MEMORANDUM

DATE: JANUARY 7, 2019

TO: GEORGE REISTAD, PROJECT MANAGER

MADISON TERMINAL MARKET PROJECT

FROM: ANNA R. JENSEN, TEAM LEADER

ACDS, LLC

RE: MADISON TERMINAL MARKET PROJECT UPDATE

This memorandum intends to provide an overarching context for the technical memoranda distributed to the local committee:

- 1. Terminal Market Needs and Solutions
- 2. Shared Last Mile Delivery and Refrigerated Locker Solution
- 3. Business Service Needs and Solutions
- 4. Commissary/Flex Food Manufacturing Needs and Solutions

Collectively the memos present the initial business concepts that respond to the market needs and opportunities identified up to this point. ACDS and the local committee will continue to refine the solutions to the needs and opportunities. The refined responses will allow the project to move into the next phase with a solid basis for business modeling.

Purpose of the Project

Radical changes happening in the food system are impacting all levels of the food supply chain, from farmers to distributors to consumers. Consumers are demanding more discrete types of food, including organic, local, GMO-free, and allergen-free, among others. New food safety regulations and labor issues are impacting businesses from farmers to retailers. Distribution companies and farmers must conform to new and complicated transportation rules. These issues and others affect how food moves to, from, and through the region.

Along with the changes to the food system nationally and internationally, issues particular to Madison add a layer of complexity to the situation:

- Demographic changes
 - o Bifurcation of income and wealth
 - Increased urban density
- Consumer demand
 - High demand for home delivery
 - Large number of mobile device users

- High demand for organic products
- Transportation
 - o Impact of amended federal regulations for local and long-distance trucking
 - Difficult local traffic and parking conditions
- Labor conditions in the food industry
 - Poor food industry skills
 - Low labor retention rates
- Poor food access to nutritious food for low income and disadvantaged populations
 - o Equity in bifurcated market
 - Food deserts

The City of Madison recognized that gaps in the system are preventing food from flowing efficiently from the farmer to the end consumer for myriad reasons. It is understood that there is a need for physical infrastructure that replicates the functions of a terminal market. Those include things like multiple tenant capability, climate-controlled storage, local logistical support, load aggregation and disaggregation, minimal processing, picking and pulling, increased food access, and improved efficiency for small businesses.

How is ACDS working through the issues?

The project team began by gathering raw data regarding food production, consumption, and logistics, among others. A summary of the research data can be found in Appendix A, attached hereto. Then the team conducted more than 50 in-person interviews of farmers, distribution company representatives, retail store and restaurant owners, and researchers. The team used all sources to determine the answers to several questions:

- How and what products move from the farmer to the consumer?
- What do consumers (thus retailers and restaurants) demand in Madison and regionally?
 - What can local and regional farmers produce to fill that demand?

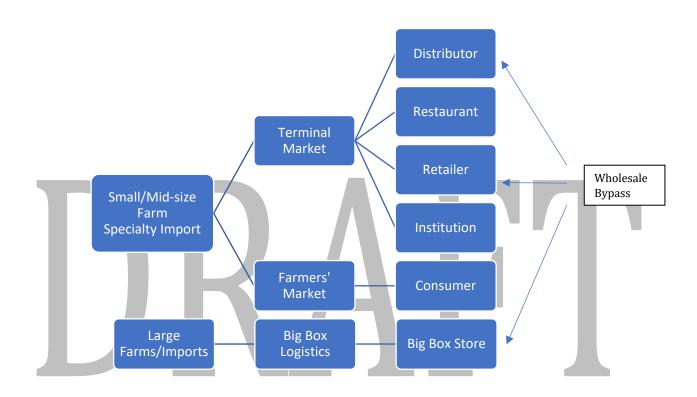
Additionally, because an existing site might be part of the solution, ACDS is analyzing the possible use of part of the Oscar Mayer campus, looking at its strengths and weaknesses, and comparing it to other potential sites in the city.

ACDS believes that the needs of the market drive business responses. The recommendations addressed in the technical memoranda reflect that belief. Current recommendations may change in focus or scope because research is ongoing. As the project team finishes Phase 1 of this project, it will remain open to new issues that may require a different solution.

What is a Terminal Market?

Terminal markets are centralized locations, mainly in urban areas, where fresh food arrives in bulk quantities, gets broken down into smaller lot sizes, and then is distributed retail operations like stores and restaurants.

Today, as large retail and institutional buyers desire more centralized control of their food supply; they bypass terminal markets by using their own internal distribution systems. This process, which is referred to as wholesale bypass, has resulted in a loss of volume at terminal markets. The process has reduced market access for small to mid-size farms that rely on terminal markets as a source of liquidity. Finding new solutions to marketing perishable foodstuffs in a manner that is equitable, transparent, and fair is, therefore, a central theme of this project.



Terminal markets are an essential link in the supply of fresh food to metropolitan areas. They work well because large numbers of buyers and sellers can come together to buy and sell. These centralized facilities aggregate large volumes of food from both local farms and far off import markets, bringing in both bulk commodities and specialty foods. Once on the terminal market, the bulk shipments are broken down into manageable sizes and offered for sale in a competitive, open-air sales environment that makes buying and selling easy and transparent. Small businesses can readily access the market, where they can view the products, negotiate price among the competitive wholesalers, and assemble small diversified loads from both the commodity and specialty sectors.

The very nature of the transaction system present on the nation's terminal markets brings many advantages to those who use the markets, which are listed in the following table.

Advantage	Description		
Information exchange	Trust in terminal markets is built by the nearly immediate exchange of		
	information occurring through the hundreds or even thousands of		
	interpersonal contacts made during the day. When information exchange is		
	symmetrical, meaning all parties have the same information at the same		
	time, the marketing system is not biased against one set of participants.		
Price discovery	The open-air transaction environment on terminal markets allows for		
	market participants from farms through wholesalers and buyers to		
	understand the pricing structure of the commodities being traded. The		
	wholesale bypass system does not allow for this type of transparency.		
Network development	Because terminal markets encourage the physical mixing of many elements		
	of the supply chain, they are in a place where the positive benefits of		
	collaboration and competition are seen on a regular basis.		
Liquidity enhancement	Terminal markets rely heavily on fast settlement of transactions based on		
	the strength of the established relationships. This speed means farmers		
	typically receive payments as cash settlements or within days of the		
	transaction, rather than 30 or 45-day terms offered by the larger system		
Efficiency	Terminal markets are characterized by high product turnover rates and high		
	levels of proficiency in breaking bulk shipments into small orders. The		
	efficiency allows markets to be competitive in servicing small accounts with		
	limited order volumes. Large distribution companies often charge		
	surcharges or minimum order volumes to service the same clientele.		
Product diversity	Terminal markets are characterized by the variety of the wholesalers and		
	buyers that utilize the markets, so they provide diverse products ranging		
	from ethnic specialties to organic products. Terminal markets, as a whole,		
	often offer many more SKU's than a standard food distributor.		

This project focuses on replicating the positive aspects of the terminal market for locally and regionally owned farms, distributors, wholesalers, retailers, restaurants, and other supply chain participants. Given the trends in distribution and wholesaling activities, supporting these characteristics may require innovative approaches to redefine terminal markets.

Project Status

Phase 1 of the Madison Terminal Market Project is a process of discovery during which the project team investigated consumption patterns, industry trends, community needs, and freight movement. Through interviews, data analysis, and site visits, the team developed recommendations to address weaknesses in the local food system. The team determined that the gaps in the food supply chain in Madison call for a cooperative business model that provides an integrated solution which includes facilities, business services, technology solutions, and improves consumer access. This business may own and operate facilities, manage and coordinate business services, license technology solutions, and expand consumer access with new pick-up and delivery options.

The purpose of the cooperative style business model, and its suite of solutions, is to enhance market access, efficiency, and profitability of its members while providing a public benefit of improved food access and social equity in Madison. Members could include farmers, distributors, manufacturers, and retailers.

The proposed model includes solutions that address needs for farmers, manufacturers, distributors and wholesalers, and retailers. Weaknesses noted in the analysis of the food system are transportation system weaknesses; lack of cold storage; need for processing space, particularly for allergen-free products and specialized supplements; and improved technology integration across the supply chain.

The project team developed four technical memos to discuss the five aspects of the project recommendations more fully. However, as supply chains are interconnected, so are each of the solutions recommended. Cold storage will integrate with transportation from the farm as well as local and regional delivery. Commissary, if integrated into the terminal market design, would be housed in a space collocated with cold storage, allowing manufacturers access to storage for distribution to retailers and restaurants. Technology solutions would connect farmers to wholesalers, wholesalers to retailers, and retailers to consumers. Delivery services and locker solutions would provide increased convenience and access to consumers. Business services would be available to all of the members and outside businesses to enable improved performance.

Relationship of Core Elements

The five business concepts being advanced in the attached Phase 1 memoranda should be considered as an integrated set of solutions to achieve the benefits of a terminal market. While ACDS, LLC feels strongly that these solutions be offered through a cooperative management structure, each could stand alone or be absorbed into an existing business by addressing a specific set of needs within specific segments of the supply chain.

	Terminal Market	Business Services	Locker System	Commissary
Agricultural Production	X	X	X	X
Manufacturers & Processors	X	X		X
Wholesale Distributors	X	X	X	X
Food Retail & Services	X	X	X	X
Consumers			X	