



GREATER PHILADELPHIA

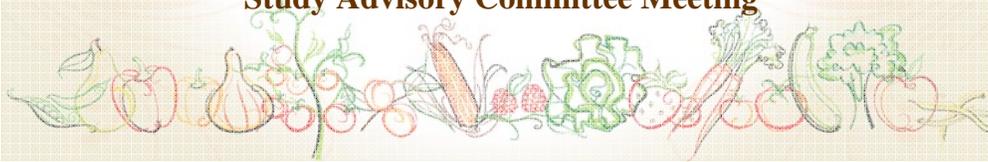
# FOOD SYSTEM STUDY

*the* FOOD *and* FARMING ALMANAC

**PART 1: Food Policy Network Analysis**  
**September 12, 2008**  
**Study Advisory Committee Meeting**



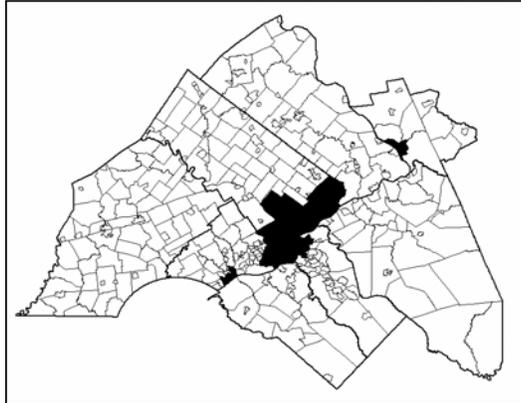
Delaware Valley  
Regional Planning  
Commission



## OVERVIEW of DVRPC



- ☞ *Philadelphia's Metropolitan Planning Organization (MPO), created in 1965*
- ☞ *Interstate, intercounty, and intercity agency*
- ☞ *Prioritize transportation funding*
- ☞ *2 States, 9 Counties, 353 Municipalities*
- ☞ *Responsible for the region's **Long Range Plan** and Air Quality*
- ☞ *Strong "Home-Rule" control of land use*



There may be a lot of new stakeholders in the room. We will quickly go over who DVRPC is... how we got interested in food systems and then dive into the Scope of Work in more detail.

We are Philadelphia's MPO. We're a federally-designated organization... which means we receive most of our funding from the US Department of Transportation... and our work is guided by the US Transportation Bill – Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

One thing that interesting to note about New Jersey and Pennsylvania, as well as much of the Northeast... we are a "Home Rule" states. What that means is that municipal governments have control over land use and zoning. 353 municipalities decide how the region will grow. Where housing will go... where shopping malls well go... where industrial parks will go. And it is up to the State DOTs and DVRPC to serve that growth with mobility options.

## FY09 SCOPE OF WORK



### **GOAL:**

- ☞ *To evaluate the region's food needs,*
- ☞ *Assess the expanded foodshed's agricultural resources,*
- ☞ *Estimate the efficiency of transporting food from farm to plate, and*
- ☞ *Plan for the increased production of food given rising fuel and food costs, and competing global markets.*

We developed the following goals that stress that this first year's work will be a learning experience.

## FY09 SCOPE OF WORK



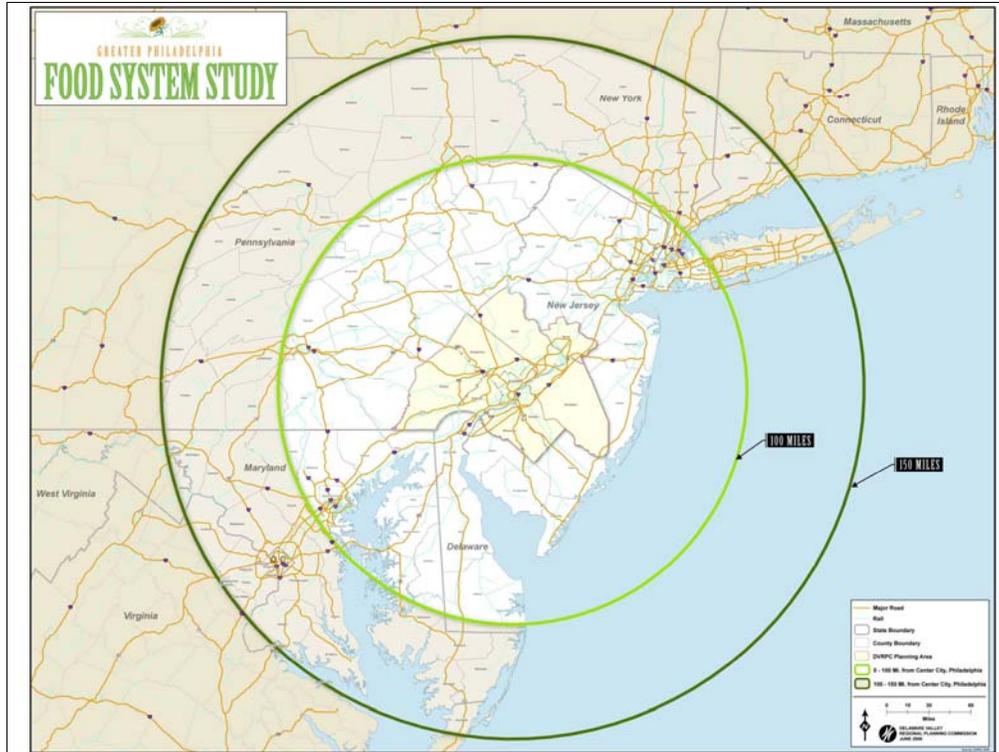
### *Study Area:*

*100-mile foodshed*

*5 states, 70 counties, 1000+ municipalities,*

*27 million+ stakeholders*

We also identified the study area based on conversations with some of you in this room.



Here is the study area.

The yellow/beige area in the middle comprises the DVRPC region. This will be the study's population base. We have a population of about 5.5 million people. In 3814 square miles... in 2005 about 21% of that was dedicated to agricultural uses.

The first inner ring is the 100-mile radius around Philadelphia. There are 70 counties, comprising 29,910 square miles of land area. And we'll figure out through the course of the study how many acres are in farmland, and specifically how many acres are dedicated to food production.

## FY09 SCOPE OF WORK



- ❧ *Part 1: Food Policy Network Analysis*
- ❧ *Part 2: Food Distribution*
- ❧ *Part 3: Resource Assessment*
- ❧ *Part 4: Opportunities*

To do the work, we have divided the tasks and research into 4 major parts.



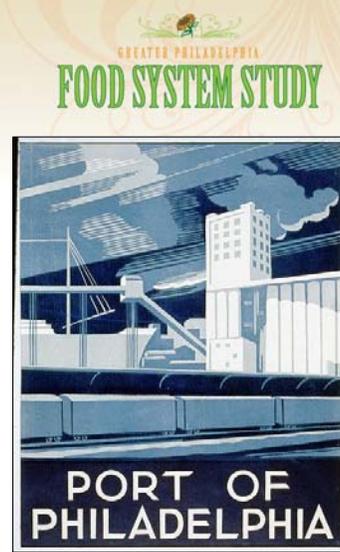
Part 1 is the part we just completed... We're here to discuss this section today.

The short of it is: who is doing what where.

And the importance of this section is that what we learned over the summer will help us focus Parts 2, 3, and 4.

## PART 2: FOOD DISTRIBUTION

- ❧ *Food is a “high turnover” commodity*
- ❧ *How do goods move through the region?*
- ❧ *Freight Analysis Framework*
  - ❧ *Origins and Destinations of food*
  - ❧ *Supply chain case studies*



The 2<sup>nd</sup> part looks more closely at the routes food takes to get to our plates.

We are looking at the entire food system, which includes local as well as global producers.

One of the reasons why we have a global food system is because processing and distribution got very efficient. Especially with cheap fuel prices.

Something we have to understand is that food is a “high turnover” commodity, meaning it needs to be restocked in stores on a daily basis and delivered to restaurants and institutions on a daily basis. As we know “fresh produce”, especially produce allowed to ripen on the vine has an even shorter shelf life. Unlike cars or electronics, food is relatively low in value and does not hold value for a long period of time.

Also, we need to understand the role and importance of food imports in our region. The ports of Philadelphia and Camden have specialized in importing fruits from S. America and specifically from Chile. Our port is an access point for several other metro areas, including DC, NYC, Boston, Chicago, and Pittsburgh.

Our region’s ports specialize in break bulk. So barges on the Delaware River are not big container ships, like you would find at the Ports of Newark/New York or Long Beach Island/Los Angeles. But, rather, they carry pallets of goods that require a lot of manpower to move from ships to trucks.

We’ll do a freight analysis framework, using FHWA data to capture origins of food that is consumed in our region and destinations of food that is exported out of the region/or foodshed.



This map shows the long distance truck flows to and from Philadelphia. The red lines show which transportation routes trucks are taking into and out of the Philadelphia metropolitan area. And the shading highlights with which states we trade most often.



The third part will focus on evaluating the agricultural resources in the 70 county area. What was grown here... what grows here now... and what may be able to grow here in the future.

DVRPC specializes in collecting data and making sense of the data... so we will create some inventories that will be useful to our stakeholders. And we'll map these inventories to be able to identify clusters of agricultural products, like the fruit belt in Adams County, Pennsylvania.

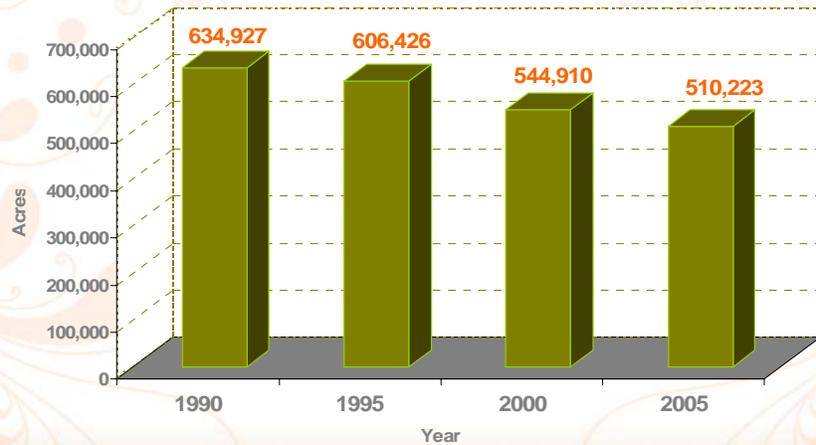
And we'll look at consumption models. Land consumption models for urban development at the urban fringe... and food consumption models. How much arable land does one person need to for basic foods for a year?

And the most difficult, we'll start to explore the impact of Climate Change on the Mid-Atlantic's agricultural industry. As a disclaimer this will be extremely controversial and extremely speculative... but a good exercise in planning.

**PART 3:  
RESOURCE ASSESSMENT**



Agricultural Land in DVRPC Region



Source: DVRPC Land Use File, 1990, 1995, 2000, & 2005

This chart illustrates one of the types of data DVRPC creates and collects – land use.

1990 – 26% of land area dedicated to agriculture

2005 – 21% of land area dedicated to agriculture

Between 1990 and 2005, 124,704 acres of agricultural land. Which is larger than Delaware County.

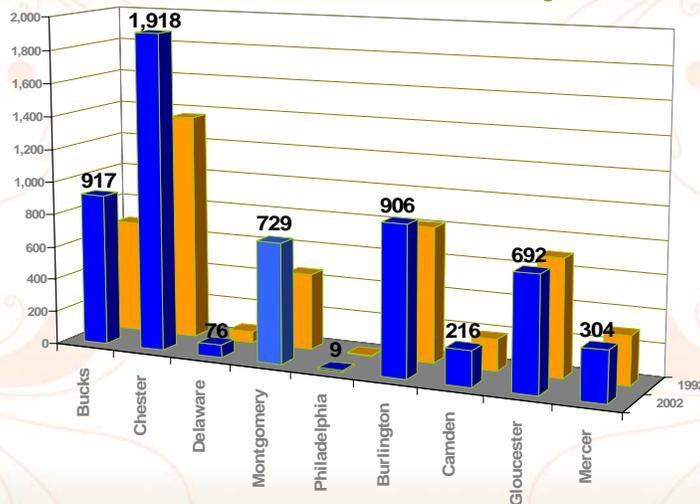
To put it another way, we lost agricultural land at a rate of 22 acres a day over a 15 year period;

or 1 median size farm a day.

### PART 3: RESOURCE ASSESSMENT



Number of Farms in DVRPC Region



Source: USDA Census of Agriculture, 2002

And this chart illustrates an interesting conundrum. While agricultural land was diminishing between 1990 and 2005, the number of farm operators actually increased between a similar time period 1992 and 2002.

In 7 counties, the number of farm operators increased.

This may be evidence that we are experiencing a rise in hobby farms, or gentlemen farmers, or farmettes in some of our more rural counties, like Chester, and our suburbanizing counties, like Montgomery County.

## **PART 4: OPPORTUNITIES**

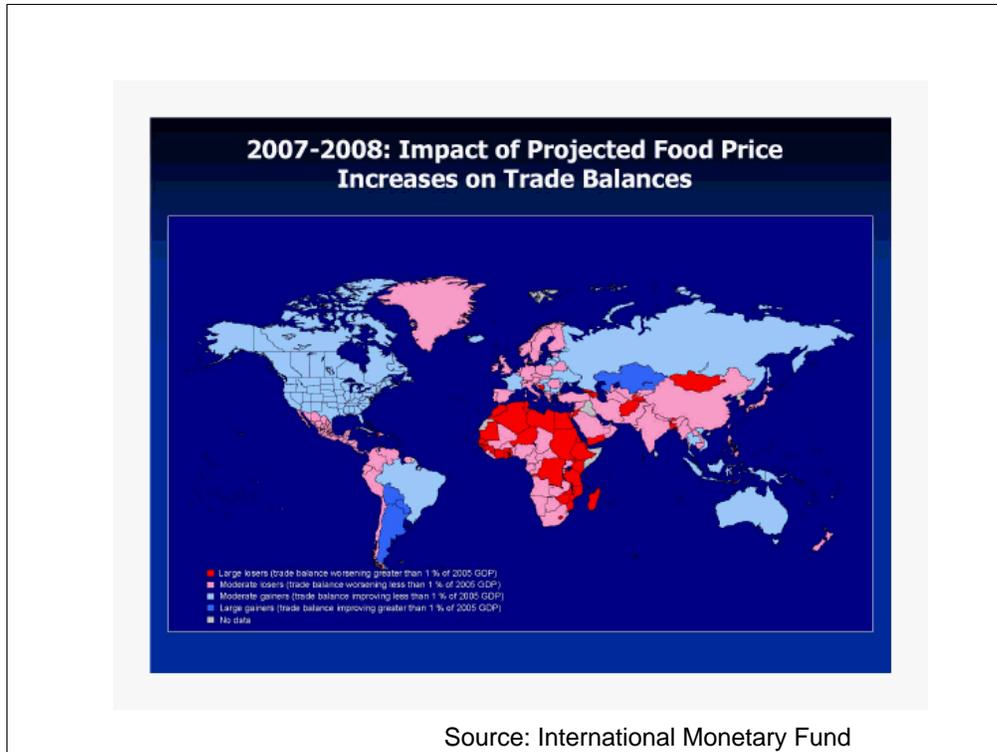


- ❧ *Information gathered from Parts 1, 2, & 3*
- ❧ *How important is agriculture and food industries to the regional economy?*
  - ❧ *Economic Analysis – micro and macro scale*
  - ❧ *Capturing revenue in the region*
  - ❧ *Emergence of “Green Collar” jobs*
- ❧ *Philadelphia has a competitive advantage for food imports*
- ❧ *Preparing for Climate Change*
- ❧ *BMP Case studies*

Part 4 is our last section of work... and our least defined at this point because it relies on the sections that precede it.

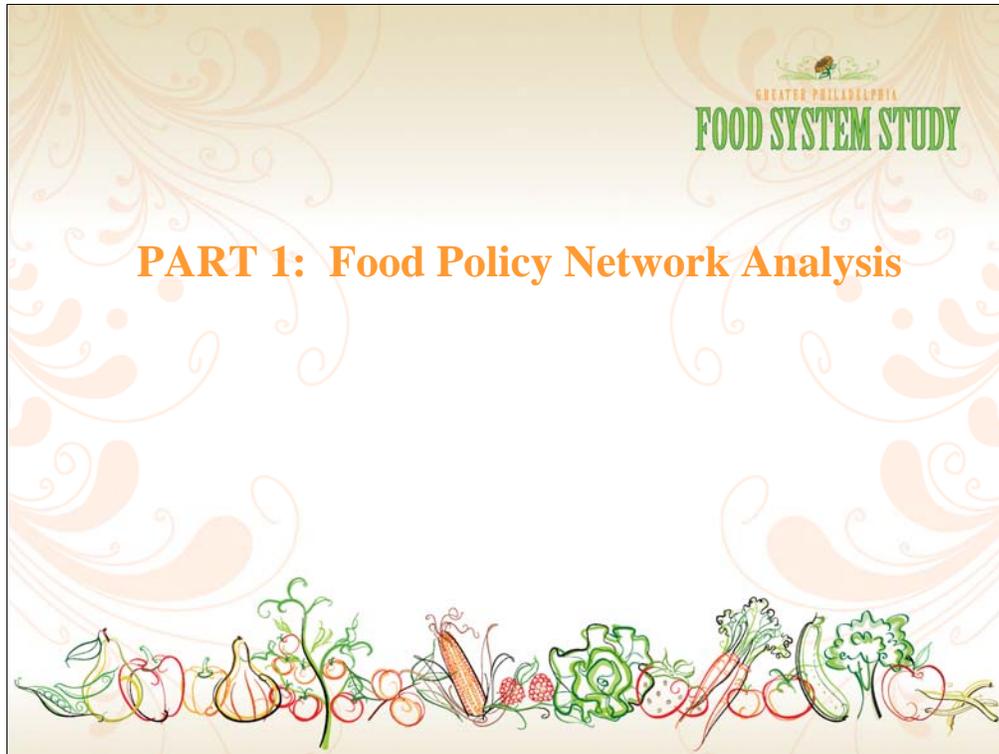
We will look at the recommendations and best management practices identified through the Policy Network Analysis. We'll have some data to understand how much food is being produced, where it is produced, and where it is consumed. We'll do some sector analysis to estimate how big the “food sector” is in the regional economy. And we'll do some micro economic analysis looking at the impacts of rising food prices on all households.

We call this section “Opportunities” because any time you take a hard look at existing conditions and try to prepare for unknown future conditions, you are creating an opportunity to identify and foster competitive advantages and find success.



For example, in uncertain times when the American Dollar is falling, our region and country is presented with a new opportunity.

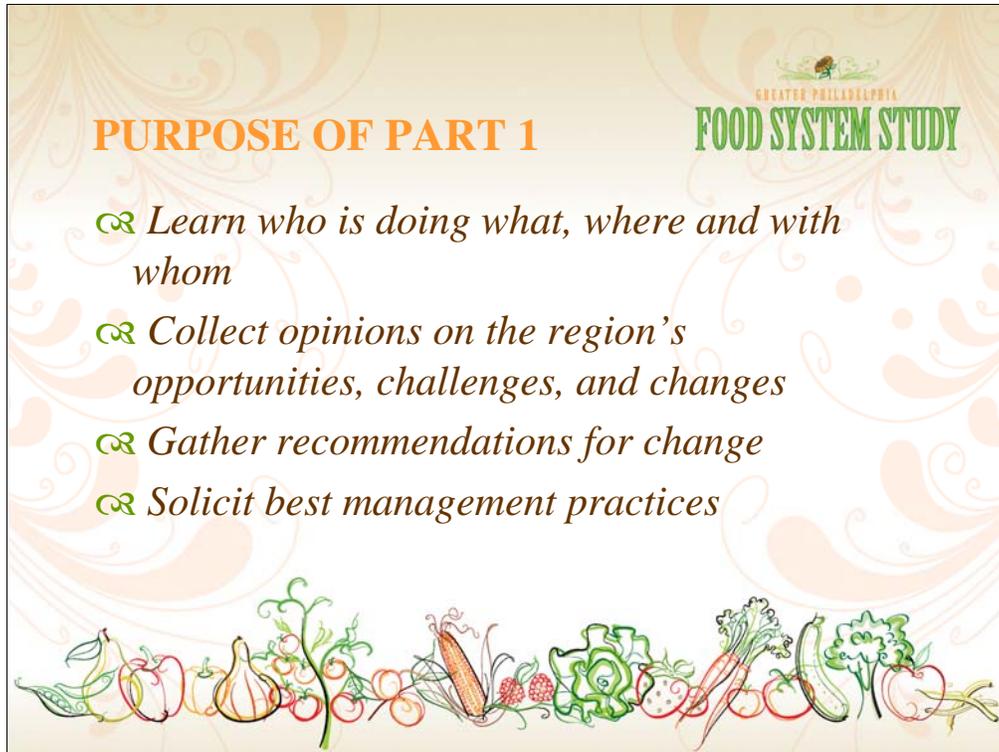
On this map, blue is good. Blue signifies that between 2007 and now, the US trade deficit was improving. With the fall of the American dollar, US has an opportunity to become a producer and exporter for the world again. As Philadelphia was once called the “workshop of the world”, maybe we can become the “kitchen of the world” in the future.



DVRPC is an impartial and objective organization. We try to collect data, analyze data, identify trends, and then plan for change given what we would like to see happen and what may inevitably happen. Like other DVRPC studies, the purpose of this study is to first understand Philadelphia's role in the global food system before we make recommendations influencing local decision makers.

Therefore, undertaking a large, broad survey, reaching out to many different stakeholders is a good first step.

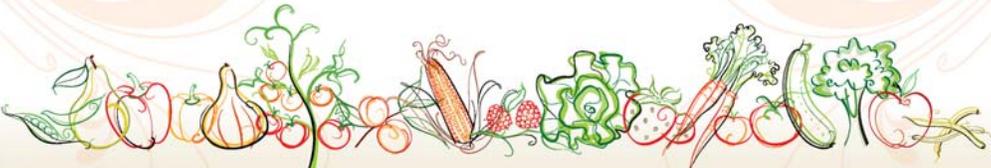
And with that, I'll hand it off to Amanda Wagner who will present our findings for Part 1: the Policy Network Analysis.



GREATER PHILADELPHIA  
**FOOD SYSTEM STUDY**

## PURPOSE OF PART 1

- ❧ *Learn who is doing what, where and with whom*
- ❧ *Collect opinions on the region's opportunities, challenges, and changes*
- ❧ *Gather recommendations for change*
- ❧ *Solicit best management practices*



Thank you to all who participated in the study in various ways. It was a great way to start off the project and allowed DVRPC to get a clearer sense of the actors in the current food system and their perspectives.

GREATER PHILADELPHIA  
**FOOD SYSTEM STUDY**

## METHODOLOGY

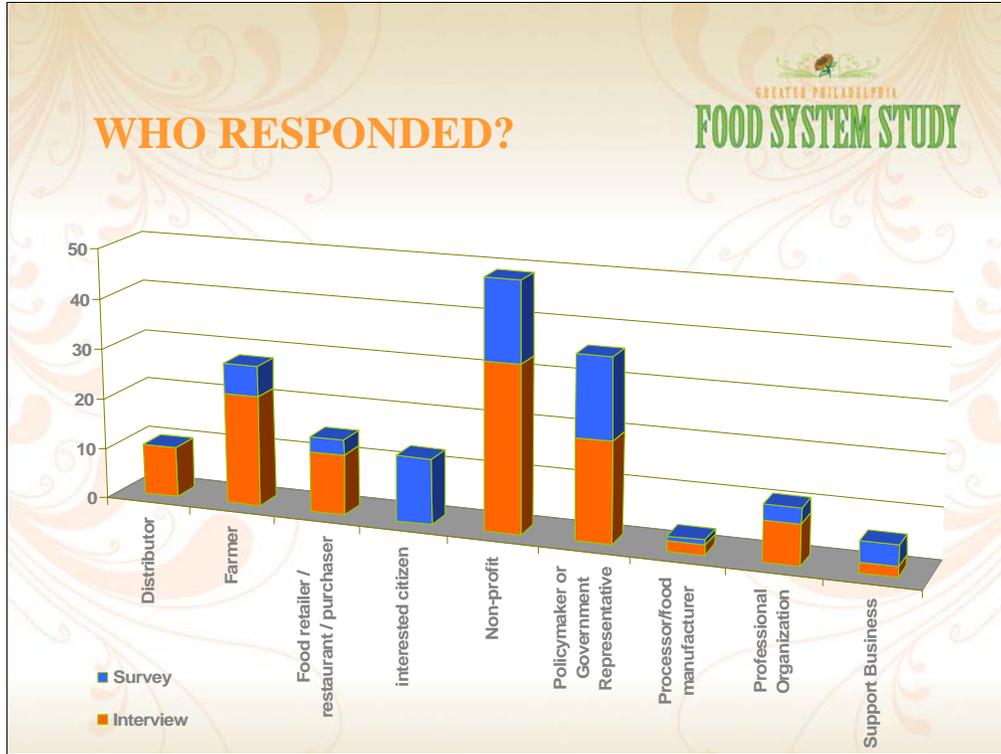
- ❧ *Online Survey*
- ❧ *Phone and In-Person Interviews*
- ❧ *Roundtables*
- ❧ *Tours*




Source: Amanda Wagner, DVRPC

The first people interviewed were those suggested in the first Study Advisory Committee meeting in June. These people were then asked for their suggestions of others to interview and it expanded out from there (this is also called the “snowball” technique).

We asked similar questions across the different formats, with some specific to the group (farmer, processor, etc). Everyone was asked “bigger picture” questions about the region’s strengths, challenges, changes, etc, which will be the main part of today’s presentation.

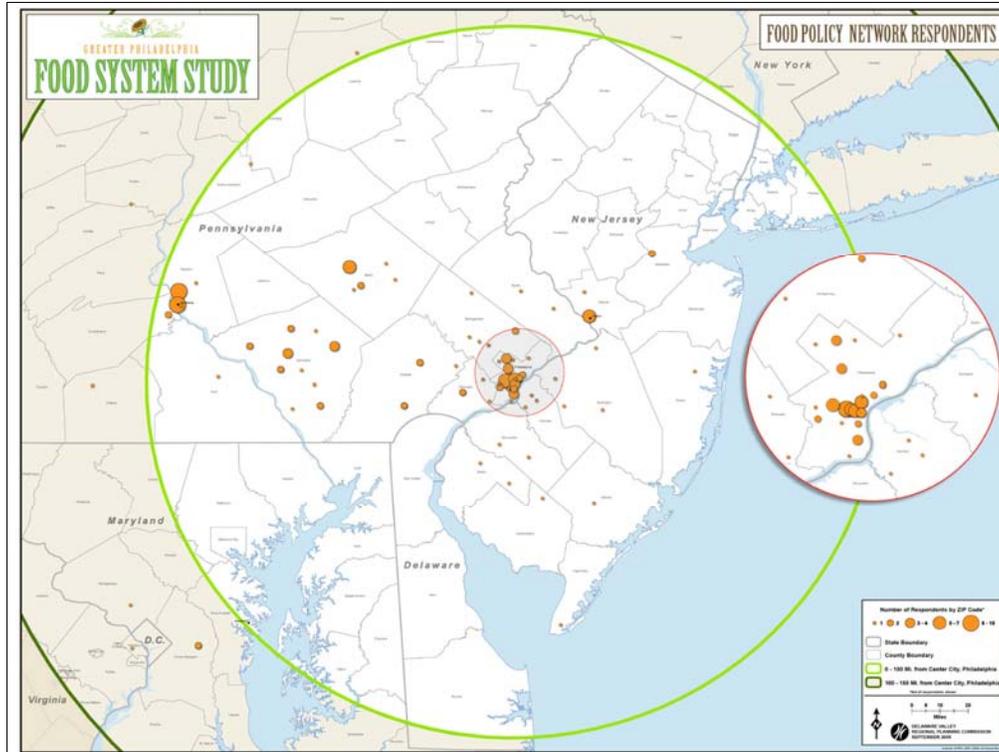


171 people contributed over a two month period in those ways I just mentioned. 1/3 of those responses were by survey and the rest, falling in the “interview” category on this chart, were by in-person and phone interviews, roundtables and tours.



Looking more closely at interviews and roundtables, 109 people were reached and they fell into the following categories.

- Support businesses providing financing and supplies to food and agriculture.
- Non-profits that focus on feeding people and equity.
- Distributors ranging from a farmer-owned cooperative to an international warehouse and logistics provider.
- Farmers (20% of those interviewed)- from urban and rural places, in PA and New Jersey, with different business models including Community Supported Agriculture (CSA), direct marketing, and process or wholesale farmers. \*Summer is the hardest time for most of these farmers so we appreciate the time they took to talk with us.
- For-profits including large institutional purchasers, restaurants, food stores and coops.
- Governments and Institutions providing marketing support, conducting academic research or offering technical assistance.
- Professional Organizations defined as those providing networking, advocacy and other assistance to members.



This map shows the geographic distribution of all 171 people (online survey and interview). The smallest dot represents one person and the largest is 10. As you can see, there are concentrations in the City of Philadelphia, and in the capital cities of Harrisburg and Trenton.



Now that we know who we talked to, let's look further into what they said.

These are the categories that we will explore today and, again, they come from the “bigger picture” questions we asked everyone in the survey, as well as follow-up research we conducted as time and data would allow.

The information we collected is based on people's perspectives, which will inevitably differ, so you will see that there are contradictions and complications. Many things are considered to be both an advantage and a challenge to the region, depending on who you talk to or how it is addressed.

For each of these categories, I will present the top few go into more detail about the “top 3”. The questions were open-ended so the responses were classified into themes and then compiled/tallied.

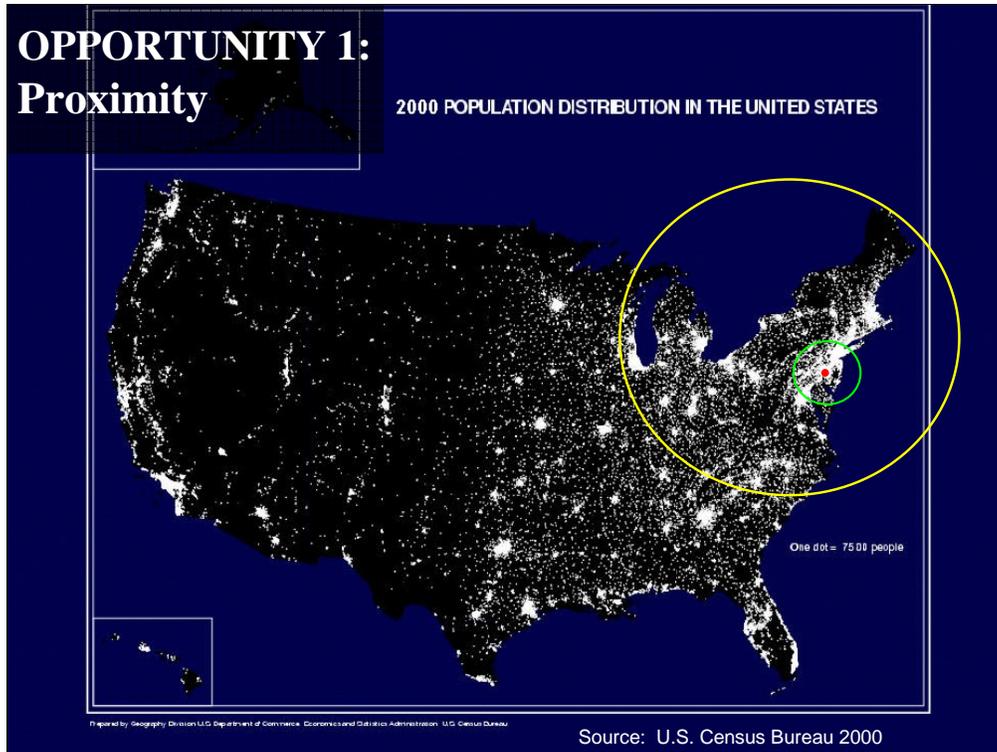
**What are the biggest  
opportunities or advantages  
of this area for the food  
system/agricultural industry?**

The good news!



The top three opportunities that came out of Part 1 are:

- Proximity to Markets
- Support
- Climate/Soil.



Almost everyone we spoke with mentioned location and, more specifically, the proximity to the markets shown in this map.

More than 100 million US residents are within 12-hour drive (source: Select Greater Philadelphia).

First circle – Philadelphia

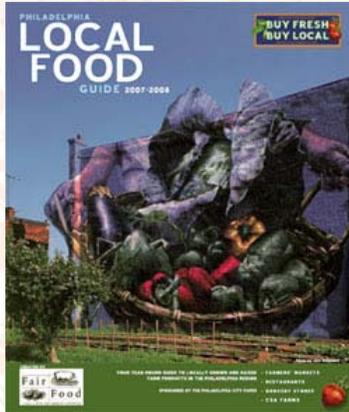
Second circle – 100-miles from Philadelphia (study area)

Third circle – a 12-hour drive, give or take.

A 12-hour drive takes you North to New York and Boston, West to Chicago, and South to Baltimore, DC, and the growing Carolinas. There is easy access to the Canadian markets of Toronto and Montreal.

It should be noted there were differences within the region, namely operations closer to the New Jersey Coast stated that they were less accessible to markets than places more closely aligned to the New York/Baltimore corridor.

## OPPORTUNITY 2: Support



Consumers

## GREATER PHILADELPHIA FOOD SYSTEM STUDY



Organizations



Institutions

Image sources: PASA.com, Delval.edu, whitedogcommunityenterprises.com

You will see in a few slides that one of the challenges of the region is a lack of support but, on the positive side, there are three main areas where people felt there was support for agriculture.

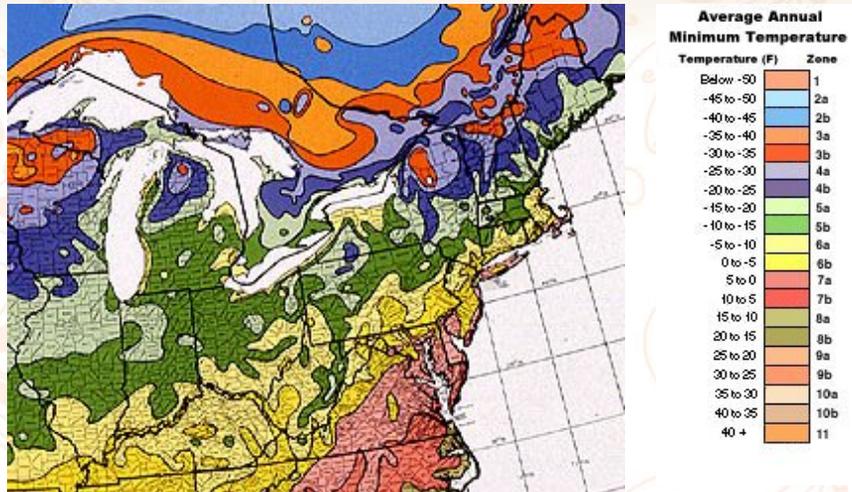
Organizations- including Fair Food, Pennsylvania Association for Sustainable Agriculture (PASA) and the respective Departments of Agriculture who are trying to connect farmers to markets, farmers to each other, and consumers to food/farmers.

Institutions- St. Joe's University Food Marketing Institute, Penn State (Cooperative Extension and College of Agriculture), Rutgers, Delaware Valley College

Consumers- namely those who are becoming increasingly interested in where food comes from. The discrepancy or contradiction occurs when people move in to previously agricultural areas and have issues with farms being next door.

## OPPORTUNITY 3: Climate and Soil

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Source: U.S. National Arboretum (from USDA )

The last opportunity to talk about, climate and soil, is mostly seen as an opportunity (though sometimes it can be a challenge).

First of all, it is an advantage because, unlike producers in the West, we don't always have to rely on irrigation and parts of the area are called the "breadbasket of world"

Second, there are pockets of the region with soil particularly suited for specialty crops (like cranberries).

Third, climate or soil issues in other places of the country or globally could also be an opportunity. Several people said that New Jersey Agriculture in particular is becoming a "shorts and fills" market. Meaning if there are droughts or floods in other markets, New Jersey farmers will have a good year.

The challenge throughout the region, of course, is that land that is best for farming is also best for development and farmland is quickly being converted into land for growing houses. The effects of current economic challenges on that development remain to be seen.

## Differences within region?



### *☞ In New Jersey:*

- ☞ Processing and brokerage in South Jersey*
- ☞ Salem County farmers perceiving more young people entering farming*

### *☞ In Pennsylvania:*

- ☞ Diversity of crops*
- ☞ Food processing*
- ☞ Raw milk legislation*
- ☞ Perception of more middle-age people entering farming as 2<sup>nd</sup> career*

**What are the biggest  
challenges  
this area faces in terms of the  
agricultural industry or food  
system?**



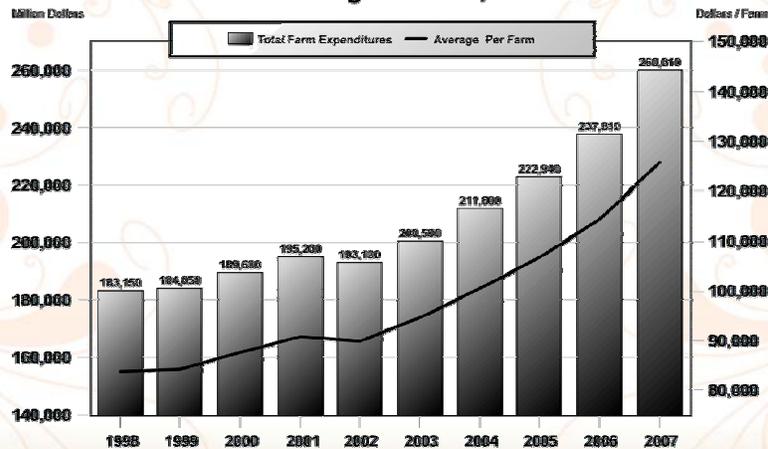
The three biggest challenges that came out of Part 1 are as follows:

- costs (to consumer and producer)
- Regulations
- lack of support

## CHALLENGE 1: Rising Costs



### U.S. Farm Production Expenditures Total and Average Per Farm, 1998 - 2007



Source: USDA/ERS Agricultural Income Report, 2007

Rising food **prices** are complicated because they are bad for the consumer but good for the farmer. If prices rise and expenses stay the same, the farmer is becoming more profitable and viable, which is a good thing. However, if expenses are rising at an uneven pace with prices, or at the same unprofitable proportion as before, then it makes it impossible to do business. These expenses include obvious ones like feed and fertilizer (with different components for different farmers) along with other inputs and fixed costs like land.

The rising cost of land due to development pressure is a particular difficulty for new and beginning farmers (especially in New Jersey). It also is related to "IMPERMANENCE SYNDROME" a phrase we heard frequently that refers to farmers unwillingness to invest in their farm for the long term (including preserving it) if they don't think they will remain profitable into the future.

Overall, the issue of costs underscores the underlying issue that farming has to operate as a business and be profitable. If its not profitable its not going to be sustainable in the long run. It also underlies the tension between what is best for the farmer and what is best for the consumer.

For distributors, obviously transportation costs are huge and the ones we spoke with are responding by seriously rethinking how they distribute and where. There is new emphasis on backhauling (or minimizing empty trucks) and cross-docking (transferring goods from one truck directly into another and bypassing the need to pay for warehouse storage). They are also, when possible, using newer technologies to look at which customers or transportation routes are most best to keep or drop from an efficiency standpoint.

Finally, a few people said that rising costs could be an opportunity for the area. It now costs \$8,000 just to get a truck from CA (plus paying for whatever is inside it), so perhaps local purchasers and distributors will want to source closer to home.

## CHALLENGE 2: Regulations



- ❧ *Government Regulations and Jurisdiction*
- ❧ *Food Safety/Third Party Audits*
- ❧ *Seafood Management*

## CHALLENGE 2: Regulations

### Government Regulations and Jurisdiction

*Fighting a Statewide Problem*



*Dot = locales that have enacted an ordinance restricting farming which were overturned by ACRE*



*Water Allocation Form from NJDEP*

The first area of regulation people mentioned was governmental regulations and jurisdiction. Mostly referring to zoning, water allocations, taxes.

Jurisdiction refers to the fact that some farms are across three different townships, making it more difficult and/or time consuming for them to maneuver zoning, codes, permitting, etc.

Right to farm and related regulation is another issue. The image on the left is taken from the ACRE website. ACRE stands for Agriculture Communities and Rural Environment and is a state legislation passed recently in PA in response to over 100 townships that have passed or are considering passing ordinances that restrict agriculture in some way (such as noise, farm vehicle stipulations, etc). ACRE provides administrative review by the Attorney General of these ordinances to determine if they are reasonable or too restrictive for the farmer. The legislation, while supported by most of the farmers in PA I talked to, is opposed by many environmentalists or others who say it supports "factory farming," and by local governments who feel it takes away their home rule rights.

Water Allocation was another regulatory issue we heard about frequently- with farmers feeling that a dialogue is needed about the process of water allocation and permitting, there should be more coordination between NJ DEP and the Department of Agriculture, and consideration of water allocation when prioritizing land for preservation. The staff at NJ Department of Agriculture did seem to be doing increasing collaboration with DEP on these issues when we spoke with them, but the farmers' perspective was that more needs to be done.

## CHALLENGE 2: Regulations



### Good Agricultural Practices & Good Handling Practices Systems CLIENT REQUESTED Audit Scoresheet <http://www.ams.usda.gov/gapghp>

Facility Name (Print) as it should appear on Certificate:			
Street Address (Print):	City (Print):	State (Print):	Zip:
Date Audit Requested:	Date Audit Began:	Date Audit Completed:	
Has company received GAP/GHP audit from USDA before?:	Time Audit Began:	Time Audit completed:	

#### EVALUATION ELEMENTS

Element	Possible Points	Less N/A Points	Adjusted Points	Facility Score	USDA Pass % Minimum	CLIENT Pass % Minimum	Final % Scored
General Questions*	175				80%	90%	
Part 1-Farm Review	150				80%	80%	
Part 2-Field Harvesting & Field Packing	90				80%	80%	
Part 3- House Packing	210				80%	80%	
Part 4- Storage and Transportation	115				80%	80%	
Part 5- Traceback*	100				80%	90%	
Part 6-W Wholesale Distribution Center/Terminal Warehouses	355				80%	80%	
Part 6-A-Traceback	60				80%	90%	
Part 7- Food Security Procedures	50				N/A	80%	
<b>Total Overall Points/All Elements Audited and General Questions</b>	<b>1305</b>				<b>80%</b>	<b>90%</b>	

\*General Questions and Traceback are mandatory requirements of a client requested audit.

Food Safety Score: (General Question Score + Traceback Score divided by 2): \_\_\_\_\_%

Food Security Procedures Score: \_\_\_\_\_%

Total Score: \_\_\_\_\_%

## Food Safety/Third Party Audits

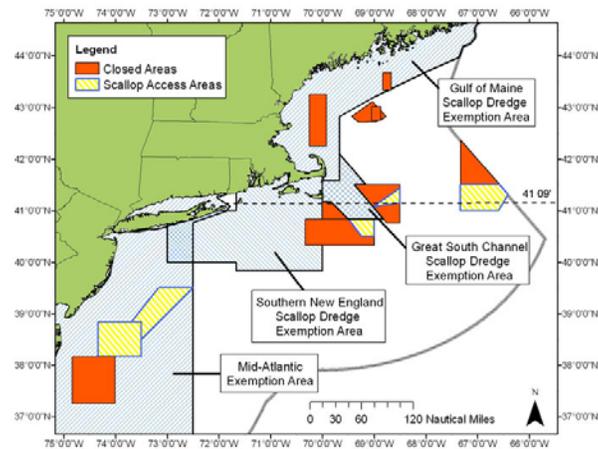
The second issue related to regulations is the food safety/third party audit which usually comes from the market rather than governments. The image is a checklist of things commonly included in a Good Agricultural Practice (GAP) audit and was taken from the USDA's website.

These audits or certifications have increasingly been required by larger buyers and food chains in an attempt to address the important and justifiable concern for food safety. The issue is that if handled incorrectly or without proper information/dialogue with producers, these audits pose a potential threat to farm viability. For example, an audit may require separation between livestock and produce, something next to impossible for Amish producers. The audits also pose the threat of increasing farmers' cost without increasing compensation. As the market moves forward there should be an intentional consideration of the practicality and effectiveness of these audits for farmers of different sizes, scales, and farming methods.

## CHALLENGE 2: Regulations



### Seafood Management



Source: NOAA Fisheries Northeast Region

Just a note on seafood because of its importance to the region and the lack of knowledge as to how it works. We spoke with three different people involved in the seafood industry, so we are not experts but have heard some overlapping issues emerge. Overall, it became apparent that the seafood industry is heavily regulated, with management plans for different species of fish and permits for particular species, and/or days at sea and/or areas to harvest in, and this has positive implications (preventing overfishing) but negative implications (for market competitiveness with imports).

This image is the management plan for Scallops. The line in ocean is the Exclusive Economic Zone for the U.S. (between 3 and 200 miles offshore) and the areas designate which are "open" and "closed." These areas alternate each year based on the inputs from a collection of scientists, regulators and industry representatives. The Scallop Management Plan is considered a success by many because it has lead to increased yields per trip while preventing over-fishing, but it still exemplifies the comparative advantage of other countries without these regulations in terms of price in the marketplace.

In fact, 84% of the fish we consume in this country is imported. Commercial fisheries in the U.S. have to dedicate either their own time or pay for legal representatives to attend and participate in these management councils. They also have to adhere to the ensuing regulations which inevitably increases their cost of doing business and can be inefficient in terms of capacity and resources. For example, a fishery cannot combine multiple permits on one boat, forcing them to take trips with two different boats using more fuel and increasing maintenance costs in the process.

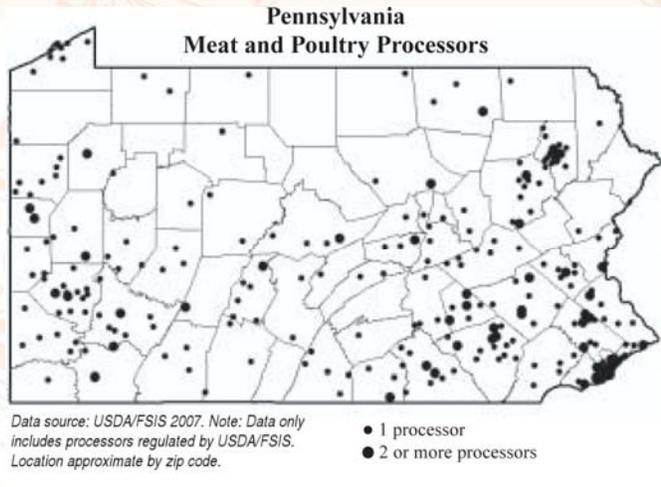
### **CHALLENGE 3: Lack of Support**



- ❧ *Support businesses and processors*
- ❧ *Urban areas/Direct marketing*
- ❧ *Political Support*

Whereas support was perceived to be present in the region's organizations, institutions and consumers, there were some categories of vital support that was missing or inconsistent.

### CHALLENGE 3: Lack of Support



Support  
Businesses and  
Processors

This map is taken from a 2007 report by the Center for Rural Pennsylvania on meat and poultry processing and reflect many of the issues we heard during our conversations. Pennsylvania has more U.S. Department of Agriculture (USDA) inspected slaughter plants than any state other than California but is losing them at a fast rate. Specifically, 4 to 5 percent per year, according to data from the U.S. Department of Agriculture/Food Safety Inspection Service (FSIS) and quoted in the study.

In addition to losing all processors at a fast rate, as the report outlines, many people we spoke with said that the region does not have enough processors at the right size to meet the needs of diverse farmers. For example, you need a very specific size processor to slaughter 8 head of cattle at a time for different market (retail vs. wholesale, for example) and processors serving farmers using “sustainable” practices such as grass fed beef or hormone free poultry.

Therefore, the challenges are the number of processors, their location and the type/size of farms they are serving.

Finally, some manufacturers and processors in both states are not necessarily dependent on local agriculture to get their product. This is either because of the volume or consistency needed, or the product itself cant be sourced locally (like cocoa beans).

### CHALLENGE 3: Lack of Support

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Urban production and  
marketing support

Source: [www.thefoodtrust.org](http://www.thefoodtrust.org)

There were two different ways that urban areas and urban markets felt a lack of support

- A need for more technical assistance on growing in urban areas (as opposed to just nutrition or gardening).
- A need to connect direct markets in urban areas with urban producers or producers coming in from more rural places.

There is initiative by some organizations, like Cooperative Extension, to address both of these issues but not enough at this point.

### CHALLENGE 3: Lack of Support

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Political Support



Source: [www.arthershey.com](http://www.arthershey.com) and Amanda Wagner, DVRPC

Many people and professional organizations expressed concern about the decreasing number of local and state officials who are farmers themselves or who understand farming.

The picture on the left is of Art Hershey a representative for the State of Pennsylvania from Chester County. Representative Hershey is a lifelong farmer and long-term supporter of agriculture, but retiring soon from the Legislature. With fewer legislators understanding farming, farmers and representative organizations are required to expend more resources to educate, give input, and provide testimony on the impact of policy on farming.

People also perceived a lack of political support via a lack of funding for agricultural programs and departments. The picture on the right shows a sign in New Jersey imploring the State to keep the Department of Agriculture, in response to Governor Corzine's suggestion to merge it with the DEP. This was possibly political posturing but nonetheless send a negative message to the state's producers and other agricultural entities.

## Differences within region?



☞ *In Pennsylvania:*

☞ *More optimism*

☞ *In New Jersey:*

☞ *Water issues*

☞ *Price of and access to preserved farmland*

Both states have issues with preserved farmland but it seemed more acute in New Jersey, because of its dense population, and within Pennsylvania in the Southeast.

**What are the biggest changes  
to the food and agriculture  
industry you have witnessed in  
the past 5-10 years?**



- Local food movement combined with increasing farmers markets, niche markets and direct markets.
- Rising food costs
- Expanding businesses.

## CHANGE 1: Local, Sustainable, Direct, and Niche Markets



Number of Operating Farmers Markets



Source: USDA Agricultural Marketing Service

As you can see from this chart, farmers markets are increasing across the country. This is just one of the signs that there is increasing consumer awareness of and demand for local food, which is in part fueled by food safety concerns and the media attention paid to the issue. There has also been an exponential increase in raw milk permits request in PA and farmers wanting to do direct marketing to consumers in both states.

Niche products are also increasing in direct and other markets. This is based on changing demographics affecting food demands. For example, more jalapeno peppers are being grown in New Jersey and Pennsylvania has seen an increasing number of goat farms. The Pennsylvania Department of Agriculture even got a recent request for a start-up water buffalo farm (which will obviously have some permitting issues).

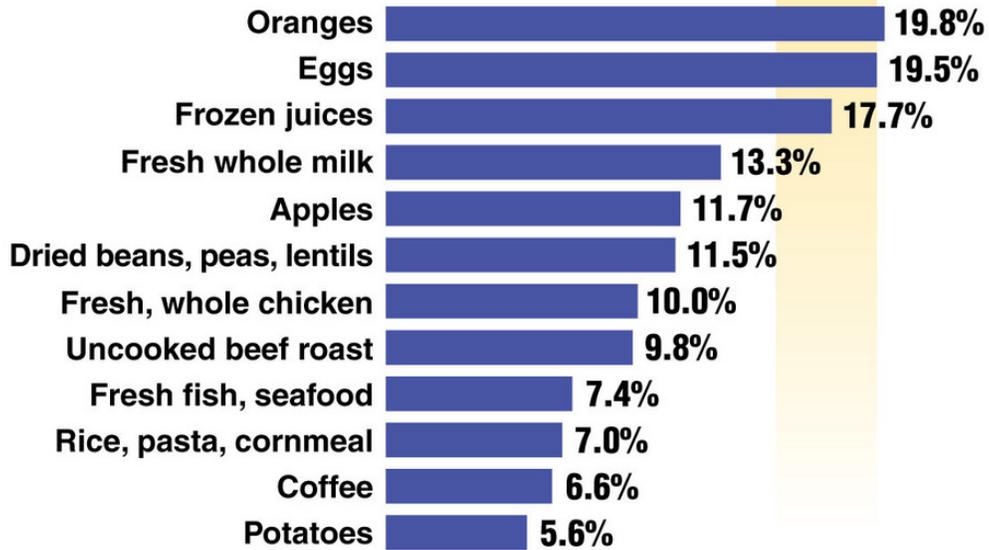
Besides production this demand for local, direct, or niche could positively impact other areas of the food system like processing, retailing, distribution.

The question that remains, however, is whether demand for local is outpacing local supply. For example, all of the CSA farms we interviewed are at capacity with a waiting list, and farmers ready and suited for farmers markets are not increasing as quickly as new farmers markets are appearing.

Finally there is tension within farming community between local/sustainable and more traditional approaches to farming. Many of those coming from the larger farming perspective feel there is hostility from local and sustainable food advocates but argue that they are needed to feed the entire population. Some local producers recognized that perception but felt that they have reasonable concerns with the production method (though don't want to personalize it to the farmer).

# Food prices on the rise

*Percent change in prices for some common food items, June 2006 to June 2007:*



Already spoke a lot about the complications of costs and prices but will be interesting to see in the future if the current local or niche trends will be affected by rising food prices. There was also a lot of uncertainty and questioning as to what the real price differences are between local and non-local.

## CHANGE 2: Expanding Businesses

GREATER PHILADELPHIA  
FOOD SYSTEM STUDY



Source: Four Seasons Produce

Possibly partly because of the increased interest in agriculture we spoke about, many processors and distributors have recently moved to larger facilities or invested in technology to be more productive and efficient. This is a picture Four Seasons Produce in Ephrata, PA. Their new facility was built within the last 5 years and is an Energy Star Certified warehouse facility.

In addition to expanding, many businesses in processing or distribution tended to have affiliate businesses specializing in logistics or importation.

## Conundrums:



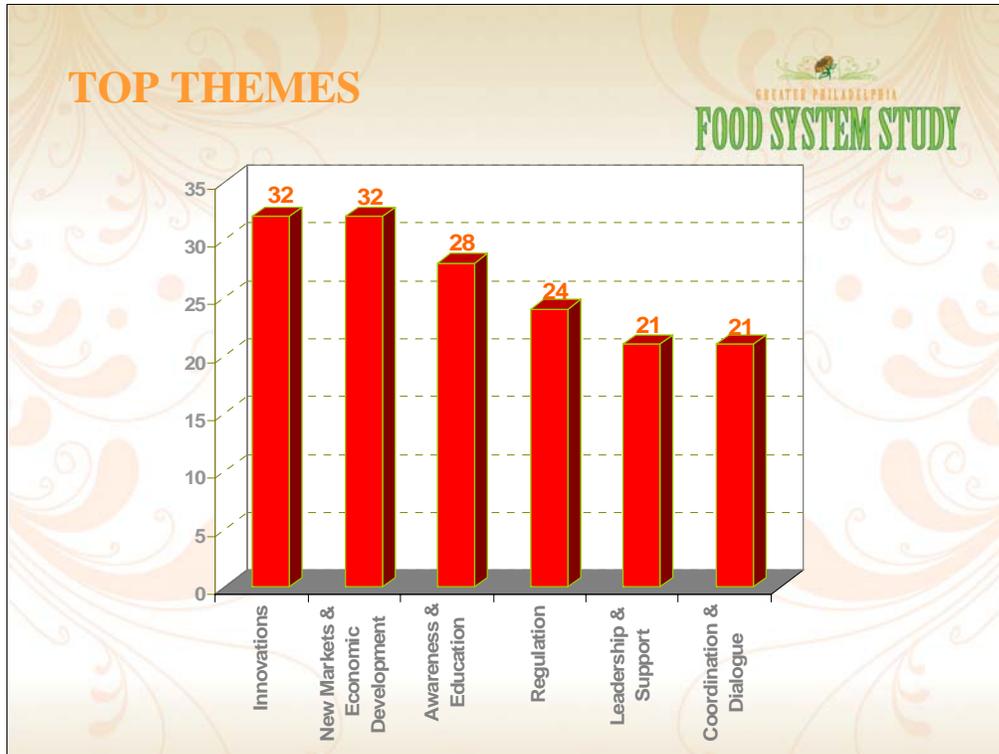
- ❧ *Consolidation of farms? but more people interested in farming*
- ❧ *Increasing demand for local? but decreasing production*
- ❧ *Increasing collaboration between farmers? but increasing tensions between farmers using different methods or scales*
- ❧ *Farmers making less money? But food prices increasing?*
- ❧ *Higher income households more likely to pay more for the “local” brand? but low income households need access to affordable and fresh food*

All of these conundrums need to be explored (or at least acknowledged) as we move further along in the study. Perhaps one or some of them can be incorporated into the assessments of Part 3.



We've heard the opportunities, the challenges, the changes, and are now moving into what people want to see happen in the future. The question was asked in different ways between groups and between survey and interview but the point in all cases was to get at ideas for changes that need to be made that we can flesh out in the future.

These are not changes DVRPC will definitely do or implement, but rather things people would like to see in the region related to the issues raised in this study.



As you can see, recommendations reflect the opportunities and challenges.

## RECOMMENDATION: Innovations

GREATER PHILADELPHIA  
FOOD SYSTEM STUDY

- ❧ *Processing and Value-Added*
- ❧ *Institutional and commercial kitchens*
- ❧ *Meat processors and state meat- inspection system*



Photo: [www.starrynightcatering.com](http://www.starrynightcatering.com)

## RECOMMENDATION: Innovations

GREATER PHILADELPHIA  
FOOD SYSTEM STUDY

### ☞ *Technology*

☞ *Cost-sharing on investments for water conservation (sensor mark and auto steer tractor)*

☞ *Distribution coordination*



Photo: [www.ga-lab.com](http://www.ga-lab.com)

The auto steer tractor lowers the skill needed to operate the machinery (expanding the potential workforce base for the producer) and ensures greater accuracy in planting- allowing closer rows and higher yields.

Distribution Coordination means that people want a way to see and understand the current distribution system. One example was technology that shows what trucks are on the road, what they are carrying, where they are headed, etc. Another was the creation on an online auction block for various products, including seafood, to make increase transparency and connections between producers and buyers.

## RECOMMENDATION: Innovations

GREATER PHILADELPHIA  
FOOD SYSTEM STUDY

- ❧ *Distribution and Transportation*
- ❧ *Multiply Common Market Model*
- ❧ *Bridge Repair, Public Transit, Toll Abatement for those food producers*
- ❧ *Inland intermodal connections at the Port*



A bridge repair job in progress. (Rtg. Publicity photo.)

Photo: [www.nzetc.com](http://www.nzetc.com)

The Common Market is a newly formed local foods distributor in Philadelphia consolidating product from local producers and distributing to larger institutional and restaurant buyers. Many people mentioned that it is a model that starts to address the huge issue of distribution, though small, and could be expanded or replicated in other places.

Also were more traditional recommendations related to transportation including Bridge Repair (particularly for commercial fishers in South Jersey for getting employees in and product out), public transit to get commuters off the roadways and alleviate congestion for food transporters, and toll abatement for food producers if tolls are enacted on any new roads.

The ports within the Delaware Valley Region do have a comparative advantage in getting break bulk, highly perishable product quickly off the ship but there can always be faster connections from the port to other destinations inland, according to the people we spoke with.

**RECOMMENDATION:  
New Markets and Economic  
Development**

*Local purchasing policies*

*Local section in new Philadelphia Produce Terminal*

*Include agriculture sector in economic development initiatives*


One of the most common suggestions was to incentivize or implement a local purchasing policy by governments, institutions, and businesses.

Another overall sentiment with the people we spoke was that agriculture needs to be seen more as a business. This includes inclusion in economic development initiatives at the state and local level and the provision of resources such as business planning and access to diverse loans/financing (for producers and food related enterprises).

The two logos included here are for entities already stating to use this business-based approach. PAgrows is a program of the PA Department of Agriculture and the Economic Development Council is a non-profit entity in Chester County working with state and local governments on loans and financing.

## RECOMMENDATION: Awareness and Education

GREATER PHILADELPHIA  
FOOD SYSTEM STUDY



Photos from [www.pafarmbureau.com](http://www.pafarmbureau.com) and [www.fernbrookeducation.org](http://www.fernbrookeducation.org)

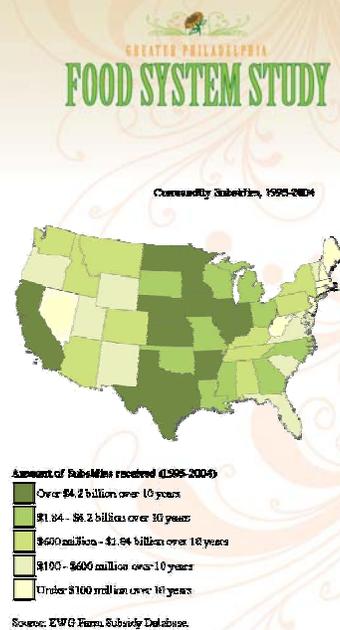
There were several different things people wanted more awareness and education on including:

- What it takes (costs) to farm and distribute food
- Local food and “value of local”
- Nutrition and food preparation
- Tradeoffs between different food production and distribution methods

The pictures show some of the diverse ways people are trying to educate already. On the left is the Pennsylvania Farm Bureau’s mobile ag unit. The right is the Fernbrook Farms Summer Camp program in Chesterfield, NJ where students actually work on a farm for several weeks.

## RECOMMENDATION: Regulation

- ☞ *“Level the playing field” by eliminating subsidies*
- ☞ *Standardize regulations and labeling laws*
- ☞ *Change zoning to improve food access and production (including urban agriculture)*
- ☞ *Lower property tax, no fuel tax*
- ☞ *For commercial fisheries, allow more flexibility in permitting and leasing (“capacity reduction”)*



When asked about recommendations for change, many said that they didn't want any intervention by government and the market should be allowed to take care of itself. This is reflected in the “level the playing field” sentiment. It was often targeted at the Farm Bill and the disproportionate share of federal dollars to other geographic areas outside of the Northeast/Mid-Atlantic and crops not including fruit and vegetables.

In terms of standardization, one example is the Milk Marketing regulations. There are designations for the state milk marketing and federal milk marketing designation. Some places only fall within the state designation, so are not subject to the same amount of restrictions and requirements for pricing and costing.

Zoning applies to urban areas for production and access but also the right to farm ordinances in rural areas we spoke about earlier.

Capacity reduction refers to the ability of commercial fisheries to combine permits and eliminate inefficient vessels in order to save on fuel and capital costs.



Government- purchasing more from the region themselves, as mentioned earlier, and educating themselves on what farming means. Jersey Fresh and PA Preferred are two state marketing programs that people were supportive of (with Jersey Fresh older and more recognizable than PA Preferred)

Consumers/neighbors- work with government to minimize right to farm issues (the ordinances restricting farming) and show support of farmers and fishermen. The image is a bumper sticker distributed by Cooperative Extension with the aim of education neighbors on the purpose of that slow-moving farm vehicle.

Non-profits and other organizations- address the decreasing capacity in local leadership (many people wearing many different hats) and focus on complementing, not competing with farmers for resources. This could mean providing assistance legal lease issues for farmers renting land or grant writing to access business loans and planning

## RECOMMENDATION: Coordination and Dialogue



- ☞ *Clearinghouse or coordinated information sharing that is accessible online*
- ☞ *Food policy council or advisory board*
- ☞ *Multiple-state coordination on distribution and branding*
- ☞ *Coordinated regulation and definitions, especially on water allocations in NJ*
- ☞ *Regional strategic planning of farmers markets*

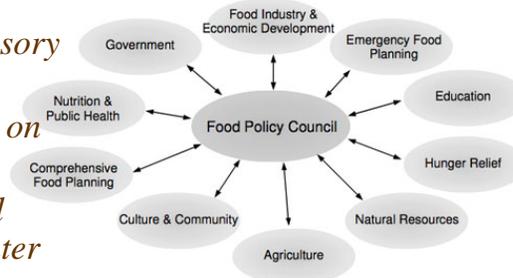
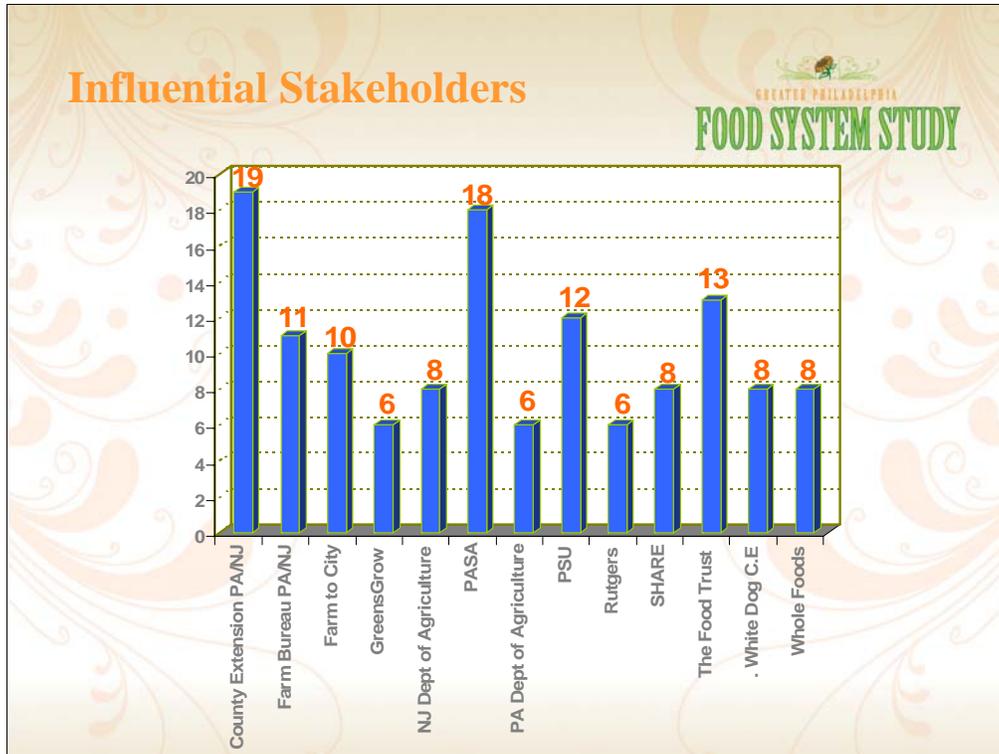


Image from [www.fpclanecounty.org](http://www.fpclanecounty.org)

**Who else should we be  
talking to about these  
issues?**



To get at the question of who is working with who and seems to be influential, we used the answer to the last question “who else should we talk to about these issues” and compiled the results.

The methodology has limitations. First, it is only based on who we spoke with. Second, people may not have mentioned important stakeholders for various reasons- perhaps they were mentioned elsewhere in the interview, they might have assumed we already spoke with them or they might think they would not have the time or inclination to speak with us.

Based on all the information we acquired in Part 1, we created a Food System Stakeholder Chart. It lists entities by type (enterprise, non-profit, distributor, etc) along with the scope, mission and activities. This was in response to a need we heard at the beginning of this process to collect in one place who is doing what, where.



Synthesizing all of these 171 responses takes a lot of work. And requires lots of additional research as we try to learn more about each person or industry we talked to.

Now we'll speak to conclusions – what we are taking away from Part 1 and bringing into the future Parts of the study.

## CONCLUSIONS



- ❧ *Interconnected food system*
- ❧ *Not all farming (or farmers) are the same*
- ❧ *The food system is global because of technological efficiencies and international labor specialization*
- ❧ *Everyone (every individual, organization, industry, business) has different perspectives and needs*
- ❧ *Advantages can also be challenges*

What we learned from this first part of the study is: this topic, while sounding simple (everyone eats), is very complicated.

Philadelphia's food system includes both local producers and global trading partners.

One's diet includes both fresh produce and processed and refined foods, like bread and cereal. But wheat and rice are not grown in our region but are processed in our region.

Similarly, most people's diet includes meat and other animal products. Such Large-scale animal operations are harder or impossible to operate in suburbanized or suburbanizing communities.

**CONCLUSIONS:**  
**Interconnected**

☞ *A food system is very complicated, interconnected, and influenced by global market conditions*





To illustrate how this interconnection between local consumers and global producers benefits the Philadelphia region, we give you the Philabundance example.

The system of ports in and around Philadelphia have specialized in importing fresh produce from S. America, among other food and non-food items.

Lots of these imports are distributed through smaller vendors at the Philadelphia Regional Produce Market.

Vendors at the Produce Market regularly donate pounds and pounds of fresh produce to Philabundance, a regional distributor to area food banks, shelters, and community kitchens.

This means that Philabundance has an abundance of fresh fruit to distribute and they can use surpluses, if there are any, to trade with other regions' food banks.



Source: Christina Arlt and Amanda Wagner, DVRPC; Fair Food Farmstand

Not all farming (or farmers) are the same. There is conjecture by each state's farmers about the other. There are also differences within states by scale, method, experience, motivation and geography, which equals different regulatory, marketing and support needs.

The challenge will be to explore and maximize the opportunities presented by differences and coordinate on and be inclusive in planning for the future.

## CONCLUSIONS: Technological Efficiencies



- ☞ *Trade is important for any region; trade is vital to Greater Philadelphia*
- ☞ *Transporting high volumes of food reduces transportation costs*
- ☞ *Ship/water travel is most efficient for fuel consumption; however, most freight is transported by trucks because of time sensitivity*

Comparing Freight Modes – Per Ton/Per Mile

	Cost	Fuel Use	Hydrocarbons	Carbon Emissions	Nitrogen Oxide Emissions
Mode	Cents	Gallons	Lbs.	Lbs.	Lbs.
Barge	0.97	0.002	0.09	0.2	0.53
Rail	2.53	0.005	0.46	0.64	1.83
Truck	5.35	0.017	0.63	1.9	10.17

Source: Victoria Transport Policy Institute

Additionally, it seems common sense that reducing how far food travels would be beneficial to the consumer and the environment.

For example, cities can be efficient uses of space. Dense residential areas mean that our society can efficiently serve large areas of people with infrastructure. Living close to where you work reduces not only your commute time, but also your carbon footprint and out-of-pocket transportation costs.

It seems that it makes sense that having producers close to markets would also reduce travel time, reduce the carbon footprint related to transportation, and therefore reduce out-of-pocket transportation costs to the producer or distributor and food costs to the consumer.

However, ship/water travel is the most efficient mode to transport large volumes of freight, including food. Less fuel is used transporting 1 ton of freight over 1 one mile than any other mode, and therefore ships emit less carbon. And what makes these trips of 6,000 miles or more worthwhile to international producers and transport companies is the large economy of scale and, bunker fuel costs less than other grades of fuel.

However, time is a critical factor in the efficiency equation... and because food has a shorter shelf life, most of the freight traveling on American highways is food in trucks.

## CONCLUSIONS: Diverse Needs



☞ *Besides more funding, more money, or more revenue, different stakeholders have different missions, perspectives, and needs.*

☞ *Access or production?*

☞ *Need or niche?*

☞ *Consistency or Seasonality?*

☞ *Intervention or laissez faire?*

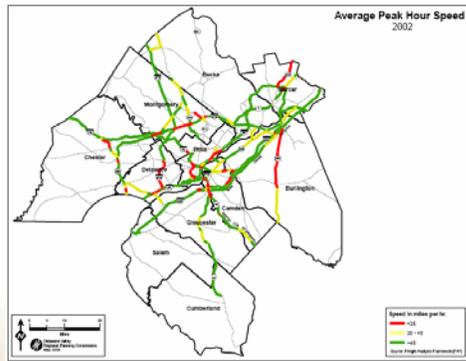
Think about how your answer to each of these questions will change the way you view the situation, the problems and the needed solutions.

## CONCLUSIONS:

Advantages + Challenges = Opportunities



- ☞ *Weakening US \$ creates exporting opportunities and reduces the amount of imports*
- ☞ *Access to many different metropolitan markets means land is more expensive and the cost of doing business is high.*



And lastly the future is very uncertain.

Developing a stronger local food system that relies less on imports is a good thing... especially when considering the environmental benefits and reduced infrastructure costs of working landscapes.

Additionally, as more of the world's population enters the middle class and the American Dollar continues to decline; our international trading partners will go to the most profitable markets, which may not be the United States.

But as we learned in Econ 101, our region cannot be protectionist, either. We need food imports now, and will always need food imports in the future to feed a large non-farming population, to feed the hungry and disadvantaged, and to feed the region during times of drought, and avoid times of famine.

We need to overcome the short-term problem of expensive land to ensure we have the long-term viability of working landscapes producing food for nearby populations.

# **QUESTIONS**

## **NEXT STEPS**

## NEXT STEPS

- ❧ SAC picks BMP and Case Studies
- ❧ Review Part 1
  - ❧ Sub-committee of Study Advisory Committee; commit to review document and provide feedback
- ❧ Commence Part 2: Distribution
  - ❧ Freight Analysis Framework
  - ❧ “Food Miles” Literature Review
  - ❧ Supply Chain Case Studies
  - ❧ Friday, 12/12/2008 SAC meeting to review Part 2 findings

**ONE MINUTE  
REPORTS**



Meeting attendees were asked to vote on best management practices or case studies from outside the region to be researched for the final report. Categories included farm to school, financing programs, education/training/technical assistance and enterprises.

# THANK YOU!

## FOR MORE INFORMATION

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Commission

