The Future of **FARMERS MARKETS**

Advancing the local circular economy



April 29th, 2018, Chicago

This research project is part of the ongoing grant-awarded ERIF project "Designing Sustainable Systems Solutions", a partnership between IIT - Institute of Design, IIT Stuart School of Business, and Plant Chicago



Objectives:

This document was created to enhance collaborations among farmers' market managers for advancing on circular economy practices in the city of Chicago. We present a high-level overview of ongoing design research focused on exploring current local circular economy practices within the farmers' markets in Chicago. Information is centred around major barriers and opportunities for interventions. We share this information with the goal of expanding the debate around the foundational challenges of implementing local circular economy practices.

Findings:

We relied on design research methods to approach the complex systemic issue of local circular economy in farmers' market in Chicago. We used eight lenses (networks, financial, cultural, digital, natural, built, governance, individual) to guide the research. We visited different sites, and interviewed several actors in the system.

While researching, we were able to identify four themes that emerged from patterns of existing challenges in the farmers' markets: data, best practices, materials & nutrient management, and rules & regulations.

We then hosted a workshop with farmers' market managers and other representatives of circular economy initiatives in Chicago to validate some of the interpretations being made, as well as to explore potential principles that could inform alternative paths to increase impact.

The workshop led us to four opportunity areas in which market managers should intervene to advance local circular economy practices in Chicago: collaboration, education, facilitation, coordination.

Next steps:

This report can inform the next phase to codesign and prototype interventions that advance local circular economies practices in Chicago.

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WHO IS INVOLVED?

In order to better understand the circular economy landscape of farmers' markets in Chicago, Elizabeth Lyon, from Plant Chicago, and Andre Nogueira, from IIT's Institute of Design, conducted a research project considering related initiatives currently being employed at farmers' markets across the city. Plant Chicago is a non-profit organization located on the south side of Chicago with a mission to cultivate local circular economies. This mission is carried out through education, research, and farmers market programming. Plant Chicago recently began working to develop collective activities with colocated businesses at The Plant, an industrial building located on the south side of Chicago that serves as a co-location and community building space for local food and beverage businesses.

Learnings from this new initiative showed that even though involved organizations shared sustainability-driven beliefs, major barriers still exist in understanding how to engage in circular economy practices as an organization. It can also be difficult to agree upon a set of indicators that might inform a collaborative system's values and performance. Even though Plant Chicago's initial goals were focused on engaging tenants at The Plant, the NGO recently started to explore alternative platforms for cultivating local circular economies across Chicago, including other farmers' markets in the city.

This project is part of the 2017 grant-awarded ERIF research "Designing Sustainable Systems Solutions", led by Dr. Carlos Teixeira, associate professor at IIT Institute of Design, Dr. Weslynne Ashton, associate professor at IIT Stuart School of Business, and and Andre Nogueira, PhD Candidate at IIT Institute of Design. The research is based on a partnership between IIT and Plant Chicago, and focuses on designing new strategies for sustainable systems solutions at the facility level.

We thank all the participants involved in this research process. Their commitment was critical to the development of this report. We welcome feedback and suggestions that can contribute to move this initiative forward.



Plant Chicago Farmer's Market, Sept 2017

WHAT IS THE CHALLENGE?

In order to support an increasingly urbanized population, cities need to reconsider the principles sustaining decision-making, and reimagine their processes through which critical infrastructure is developed, especially those around waste, water, energy, and food access [1]. The city of Chicago generates over 2,200 tons of food waste every day [2], has over 400,000 residents living in "food deserts" [3], and depends on non-renewable sources for 96% of energy demand [1]. These are interconnected problems being reinforced by an economy based on the linear, "resource in, waste out" thought process.

As public spaces that collectively attract hundreds of thousands of visitors each year in Chicago, farmers' markets hold immense potential to demonstrate, promote, and engage businesses and residents with circular economy practices. However, markets face many barriers including lack of adequate funding, staffing, information, energy and waste diversion infrastructure, and collaboration, all of which make it difficult to understand and implement

circular economy practices at a citywide level. Little research exists on the history and current state of farmers' markets in Chicago, let alone on their challenges or successes related to waste diversion, sustainable packaging, and energy use.

Whereas farmers' markets have increasingly aimed to support local businesses while also attempting to tackle food insecurity and malnutrition throughout Chicago, the challenge of how local circular economy practices (e.g. waste diversion, sustainable packaging, and energy use) should be incorporated into the rules, regulations, and daily operations of the market itself, is yet to be uncovered. So, we asked ourselves:

[1] https://www.comed.com/documents/about-us/environmentalcommitment/environmentaldisclosure.pdf?FileTracked=true [2] http://www2.illinois.gov/gov/green/documents/waste%20study.pdf [3] http://www.marigallagher.com/site_media/dynamic/project_files/ FoodDesert2011.pdf

HOW MIGHT FARMERS' **MARKET MANAGERS COLLABORATE TO ADVANCE CIRCULAR** ECONOMY PRACTICES IN THE CITY OF CHICAGO?

BEFORE MOVING FORWARD, WE WOULD LIKE TO SHARE OUR UNDERSTANDING OF CIRCULAR ECONOMY:

FROM A CIRCULAR ECONOMY ...



The emerging circular economy movement, formalized by thought leaders such as the Ellen MacArthur Foundation [4], re-imagines the economy as a circular system of resource flows, where the output from one industry becomes an input for another. The movement is a response to current inefficient systems of production and consumption that are based on linear models of "taking, using, and wasting" resources. Together with others, the foundation has been advocating for reorganizing the economic system by utilizing the following three major principles.

Adapted from [5]

Preserve and enhance natural capital by controlling finite stocks and balancing renewable resource flows.

Optimize resource yields by circulating products, components, and materials at the highest utility at all times in both technical and biological cycles.

Foster system effectiveness by revealing and designing out negative externalities

While the circular economy movement has gained traction in various sectors over the last decade, little attention has been given to the complexity behind social interactions or to the infrastructure, tools, and methods required to promote such paradigm shift at the local level. For example, when applying the three principles defined by Ellen MacArthur Foundation in platforms for community development (e.g. farmers' markets), it is still unclear how they should be incorporated, especially when dealing with challenges related to environmental sustainability, social justice, and economic equity. Although still a working definition, we have been exploring the local circular economy as a

COLLABORATIVE PRACTICE SUSTAINED BY LOCAL CIRCULATION OF MATERIALS. NUTRIENTS, KNOWLEDGE, AND MONEY; AND EMPOWERED BY PRINCIPLES OF TRANSPARENCY, DIVERSITY, AND INCLUSION.

[4] http://ellenmacarthurfoundation.org

[5] https://ecomono.com.au/blogs/news/the-circular-economy-a-restorative-model-by-design-and-its-connection-to-fashion

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TO A LOCAL CIRCULAR ECONOMY ...



WHAT HAVE WE DONE?

	MARKET MANAGERS		
	Independent	City Run	
Year-Round	2X		
Seasonal	4X	1X	

1 market 2+markets

We relied on systemic design research methods to approach the complex systemic issue of local circular economy in farmers' market in Chicago. We used eight lenses (social, financial, cultural, digital, natural, physical, governance, individual) to guide the research with the goal of learning about the barriers to, and opportunities for, implementing practices to advance the circular economy at Chicago farmers markets. We have visited different farmers' markets, grocery stores, restaurants, urban farms, community center and research institutions, and engaged with local vendors, farmers market managers, customers, and peer organizations to conduct the research from January through May 2018.

We interviewed participants about their personal and professional experiences in farmers' markets, and the infrastructure supporting their activities around Chicago. This allowed us to gain a rich perspective of the circular economy landscape in farmers' markets around the city. We then utilize well-known design methods such as POEMS (people, objects, environment,

messages and services), the five stages of human experiences (entice, enter, engage, exit, extend), user journey maps, value webs, and activity systems, as tools to ground our research in the context, and structure our findings.

We hosted a workshop with farmers' market managers and other representatives of circular economy initiatives in Chicago to validate some of the interpretations being made, as well as to explore potential principles that could inform alternative paths to increase impact. In the next pages you will find information about our design approach, an overview of the workshop, what we learned, and the four opportunity areas we have uncovered.



VENDORS			Additional
Farm	Prepared	Non-food	Programs
	1X		
		1x	

Mapping assets

We started with a speculative exercise of defining a "hyper-local" geographic area based on major transportation corridors. We were curious to validate some of the assumptions we were making about the value of advancing a local circular economy,

Our goal was to learn about existing opportunities for collaboration between Plant Chicago's farmers market and entities in its surrounding geographic area. By mapping the landscape of educational institutions, parks, public institutions, health care providers, urban agriculture projects, and food retail establishments, we began to uncover potential local collaborators in advancing circular economy practices.

However, forming partnerships with the identified organizations can be resource consuming. Without the appropriate amount of time, knowledge, skills, and financial support to build and maintain relationships, and the proper infrastructure to introduce new activities into the market, partnerships might be limited in the long-term agenda.



NEAR NORTH SIDE

Chicago

NEAR SOUTH SIDE



DOUGLAS

BRONZEVILLE

GRAND BOULEVARD

KENWOOD

HYDE PARK

WOODLAWN

SOUTH SHORE

AVALON PARK

CHATHAM.

SOUTH CHICAGO

CALUMET HEIGHTS

Historical evolution

We then focused on quickly exploring the broad historical presence of farmers' markets in the urban life. Even though information about farmers' markets in American's history is limited given their impact in society, it is safe to say they played different roles through the years. Over time, they have expanded their mission from being a point of sale for farmers to providing food access for low-income communities. Very recently, they have also started to engage in "shop local" movements to support small businesses, as well as building community through various complementary programming. As such, farmers' markets are flexible platforms capable of changing and adapting to attend social needs and consumer demands in regards to larger societal movements.

The table on the left is a result of a short investigation of the farmers' markets value-overtime. The columns represent fixed conceptual time frames.

Sources of information accessed on March 2018 https://daily.jstor.org/the-wartime-origins-of-farmers-markets/ https://www.smithsonianmag.com/arts-culture/farmers-markets-68235529/ https://farmersmarketcoalition.org/the-cultural-significance-of-farmers-markets/ http://msue.anr.msu.edu/news/urban_and_farmers_markets_have_a_long_history_in_these_iconic_cities https://www.ams.usda.gov/local-food-directories/farmersmarkets http://ageconsearch.umn.edu/bitstream/58131/2/Vecchio.pdf https://www.cityofchicago.org/city/en/depts/dca/supp_info/farmersmarkets0.html

	1970 - 1994	1994 - 2010	2010 - 2017
SOCIAL MOVEMENT	Counter culture; back to traditional farming; local movement "started" Grassroots activism	Food access (food desert awareness) & organic/ healthy movement moving to mainstream, emergence of community gardens/ community food systems Grassroots activism	Local is the "desirable"; healthy; fresh ; organic ; community development ; advocacy around community gardens & community food systems City investment Support in food desert plan
MANAGEMENT	Nonprofit Municipal Farmers	Nonprofit Municipal Individuals (neighborhood markets)	Nonprofit Municipal Neighborhood Business Development Organizations Chambers of Commerce
TYPES OF Vendors	Farmers Value added, bakery	Local farmers Value added, bakery Craftspeople Prepared foods	Local farmers Value added, bakery Community gardens Craftspeople Prepared foods Community businesses
PRODUCTS OFFERED	Fresh produce Jams, honeys Breads Small amount of ready to eat foods & crafts	Fresh produce Jams, honeys Breads Ready-to-eat foods Arts & Crafts "Gourmet" items	Fresh produce Jams, honeys Breads Ready-to-eat foods Arts & Crafts "Gourmet" items
SERVICES OFFERED		SNAP acceptance	SNAP acceptance Double-Value Coupon Programs Food Scrap drop-off
MARKET ACTIVITIES	Commerce Socializing spot	Commerce Socializing spot Education Entertainment	Commerce Socializing Spot Education Entertainment Civic Engagement

Values exchange and activities flows

Even though flexible, we learned that farmers' markets are heavily reliant on grant funding, which is a main determinant of what activities and programming markets choose to incorporate. Markets are made up of an incredible amount of interactions between farmers, local business, local residents, and non-profit or government organizations, but still isolated within their own boundaries. As such, each of these interactions, including among market managers, holds an opportunity for education and action around circular economy practices. The diagram below shows the interdependencies among major activities that are needed to bring a farmers' market to life. Accounting for these interdependencies allows us to explore what activities might be necessary to advance local circular economies.

While envisioning the future of farmers' markets can be challenging, the diagram on the right allows us to identify key actors that are giving and receiving value. The three green circles in the background indicate proximity to the activities happening during farmers' market. Because we have learned that farmers' markets are flexible platforms, we can assume the model can be changed to advance local circular economies in Chicago.





Situated interactions

When visiting markets, we saw several activities related to circular economy taking place (e.g. trade among vendors). However, they are still serendipitous, and depend on the level of affinity between vendors or the proper infrastructure in place (e.g. three bin waste stations). If market managers focus on advancing circular economy practices, they might uncover hidden connections and opportunities for improvement in every stage of the user journey. For example, customers, vendors, market managers, and volunteers go through intensive periods of engagement (e.g. during the market), but very little before or after. By approaching the interactions among actors in five stages, we are able to identify opportunities for interventions in their initial attraction (entice), when entering the farmers market (enter), when engaging and participating with the market's offerings (engage), when leaving the market (exit), and when the actors' experiences are extended after the market (extend). The diagram below is a generalized and abstracted representation of farmers' markets' journeys. While it is linearly represented, the journey is an iterative process. The colors on the curved lines indicate where actors normally engage in the journey. Icons with grey backgrounds represent subsets of major activities (e.g. Q&A, emergent issues, manage LINK services, and waste stations are subsets of Operations and Management during the engagement phase).



Anatomy of infrastructures

Our approach guickly allowed us to understand that farmers' markets are a platform in the city. When intervening in platforms such as farmers' markets, it is important to understand the integration of multiple systems (e.g. food, mobility, education, healthy, economy, natural) and the interactions among actors (e.g. customers, vendors, market managers, property owners, volunteers). In order to do so, we conducted ethnographic research on both users and infrastructures. We focused on understanding the infrastructure shaping the interactions among actors, and how the multiple systems were being integrated. In both we utilized the eight lenses to expand our perception of the dynamics of the systems.

The diagram maps the existing features, the actionable properties they currently afford users to do, the impacts they generate, and their relationships with the intended goals of farmers' market platforms. This tool is useful to understand the systemic complexity in advancing local circular economy, and how interventions might consider the multi-level integration of various systems. For example, we learned that even though diversity is affording a variety of offerings, it is not addressing challenges of social inequalities. When reading the diagram, please zoom in to better capture the complexity involved in the system.







WHAT HAVE WE UNCOVERED?

We compiled data gathered from multiple research approaches, including the previously mentioned in this report, user and site observations, interview notes and participant observation experiences, among others. Upon analysis, we generated 100+ insights from the data. We also used system dynamic tools in combination with the innovation lenses approach to identify multiple interactions among agents. By doing so, we were able to uncover seemly unrelated variables, and identify patterns across different data. Even though there is no single pattern that on its own can summarize the complexity embedded in advancing local circular economies, the combination of design methods led us to four of them, here presented as themes. While not extensive, they present common challenges among farmers' markets, and therefore, entry points to advance local circular economies. Please dive deep into the diagrams on the following pages to see the multi-level nature of the themes given some of their elements.



Data



Best practices



Rules & Regulations



Material & Nutrient management

"[In the past] markets were just another program of the organization. Now they are more about accessibility and food access. So it's really evolved but the farmers and small businesses are always our top priority. Secondly is making sure everyone has access to food and is eating healthy"

Vendor's tent at the Plant Chicago Farmer's Market, Sept 2017

DATA

Data gathered is related to market-level financial transactions, attendance, and customer survey feedback, with little data collected on vendor revenue/growth, waste diversion, or collaboration between vendors. Data is also not aggregated at a city-wide level. Because most data remain with individual markets and their targeted stakeholders, it does not currently help us to understand overall impact of markets in the city of Chicago. Additionally, some of the data important to indicate advances in the local circular economy are not being gathered by a majority of markets.

Vendors at long-standing markets are hesitant to submit vendor-specific data, such as revenue, especially if this was not required of them when the market started. Reasons for data collection need to be explained in relation to the larger goal of the market and how it will help their business in order for vendors to begin getting on board with the idea of submitting potentially sensitive business data.



"The data has been tough because we didn't ask for data at the beginning (19 years ago), and the farmers remind us of that every time we ask for data, so that has been a challenge. Last year we really tried to push it and we got mediocre results." [Farmers market manager] We learned that several market managers are implementing circular economy practices such as composting organic materials at the market and setting sustainability standards for vendor packaging. Other managers have not yet understood the importance of adopting these practices, or still struggle to understand how best to implement them into current programming with limited resources.

Chicago market managers currently share best practices with each other through informal relationships and infrequent gatherings, but there is great opportunity to create a sustained and more inclusive way to share best practices on many aspects of farmers' market management. While this project is focusing on advancing circular economy principles, best practice sharing can increase the efficacy of farmers' markets in many other arenas as well.



BEST PRACTICES

at its best."



"The stronger networks of community market organizers didn't exist 15 years ago. But now we can check on each other because we have very similar missions. Community policing [Farmers market manager]



RULES & REGULATIONS

MATERIAL & NUTRIENT MANAGEMENT

A wide range of quantity, specificity, and enforcement exists within farmers' market rules and regulations in Chicago. Markets tend to align their regulations with the larger goals of the program. Only a few markets require farmers to possess a third party certification, most of which relate to the treatment of animals and use of synthetic pesticides, but none of which have the ability to encourage a truly holistic approach to advancing the local circular economy. In addition, few markets explicitly require vendors to meet specific social justice or materials/nutrient management and sourcing standards.

Many vendors are initially hesitant to implement circular economy practices such as sourcing compostable packaging, mainly due to a perceived financial barrier. However, market managers who have helped vendors successfully make the switch explained that implementing this change gradually over time and educating vendors about the importance of composting and the goals of a circular economy was effective. One vendor mentioned that being able to say his packaging is 100% compostable has helped with marketing and is also a great opportunity to educate his customers on circular economy principles.



"There were two people in the application process this year who weren't certified. When we mentioned the third-party certification requirement, they jumped through all the hoops and got their third party certification right away because they wanted to be at the market." [Farmers market manager] Implementing a circular economy-based materials and nutrient management system, such as composting, can significantly increase the diversion of organic waste from landfills. A farmers' market's ability to implement a system that properly manages "waste" materials and nutrients in order to increase their local circulation is highly dependent on the market's host site and the priorities of the market's host organization.

Many markets stated lack of budget, infrastructure, knowledge, and available local services as barriers to diverting organic waste from landfills. In the past five years, a handful of markets have hired small, local food scrap haulers to handle their "waste". One market is partnering with a local non-profit to study current materials and nutrient management practices and implement a "zero waste" program. As a few managers mentioned, once an organic materials diversion system is in place, ongoing education needs to be done in order to ensure proper sorting. This holds great potential for educating the general public on circular economy practices in action through conversations at a market "waste station" and reports to communicate overall results of "waste" audits, including quantity of nutrients diverted.



"We don't necessarily have much waste. The vendors that have their own samples all have a garbage bin nearby. I haven't paid close attention but I'm pretty sure they take that bag and toss it in the nearby garbage or recycling. I'm pretty sure our vendors are *being conscious of that.*" [Farmers market manager]

Sense Making Workshop

We hosted a workshop at the IIT- Institute of Design for market managers and other collaborators of circular economy initiatives in Chicago. The goal was to validate some interpretations and the four themes we uncovered, while exploring alternative paths to advance local circular economies.

In pursuit of these goals, we promoted designled interactive activities to support the ten participants in co-defining principles for future engagements that could guide farmers' markets in this direction.

Ten participants were divided into two groups. Each group chose one of the four themes as a context for exploration considering the how might we's and the three principles of local circular economy: transparency, diversity, and inclusion. The themes selected were: (1) Nutrients & Materials Management, and (2) Best Practices. Both teams focused on inclusion.

By having a (A) clear goal (advance local circular economy in Chicago through Farmers Markets), (B) challenges participants all agree upon, and (C) a focus of intervention (inclusion), participants were able to generate principles of interventions. They utilized the eight innovation lenses to structure their thinking, and expand their perception of the system.

Even though the workshop lasted only for one and a half hours, participants were also able to quickly speculate future scenarios to guide and advance local circular economies in farmers' markets, considering their principles for future interventions. Finally, they shared their outputs, contacts, ideas, and excitement in moving this project forward.

The principles presented on the following pages were developed by the participants of the workshop, and should be used to inform future interventions according to their perception of the current state of farmers' markets and the local circular economy more broadly.



How might farmers' martkets become a platform for benchmarks and data sharing to communicate the combined impact of local circular economy practices?



How might we collaborate to create an affordable and effective system to divert nutrients and materials away from landfills?

22

to learn from each other so we can employ proven successful practices at our markets and advance local circular

INCLUSION Inclusion means engaging people from all social, economic, and cultural backgrounds in developing local circular economies in Chicago. By intentionally being inclusive in implementing these practices, we can ensure that materials, nutrients, money, and knowledge are circulated



How might we shape market regulations to encourage the adoption of local circular economy practices by vendors and customers?

TRANSPARENCY

Collaboration among a large variety and quantity of actors and stakeholders is vital to any circular economy system. However, no system can collaborate effectively or measure impact without being transparent about their goals and progress toward these goals.

DIVERSITY

Diversity of program offerings and actors is a key success factor for farmers' markets working to develop the circular economy. When markets become more diverse, the circular economy at markets is strengthened.



ecycling

Landfi

Material and Nutrients station at Plant Chicago's Farmers Market, Jan 2018





NET-NORKS Expand relationships between managers and vendors, community partners, and funders.

> Consider the diversity of those coordinating and being served by market programming.

CULTURA

Be open-source and build on existing resources and mechanisms. FINANCIAL

HOW SHOULD WE MOVE FORWARD?

The research and results from the workshop directed us to four actionable properties that are required from market managers to advance local circular economies. They are here presented as opportunity areas for intervention and impact. They are not meant to be exhaustive, rather an indication of what's possible with collaboration across stakeholders and organizations.

While these may seem like common sense at first glance, the way they can relate to each other and expand market managers' perception about their role is where we see a valuable contribution. By incorporating them, farmers' markets can become a point of reference advancing local circular economies within Chicago, as well as an entry point for broader engagement.

However, changing existing activities to incorporate education, facilitation, collaboration, and coordination towards local circular economy can be a complicated task that will require new engagements and new types of values being exchanged. Thus, new infrastructures to unlock existing practices, and overcome fundamental barriers in collaborating for local circular economies should be built to support such effort.





EDUCATION

Market managers should provide proper infrastructure to disseminate the knowledge.

If vendors and customers do not see the multiple values in circular economies, they are less likely to participate in market activities geared toward it. More at-market education on general circular economy practices (e.g. composting, sustainable consumption classes) is needed to gain buy-in and participation from vendors and customers.

Market manager, vendors, customers, and volunteers all need to understand how to properly sort and divert materials and nutrients in a local circular economy to ensure maximum diversion from landfills. Market managers, vendors, and volunteers can all play a role in educating customers through market infrastructure like waste stations and signage. In order to do so, a cultural shift is needed. It is important to re-value produce that is often wasted because it doesn't comply with the aesthetic standards set by industrial practices (often called "ugly" produce). Markets can play a role in educating vendors and consumers about the immense economic and nutritive potential of produces in order keep local nutrients in circulation.

While many local companies now offer compostable serveware and packaging, few vendors have switched over to these options. Market managers have an opportunity to educate vendors on local options for compostable materials sourcing and to potentially provide resources to make these materials more affordable to vendors.



COLLABORATION

Market managers should organize and intentionally support one another.

Market managers currently operate separately from each other, each serving the goals and mission of their independent organizations. In addition, managers only get together as a group 1-2 times per year at networking events and conferences. In order to collaborate effectively, it is necessary to first establish a common agenda among market managers.

Because market managers are juggling a variety of tasks on a daily basis to accomplish basic job duties and short-term goals, it can be easy to lose track of collaborative efforts concerning long-term goals. A group leader will be needed to ensure that managers are staying involved, informed, motivated, and committed to working together toward their common goal. A rotating physical venue for meetings is important for market managers, who are not only located all around the city, but also benefit from exposure to existing resources, such as local farms/food businesses, community organizations, and peer farmers' markets.

In addition to physical meetings to share best practices and work toward a common goal, a digital space for dynamic collaboration and support is needed to keep managers consistently engaged in learning and sharing.



FACILITATION

Market managers should structure goal-oriented interactions to sustain engagements.

Market managers have a wide breadth and depth of knowledge and troubleshooting questions to share with each other. Unstructured conversations among managers can go in many directions. If a group is to work toward a shared goal, structure for engagement will be need to make sure the group stays on track.

However, achieving common goals can be challenging, specially because markets have different infrastructures, serve different customers and vendors, and have access to different types of resources. If market managers want to sustain participant engagement and ensure that conversations lead to action toward the group's shared goal, they will have to develop facilitation capabilities to support their interactions.

Moreover, market managers will need to expand the suite of services they currently provide not only to each other, but also to their vendors. Because market managers have a bigger picture of the activities happening during the markets, they should be able to facilitate collaborations among venders that can advance local circular economies.

Because nearly all circular economy practices at a large scale rely on cross-sector collaboration, strategic partnerships will be important to carry out any initiatives the group decides to launch, as well as to expand the reach of these initiatives beyond farmers' markets in Chicago.



COORDINATION

Market managers should ensure collaborations lead to actions.

A long-term commitment to circular economy practices and the stated goals of the group is needed to maintain cohesive and effective collaboration.

As such market managers should provide a proper support to each other in enforcing agreements made between markets and vendors, especially on provisions that relate to the local circular economy.

In order to do so, they will have to coordinate with vendors and each other on first collecting baseline data and then continually updating and comparing data in order to track performance of program interventions.

By coordinating with each other, market managers will be able to understand and communicate overall impacts of their collaborations, and share circular economy-related data on a regular basis with broader audiences..

WHAT ARE THE NEXT STEPS?

This report can be used to advance future actions, and inform next phases. While not exclusive, we have identified several options that market managers can move forward. To any of them, we highly recommend the involvement of experts in design methods, capable of supporting systemic approaches that advance some of the contributions of this project. Market managers can:

1. dive deeper into this research, and develop a more detailed work.

2. organize themselves and collaborate to codesign and prototype interventions that advance local circular economies practices in Chicago.

3. seek collaboratively for funding during the upcoming summer to maintain momentum, and prepare for more advanced work next year.



Participants during workshop April 2018



The Future of **FARMERS MARKETS**

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April 29th, 2018, Chicago

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