logistics factors.

Suggested next steps for the District government:

Suggested next steps:

- Create a comprehensive business plan
- Conduct an analysis of the scale of demand–factoring in growth potential within the District's food system
- At the time of site selection, assess physical facilities, land use, and zoning requirements necessary for a CPF to meet the scale of demand
- Create a District Government team early on to ensure continuity of project
- Conduct transportation and environmental impact studies
- Identify potential mission-aligned partners, anchor purchasers, and allies
- Further examine technological requirements and challenges
- Make the economic case to support regional food as the first source of purchased food
- Determine policy supports and incentives, and work toward their implementation

The clear need for an equitable and resilient food ecosystem, increasing demand for regionally-produced foods, and decreasing food security in the District for children and seniors — especially during the COVID-19 public health emergency — all underscore the benefits of a CPF. New channels for revenue generation and economic growth, as well as partnership opportunities with nimble, mission-driven organizations, would be a direct result of such infrastructure, and will answer the call in this unique moment to take actionable steps toward real systems change, with a District CPF as the keystone.