

UF/IFAS Extension

The Journey to Sustainability Begins with Education



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Growing the Demand for Locally Produced Food: Challenges & Opportunities

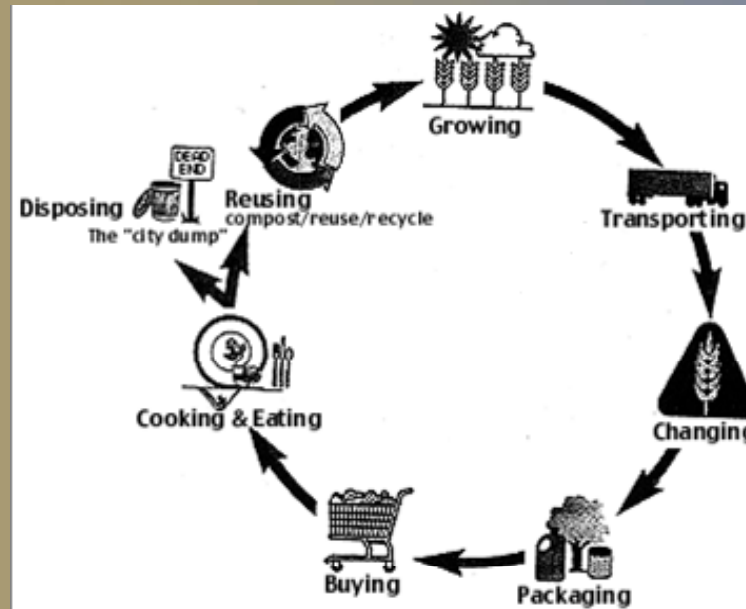
Robert A. Kluson, Ph.D.
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Outline

- Concept of foodshed
- Local foodshed background and development in Sarasota County
- Examples of foodshed initiatives in Florida

What is a Foodshed?

- The Who, What, Where, When, Why and How of Our Food Getting From Farm to Our Plate



EarthFriends. 1995. The Whole Story of Food

Foodshed Concept

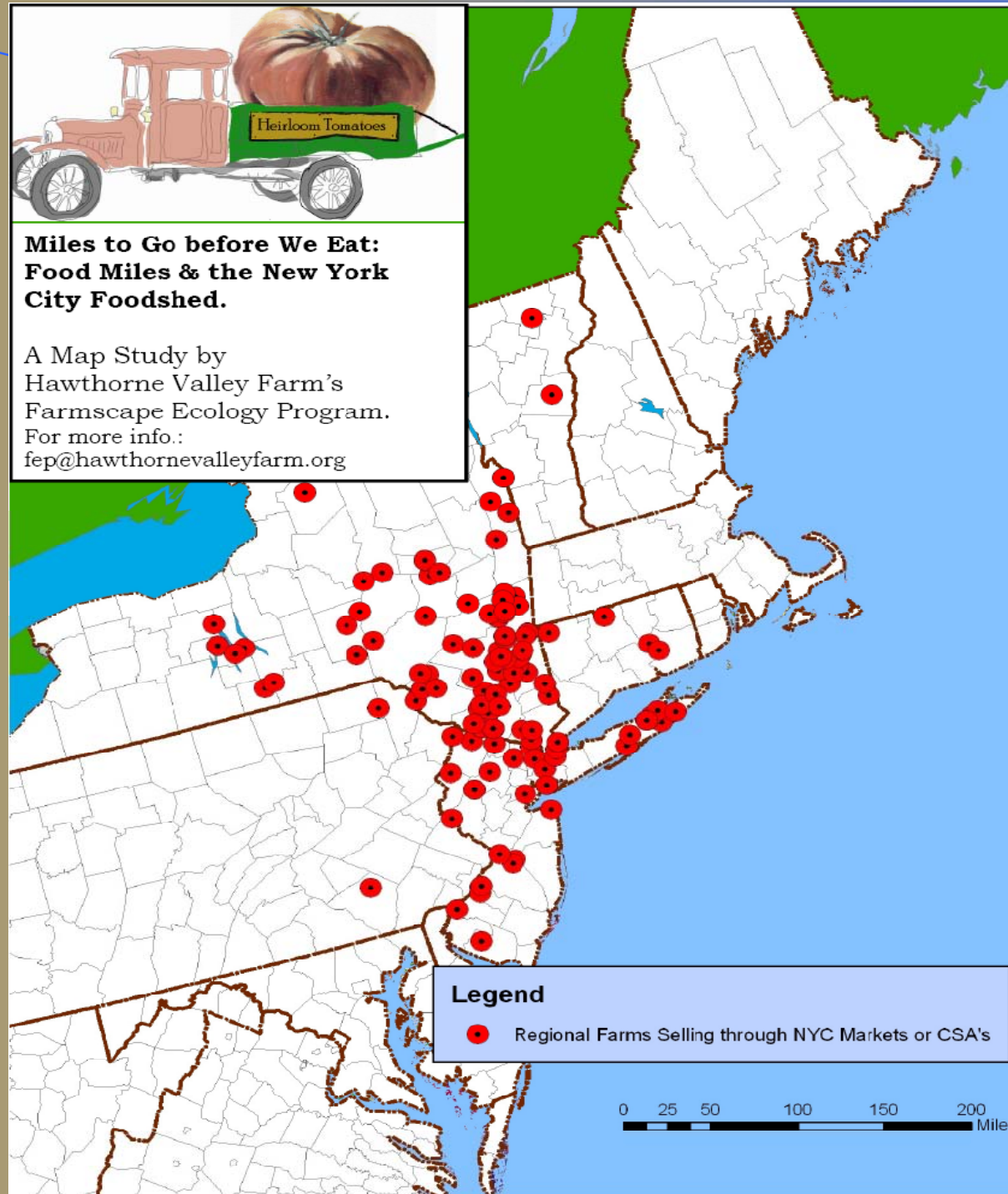
- Term was introduced by Arthur Getz (1991) from the bioregionalism movement
- Similar to the concept of a watershed, i.e. the area where food is grown and eaten.
- The size varies depending on the availability of year round foods and the variety of foods grown and processed. In a way, replacing the term 'water' with 'food' reconnects food with nature.
- A unifying and organizing metaphor for conceptual development that starts from a premise of the unity of place and people, of nature and society

Example Foodshed Map



Miles to Go before We Eat: Food Miles & the New York City Foodshed.

A Map Study by
Hawthorne Valley Farm's
Farmscape Ecology Program.
For more info.:
fep@hawthornevalleyfarm.org



Example Foodshed Economy Study

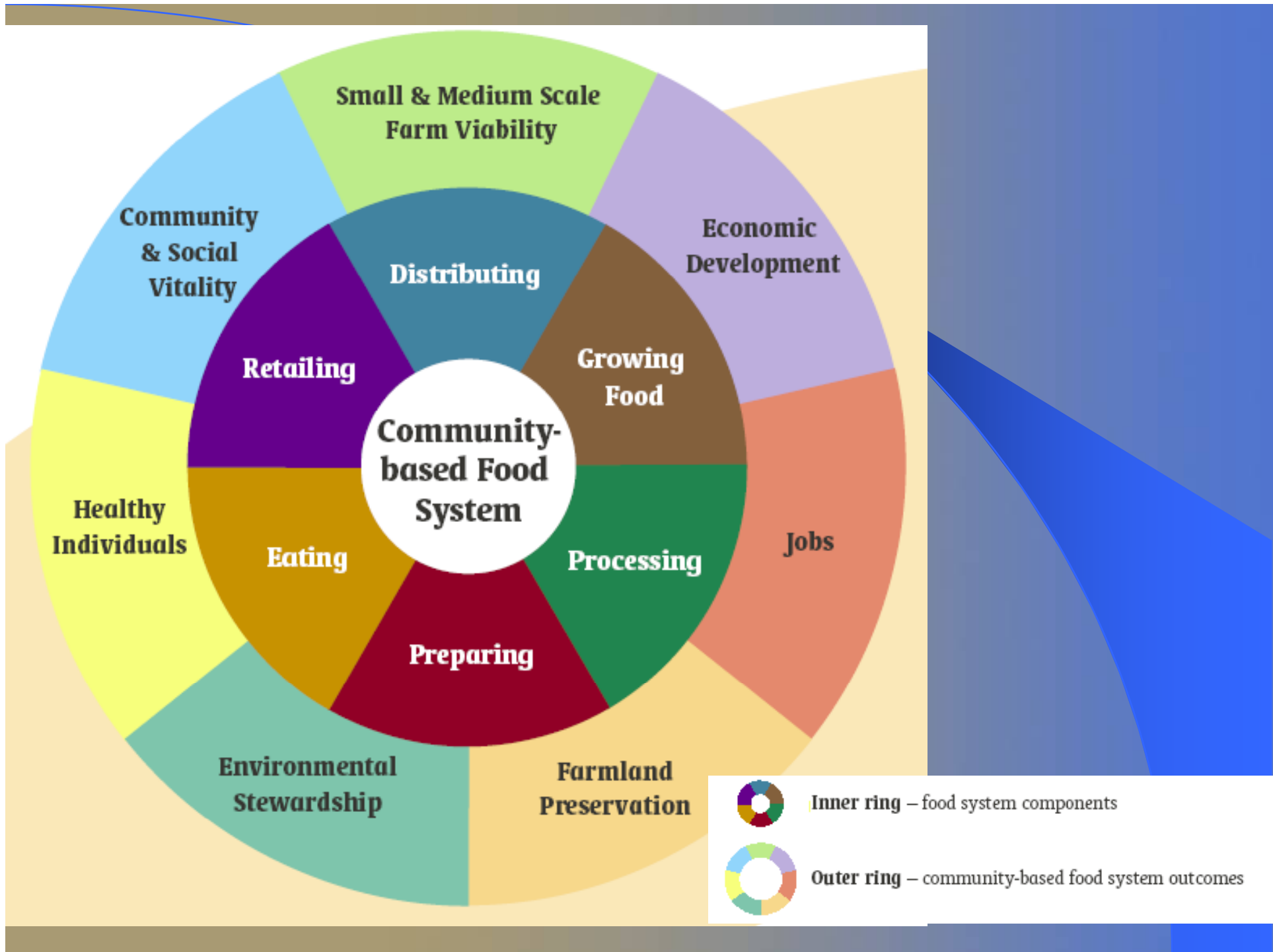
Table 11B: Economic Impact of Iowa Farmers' Markets (\$ Income)

Industry	Direct	Indirect	Induced	Total
Agriculture	4,818,841.0	440,896.0	9,687.0	5,269,424.0
Mining	0.0	380.0	45.0	424.0
Utilities	0.0	45,008.0	37,071.0	82,079.0
Construction	0.0	37,899.0	20,147.0	58,046.0
Manufacturing	0.0	153,209.0	115,550.0	268,759.0
Transportation & warehousing	0.0	313,316.0	227,787.0	541,102.0
Retail trade	3,541,135.0	34,953.0	448,798.0	4,024,887.0
Information services	0.0	48,347.0	49,266.0	97,613.0
Finance, insurance & real estate	0.0	179,169.0	246,167.0	425,337.0
Professional and technical services	0.0	217,708.0	854,906.0	1,072,614.0
Other services	0.0	42,476.0	281,736.0	324,212.0
Government	0.0	27,722.0	25,048.0	52,770.0
Total	8,359,975.0	1,541,084.0	2,316,207.0	12,217,266.0

Source: IMPLAN model for Iowa

Community Foodshed Concept

- Includes expanded food-related issues
 - food security
 - agriculture profitability
 - diet-related diseases
 - hunger
 - farmland loss
 - lack of economic opportunity for rural and low-income communities
 - sustainability
 - poor access to healthy foods



Background of Local Foodshed Development in Sarasota County

“Roadmap to Sustainability” Initiatives

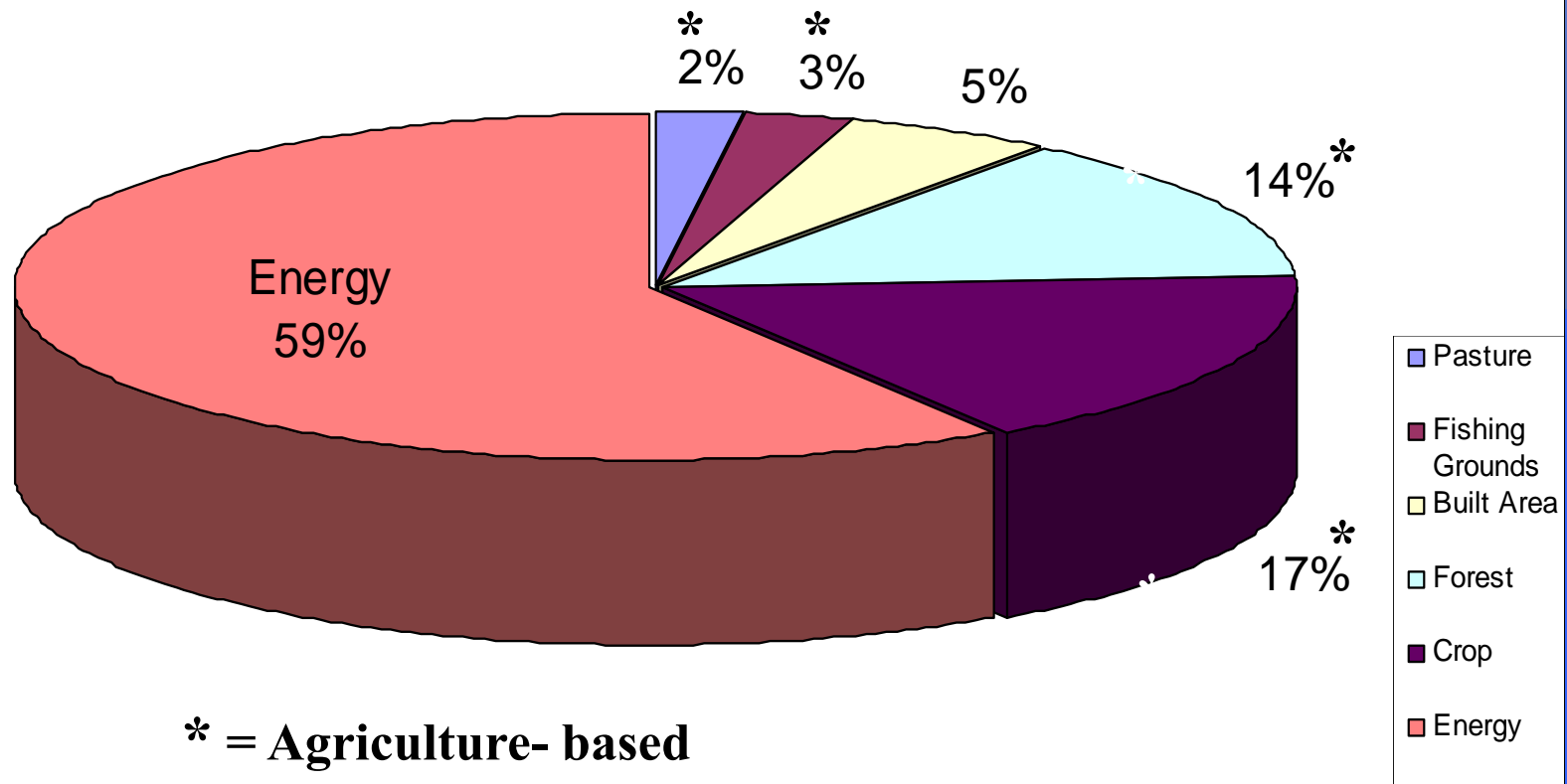
- Florida House Construction (1992)
- Environmental Sensitive Lands Protection Program (1999)
- Office of Sustainability Resolution (2002)
- Ecological Footprint Analysis (2004)
- FL Green Building Coalition & Green Local Government Certifications
- Holistic Management Policies
 - Watershed
 - Integrated Pest Management
 - Community Health Improvement Partnerships
 - Economic Development Council

Example Sarasota County Ecological Footprint Analysis



<http://www.sustainablesarasota.com/ssDocuments/6/Sarasota%20EF%20report%20FINAL--%207%5B1%5D.20.04.pdf>

Sarasota's Footprint: Percentage Breakdown



✓ If everyone on Earth lived as we do in Sarasota County, we would need 5 planets to provide the natural resources to meet our demands for food, energy, goods & services = conclusion of the analysis!

Goal: Sustainable Community Foodshed

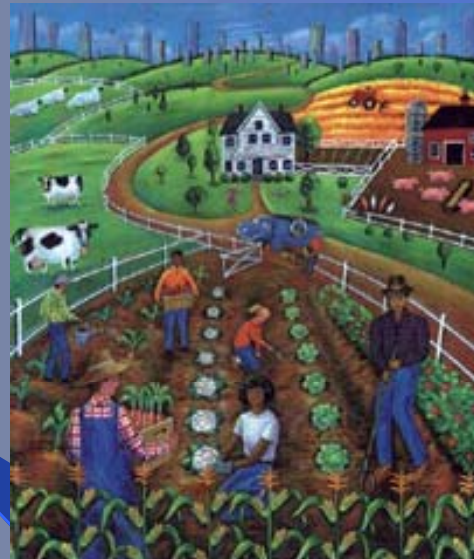
- Recognition of the whole systems nature of food, feed, & fiber production (aka sustainable agriculture)
- Equitably balancing concerns of
 - environmental soundness
 - social equity
 - economic viability
- Functional interactions between agroecological & social/economic systems

How Does a Community Make a Sustainable Local Foodshed?

Example Approaches:

- Food Policy Council
- Community Food System Assessment
- Public/Private Initiative

“Food Policy Council” What Is It?



- Stakeholders from diverse food-related sectors to examine how the food system is operating and to develop recommendations on how to improve it
- Action steps include educating officials and the public, shaping public policy, improving coordination between existing programs, and starting new programs

Who Are The Stakeholders?

- Farmers, farm organizations, farmer's markets
- Consumers: CSAs, Co-ops, advocacy groups
- Civic groups & boards, nonprofits & charities, community groups, community gardens
- Community Institutions: schools, hospitals, senior citizen homes and prisons
- Churches, food banks, & soup kitchens
- Restaurants, grocery stores, & wholesalers
- Producers, processors, & distributors
- University & extension
- Local, state and federal government offices
- Regional planners

Sarasota Food Policy Council Accomplishments

- Since formed in 2005, facilitated over 12 meetings with participants from the diversity of the community food system of Sarasota County
- Policy recommendations were adopted as new agriculture policies in 2 chapters of the Comprehensive Plan of Sarasota County based upon:
 - Sustainable agriculture
 - Local community foodshed development
 - Farmland protection
- Continuation and recommendations requested by County Commissioners for implementation phase

Agriculture Policy Implementation “ReNewAbility” Workshop Process

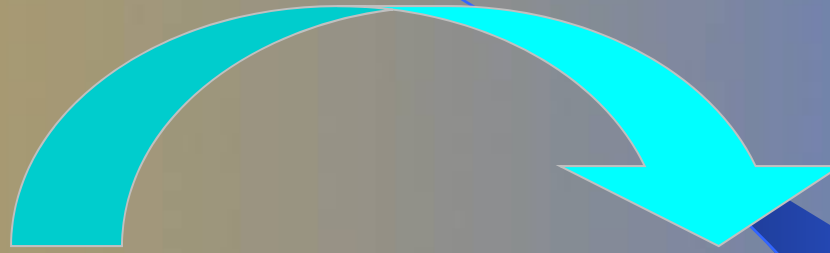


‘Current Foodshed’ Education

“Agricultural
Supplies”



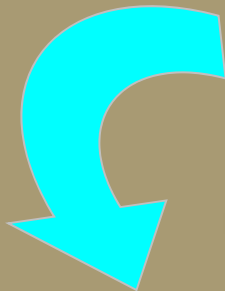
Food production
(largely technological and
removed from society)



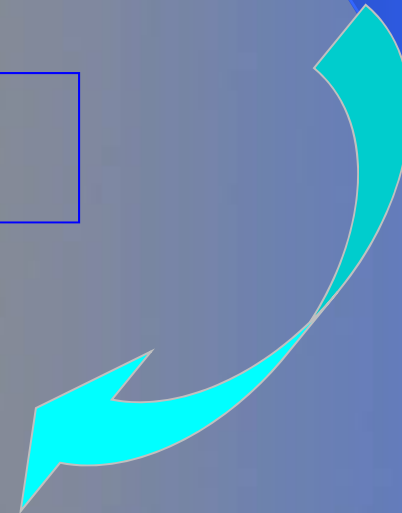
Global Food Distribution
(nonrenewable energy)

**System Is Not A Closed
Loop or Sustainable!**

“waste
products”



Food Preparation and
Consumption
(fast and cheap)



An average food item in the U.S. travels 1,500 miles

'Sustainable Local Foodshed' Education

Healthy Food Production
Integrated into Community

Local Food
Distribution Channels

The Solutions:
Close the Loop &
Sustainable Ag

Compost
and other
products

Food Preparation and
Consumption
(Nutritious and Healthy)



For a local foodshed the average food item travels 56 miles

Sustainable Agriculture Education

- **Satisfy human food and fiber needs**
- **Enhance environmental quality and the natural resource base**
- **Efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls**
- **Sustain the economic viability of farm operations**
- **Enhance the quality of life for farmers and society as a whole."**

Source: 1990 Farm Bill Definition

Foodshed Sustainability Education

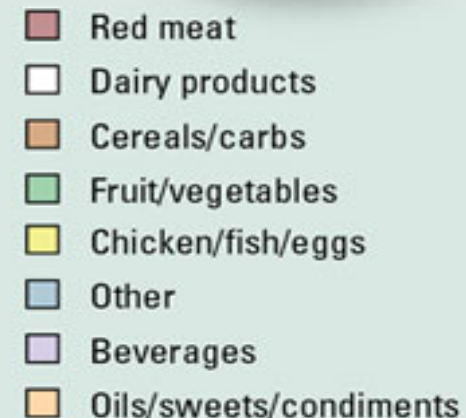
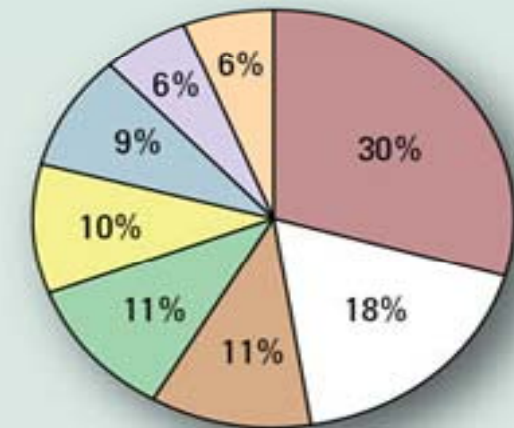
- **Amount**

- 8.1 metric tons of greenhouse gases annually from food consumption choices

- **Sources**

- Food industry
 - ✓ transportation - 11%
 - ✓ conventional production & harvesting - 83%
 - ✓ final delivery from producer to retail – 4%
- Food types are different – see chart

Greenhouse Gases from Food



Source: Weber, C. and H. Matthews. 2008. Food-Miles and the Relative Climate Impacts of Food Choices in the United States *Environ. Sci. Technol.*, 42 (10): 3508–3513
<http://pubs.acs.org/cgi-bin/abstract.cgi/esthag/2008/42/i10/abs/es702969f.html>

Sarasota Co. Ecological Footprint: Foodshed Results & Recommendations

- 36% of required biocapacity is for our agriculture-based needs
- To provide for our county's food needs, each household would need to manage an 11 and 1/2 acre farm.
- Solutions:
 - Buy locally grown food
 - Eat more vegetables and grains and less meat
 - Buy sustainable agriculture produced food

Foodshed Economy Education

1. The 8,436 farms in Southeast Minnesota sold **\$866 million** of farm products in 1997.

2. However, the region's farmers spent **\$947 million** raising this food. This is **\$80 million** more than they earned by selling their products!

Finding Food In Farm Country

Southeast Minnesota FACT SHEET

3. Even more troubling, Southeast Minnesota farm families spend about **\$400 million per year** purchasing inputs and credit from distant suppliers. Very little of this money builds wealth for local families.

4. Meanwhile, the 303,256 residents of Southeast Minnesota spend **\$506 million** buying food, almost all from producers outside of the state.

This means as much as **\$800 million each year** flows out of our agricultural region as local families **grow** and **buy** food. Almost none of this money builds wealth in our neighborhoods. **Creating our own regional food system** is one way to reduce these losses.

Sarasota County Foodshed Economy Analysis

2002 Data	\$ Millions
Consumed Food Total Value	815.8
Categories:	
Home consumed food	458.7
Away from home consumed food	351.5
Out of town consumed food	5.6

Agriculture Total Market Value	17.8
Categories:	
Floriculture	8.3
Fruits	4.9
Cattle/calves	3.6
Misc small livestock	1.0
Vegetables	N/R

Data provided by Ken Meter of Crossroads Resource Center; & by FL Farm Bureau

Sarasota County Foodshed Economy Analysis

If region consumers bought only 5% of their food directly from farmers:

\$40 million of new farm income earned each year . . .

more than what is now sold!

Community Food System Assessment

What's Cooking in Your Food System?

A GUIDE TO COMMUNITY
FOOD ASSESSMENT

WRITTEN BY KAMI POTHUKUCHI, HUGH JOSEPH,
HANNAH BURTON, AND ANDY FISHER

EDITED BY KAI SIEDENBURG AND KAMI POTHUKUCHI

2002

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US Department of Agriculture Community Food Projects Competitive Grants Program

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- Examines a broad range of food issues and links to community goals
 - Designed to inform and build support for practical action
 - Planned & systematic process
-
- It's an assets-based approach
 - Focuses on a geographically defined place
 - Involves a diverse group of community members
 - Emphasizes collaboration

www.foodsecurity.org/CFAguide-whatscookin.pdf

Community Food System Assessment

Outcome Benefits:

- Program development for addressing needs
- Policy identification and review food system
- Public awareness and visibility of issues

Process Benefits

- Develops networks and coalitions
- Community participation and collaboration
- Capacity building of participants

Locally Grown Food Education

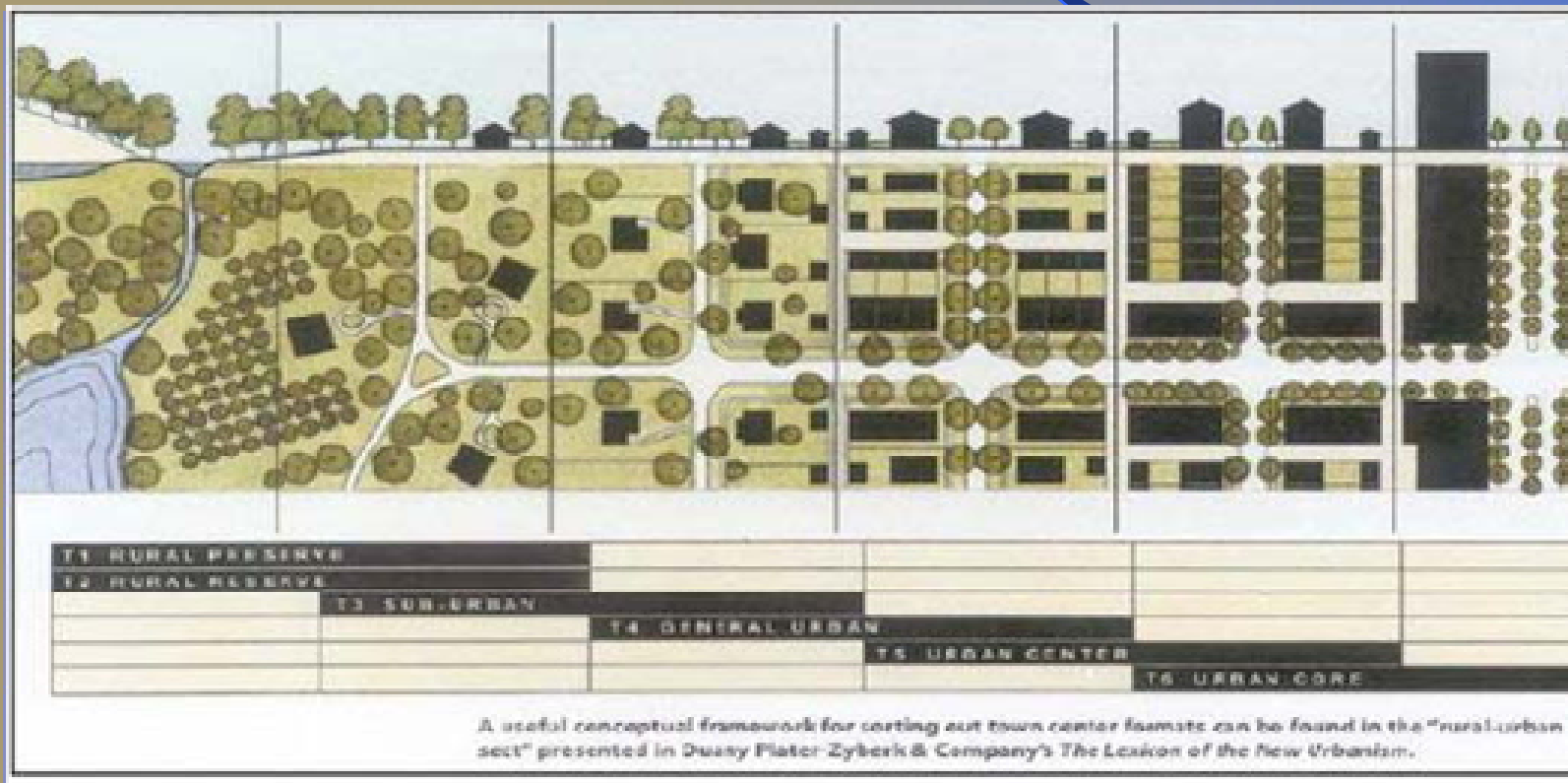
Reasons to Buy Local Foods:

- EXCEPTIONAL TASTE AND FRESHNESS
- STRENGTHEN YOUR LOCAL ECONOMY
- SUPPORT ENDANGERED FAMILY FARMS
- SAFEGUARD YOUR FAMILY'S HEALTH
- PROTECT THE ENVIRONMENT REDUCE MILES FROM FARM TO TABLE
- SUPPORT AMERICA'S RURAL COMMUNITIES
- BUYING LOCAL IS EASY

Buy Fresh Buy Local, <http://guide.buylocalca.org/index.html>

Smart Growth Education to Local Foodshed Development

- Integrated Land Planning Example



More Rural








More Urban

Mixed Land Use Along The Transect

'Smart Growth' Examples of Food-Production Solutions

SMARTCODE **TABLE 19 FOOD PRODUCTION**
noncodeby

TABLE 19: Food Production. This table shows ways of incorporating food production within the formset.

	T1	T2	T3	T4	T5	T6	SD	Services
Farm 	●						●	
Agricultural Plots 		●	●				●	
Vegetable Gardens 		●	●	●				
Urban Farm 			●	●	●			
Community Gardens 			●	●	●	●		
Green Roof - Extensive - Semi-Intensive - Intensive 	●	●	●	●	●	●	●	
Vertical Farm 				●	●	●		

Extensive Green Roofs are well suited to roofs with low load-bearing capacity and sites which are difficult to be used for other purposes. Semi-intensive Green Roofs fall between Extensive and Intensive Green Roof systems. They require more maintenance. Higher loads and more weight. Intensive Green Roofs allow lawn, gardens, trees and shrubs. They may have walkways, benches, playgrounds, etc.

© Jaime Correa and Associates 2007 Last Modified 11/26/2007

FOOD PRODUCTION

Farm

Agricultural Plots

Vegetable Gardens

Urban Farm

Community Gardens

Green Roofs

Extensive

Semi-Intensive

Intensive

Vertical Farm

Food System Assessment Example

- **United Way Food Security Project, Palm Beach, FL**

- Project of a county level coalition
 - including the Palm Beach County Board of County Commissioners, Palm Beach County Health Department and Children's Services
- Based on promoting
 - determination of who is hungry or at-risk of hunger and the barriers that stand in the way of food security in the county
 - strategies to provide social services to alleviate hunger found in 11% of the population



http://www.unitedwaypbc.org/index.cfm?fuseaction=va.one&content_id=349&x=8327493

Food System Assessment Example

- **Gainesville Food System Planning Project, Gainesville, FL**

- Project of FL Organic Growers and Consumers, Inc., Gainesville, FL (proposed)

- Community public/private stakeholders, including school district, local organic farms, businesses, neighborhood associations, etc.
- Builds upon successful projects:
 - Gainesville Initiative for Tasty (GIFT) Gardens
 - Neighborhood Nutrition Network

- Based on promoting

- local agriculture economic development
- public awareness of local food system
- local food system development plan



<http://foginfo.org/index.php>

FL Foodshed Development Grassroots Initiative Example

- **Slow Food CSA, Hastings, FL**
 - Project of Slow Food First Coast, St. Augustine, FL
 - Partnership with family farmer
 - Catalyst for local farms
 - Sponsorship of local underprivileged families
 - Based on promoting
 - local agriculture economic development
 - public awareness of local agriculture
 - Slow Food principles of fair, good & clean



http://www.slowfoodusa.org/index.php/local_chapters/#Florida

FL Foodshed Development Private Initiative Examples

- **FL Farmers of Locally-Grown Foods
Serving Local Direct Markets**

- Community Farmers Markets
- Community Supported Agriculture (CSA)
- Farm produce stands
- Institutional sales (e.g., Farm to School)

<http://www.localharvest.org/>



- **North Florida Food Partnership**

- buy local campaign and label
- linking producers and consumers



http://www.florida-agriculture.com/videos/flash/Buy_Local_TV_1.htm

FL Foodshed Development Private Initiative Example

- **Localecopia Project, Palm Beach County, FL**

- Project of Breakers Hotel, West Palm Beach
 - corporate policy for local foods purchasing
 - committee structure, including local farmers
 - UF/IFAS Extension partnership
- Based on promoting
 - local agriculture economic development
 - sustainability and conservation
 - renewable energy applications



<http://www.localecopia.org/>

FL Foodshed Development Public Initiative Example

- **Geraldson Community Farm (CSA),
Bradenton, FL**

- Project of FL West Coast RC&D
 - Manatee County partnership
 - response to community assessment of local ag preservation and foods needs
- Based on promoting
 - sustainable agriculture
 - entrepreneurial local agriculture economic development
 - agriculture heritage preservation



<http://fwcrd.org/projects/geraldson.html>

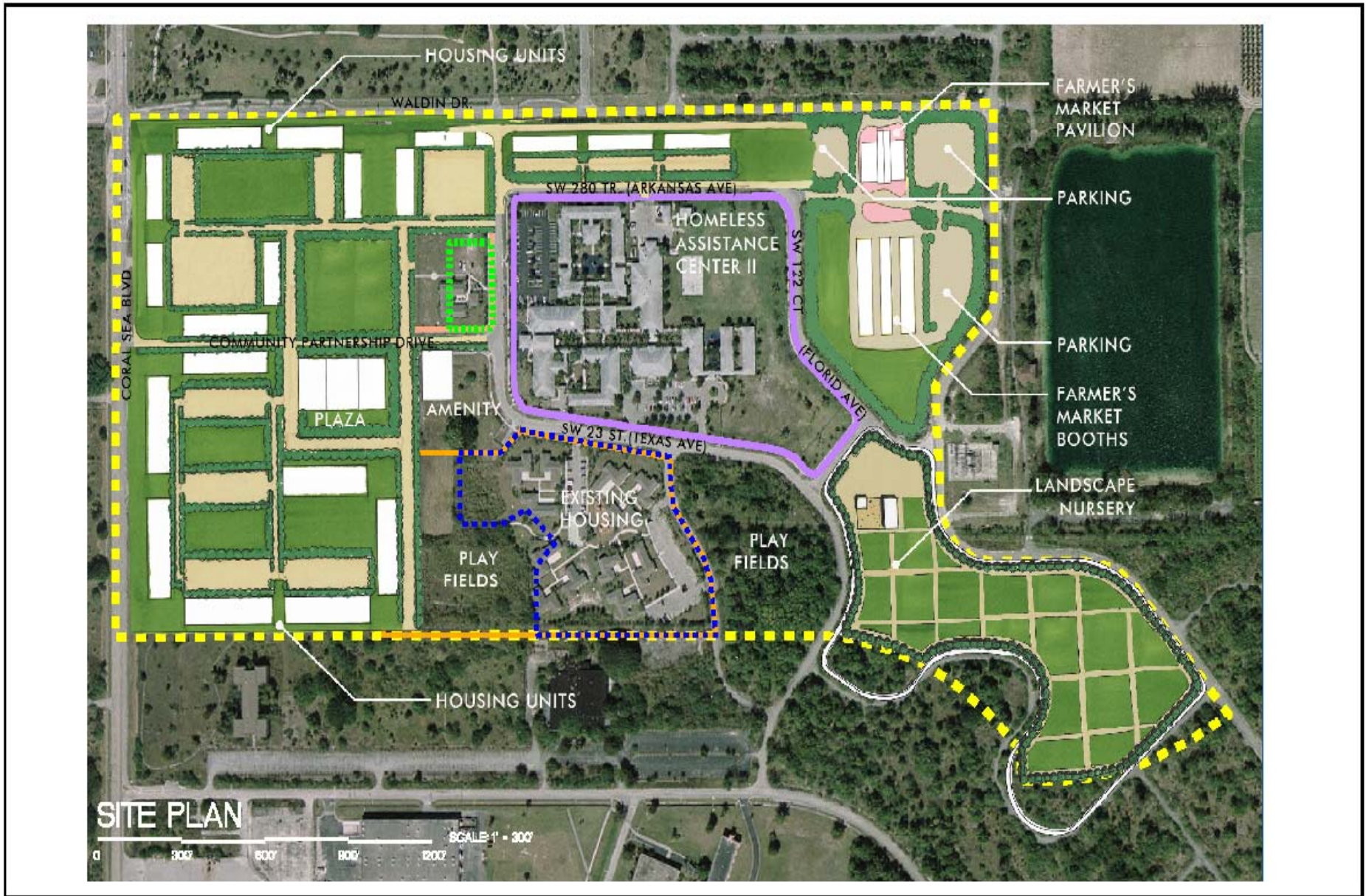


FL Foodshed Development Public Initiative Example

- **Homestead Air Base Homeless Project**
 - Project of Homeless Trust, Miami-Dade County, FL
 - facilitated by Congresswoman Ileana Ros-Lehtinen
 - partnership with Office of Sustainability, Miami-Dade Co.
 - utilizes 52 acres of undeveloped property at the former Homestead Air Force Base
 - Based on promoting
 - job skill training in nursery/produce production & marketing
 - entrepreneurial local agriculture economic development
 - sustainability in meeting social service needs

<http://www.miamidade.gov/homeless/>





MIAMI-DADE COUNTY HOMELESS TRUST
 HOMESTEAD AIR BASE CONCEPTUAL SITE PLAN



DATE 1.21.08

SCALE AS SHOWN

OSBORN

Architect/Planner/Interior Designer
 1200 SW 10th St., Miami, FL 33135
 305.375.1100
 www.osborn-engineering.com

Online Resources for Projects In Local Food System Development

- Community Food Security Coalition

http://www.foodsecurity.org/cfa_home.html

- Southern Sustainable Agriculture Working Group Website

<http://www.ssawg.org/cfs-action.html>

- “Good Food, Good Business” video

<http://www.youtube.com/watch?v=i9qgxw7-Fn4>

