



**Committed to the future of
rural communities**



White House Business Roundtable

Jobs and Economic Development from the Farm/Food Value Chain

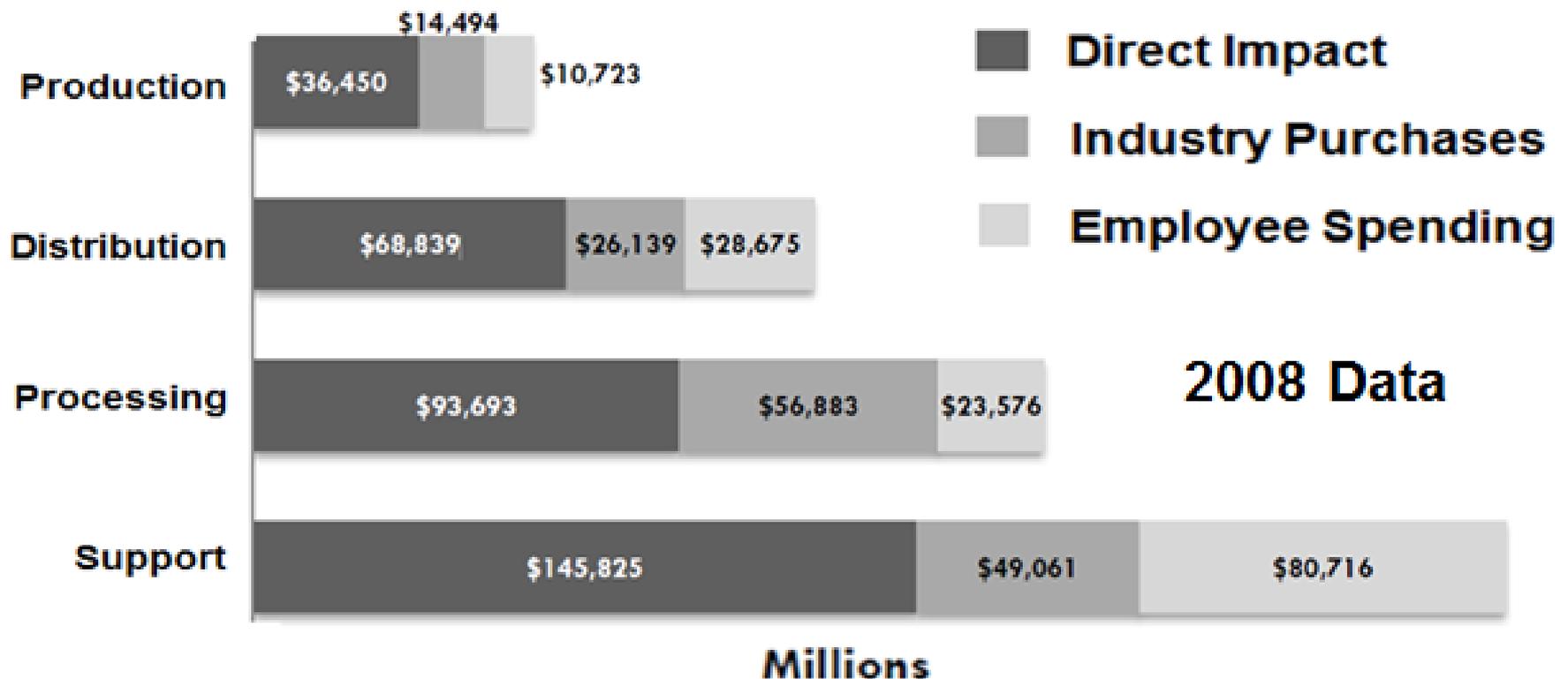
May 17, 2012

Dr. Glenda Humiston, State Director, California RD

California Agriculture Value Chain

Direct Impact is over \$344 Billion

Multiplier Effect Takes it to \$635 Billion per Year



SOURCE: CA Center of Excellence, "Agriculture Value Chain Scan", June 2011

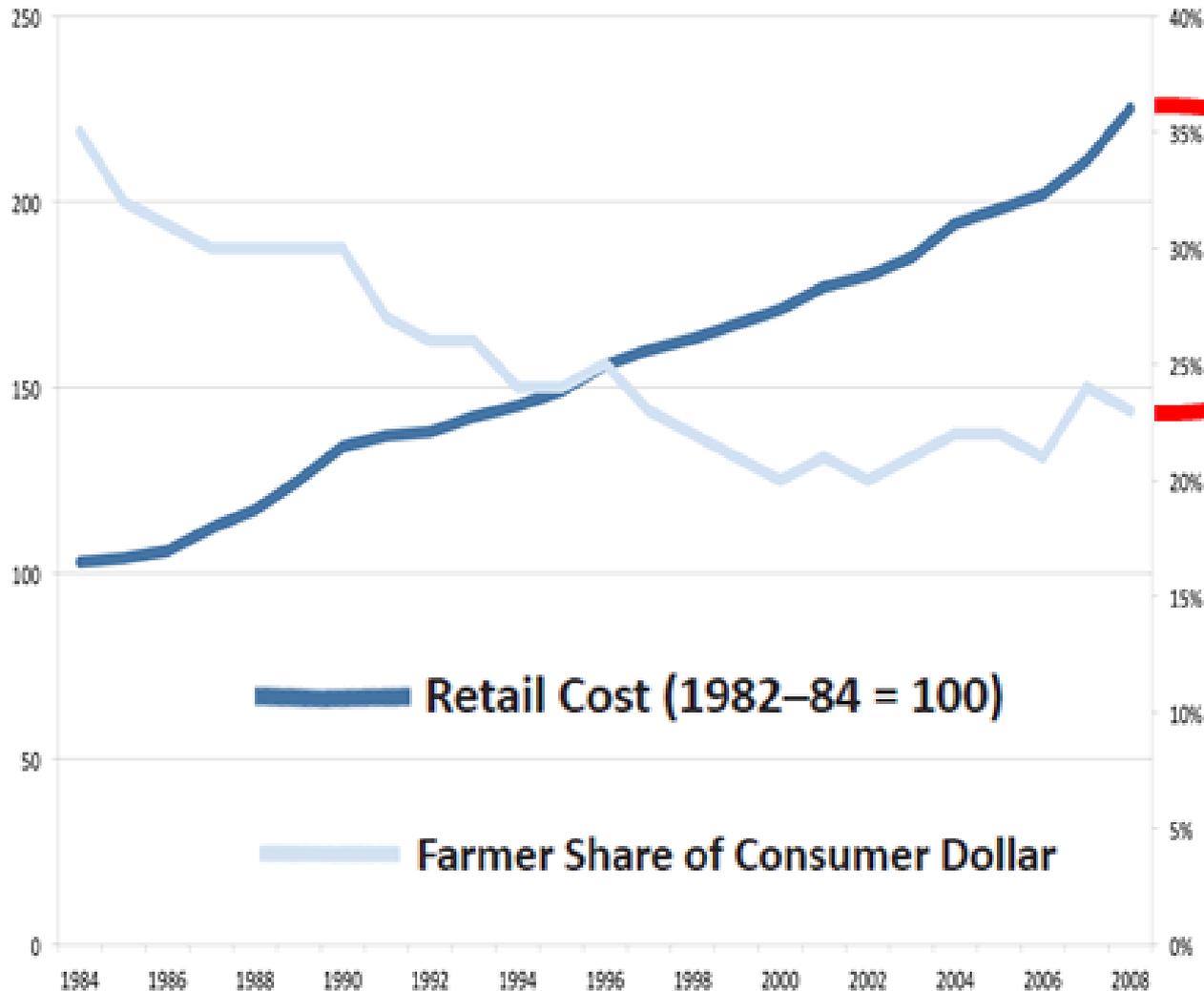


Projection: Agriculture Value Chain Occupation by Sector

SECTOR	2011 JOBS	5-YEAR NEW JOBS	AVG. HOURLY WAGE
Support	1,446,232	183,018	\$24.59
Production	206,303	-36,364	\$23.34
Processing	226,216	5,173	\$23.49
Distribution	585,014	29,913	\$24.04
TOTAL	2,463,765	181,740	\$23.87

SOURCE: CA Center of Excellence, "Agriculture Value Chain Scan", June 2011

Retail Cost vs. Farmer Share of Food Sales



SOURCE: USDA National Agricultural Statistics Service

**Ag
Value
Chain
Profits**

**Most of It
Leaving
Our Local
Communities!**

Growing Policy Support for Regional Food Systems



2002

The San Francisco Foodshed



Executive Directive on Healthy and Sustainable Food 09-02
(Issued July 9, 2009 by Mayor Gavin Newsom)

2009

LOS ANGELES FOOD POLICY COUNCIL



CATALYZE | COORDINATE | CONNECT

2010

California Agricultural Vision:
Strategies for Sustainability

2010



THE UNITED STATES CONFERENCE OF MAYORS

The Voice of America's Mayors in Washington, DC

January 27, 2012: The U.S. Conference of Mayors creates a Food Policy Task Force at their 80th meeting in Washington, D.C.

Needs to Evolve into...



- # JOBS!
- HUSBANDRY
 - HARVEST
 - PROCESS
 - COOLING
 - CUT & WRAP
 - PACKAGE
 - STORAGE
 - TRANSPORT
 - MANAGE
 - DISTRIBUTE
 - MARKET
 - WHOLESALE
 - RETAIL
 - TOURISM
 - SERVICE
 - SUPPORT
 - RESEARCH

California Ag-Based Biofuels Expanding

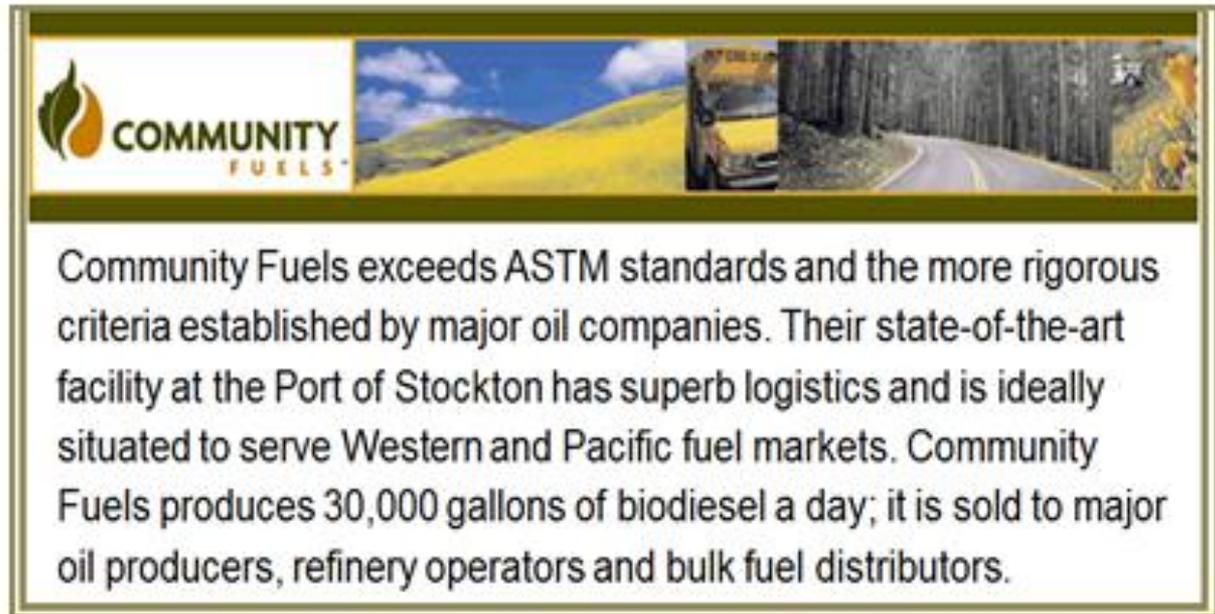
Western
**FARM
PRESS**
TIMELY RELIABLE INFORMATION
FOR WESTERN AGRICULTURE

Aug. 15, 2011: Wanted:
California farmers to grow
25,000 acres of Camelina



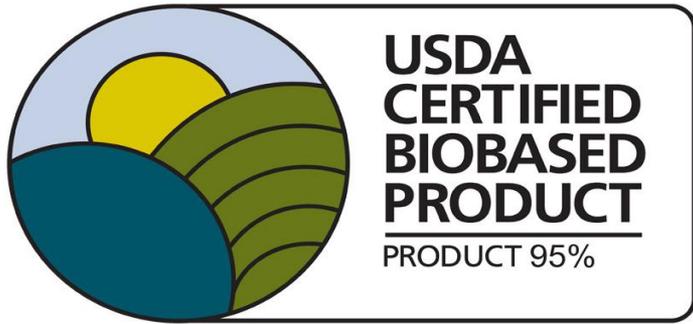
A screenshot of the NASA website. The top navigation bar includes 'HOME', 'NEWS', and 'MISSIONS'. The main content area features a news article dated 4/27/11 about biofuel tests.

4/27/11 – NASA has given jets their first taste of animal flesh and apparently they like it. In March and April, researchers at NASA Dryden Flight Research Center in California conducted tests of biofuel made of chicken and beef tallow (waste fat) in the engine of a DC-8 airplane; results were very positive.



An advertisement for Community Fuels. It features a logo with a stylized leaf and the text 'COMMUNITY FUELS'. Below the logo is a photograph of a yellow truck on a road. The text describes the company's production and standards.

Community Fuels exceeds ASTM standards and the more rigorous criteria established by major oil companies. Their state-of-the-art facility at the Port of Stockton has superb logistics and is ideally situated to serve Western and Pacific fuel markets. Community Fuels produces 30,000 gallons of biodiesel a day; it is sold to major oil producers, refinery operators and bulk fuel distributors.



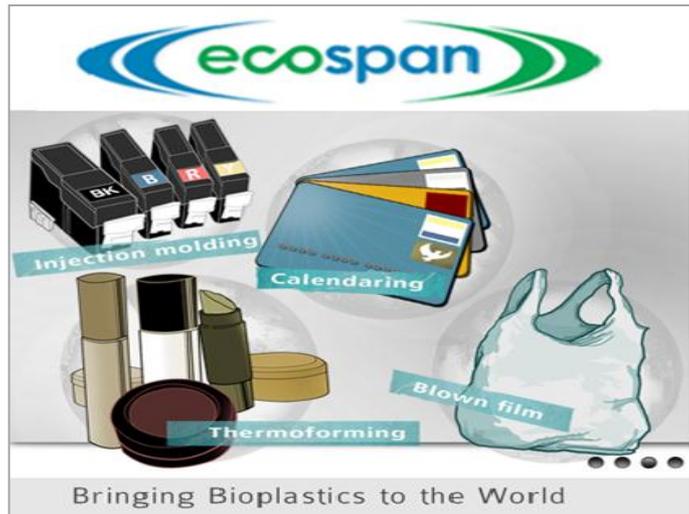
Many California Firms Already Producing Bio-Based Products



Microbes That Make Our Planet Clean And Green

Click any image on the left for more details

Bio-Green Planet



Bio-based products for your foodservice operation

We're your #1 source for products made from the earth that can be returned to the earth — like sturdy, compostable Bridge-Gate products made from wheatstraw.

[READ MORE](#)

Fuel Your Imagination

GREEN HEAT Chafing Fuel is a biodegradable, sustainable, and money saving alternative to traditional chafing fuels.



About 65% of Value Chain Jobs & Economic Activity will be off the Farm – in our cities and rural communities.

Build Urban–Rural Partnerships



Reducing Conflict Between Rural and Urban Areas is Crucial



Leverage Existing Infrastructure to Support Entrepreneurs

Aggregation Hubs

OPPORTUNITY: Partner with Food Banks

- Similar Facilities & Equipment
- Improve Access to Food Overall
- Complementary Hauling of Product



Commercial Kitchens

OPPORTUNITY: Partner with Schools, NGOs

- Use facilities & equipment 24/7
- Potential Revenue Stream for NGO
- Chance to Educate on Food Prep



California Financial Opportunities Roundtable (CalFOR)

Community Development Financial Institutions
Business Development Corporation
Individual Development Accounts
Employee Stock Ownership
Direct Public Offerings
Institutional Investors
Local stock exchanges
Benefit Corporations
Crowd-Funding
Cooperatives



California Citizens Hold \$859 Billion in Retirement Accounts

**\$43 Billion for Investment
in California if Residents
Brought 5% of Their
Retirement Accounts Home**



**Solano – Yolo
Counties
5% =
\$726 Million**

SOURCE: Employee
Benefit Research
Institute, May 2010
Data Derived from
Averaging National
Statistics

THE FOOD CHAIN CLUSTER

Integrating the Food Chain in Solano & Yolo Counties to Create Economic Opportunity and Jobs



Why a Food Chain Cluster Study?

- *Agriculture Futures Study* pointed out the existing relationship among the ag regions in Solano and Yolo counties
- *Index of Economic and Community Progress* showed specialty manufacturing & logistics as growing clusters in Solano County
- General Plan updates reaffirmed policy of limiting/targeting development to ag-related business in the unincorporated area

What do we mean by “Food Chain?”

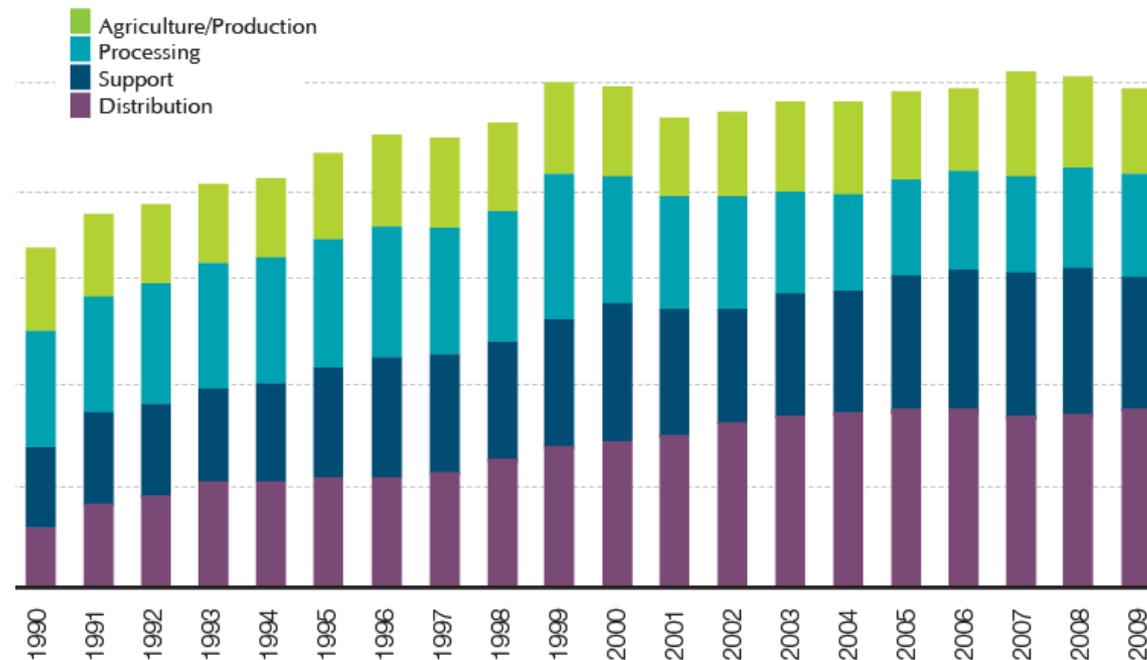


What did we learn?

- Food Chain represents \$2.5 billion in total economic activity, 10% of total GDP

ECONOMIC OUTPUT OF FOOD CHAIN

Gross Domestic Product by Segment
Solano and Yolo Counties



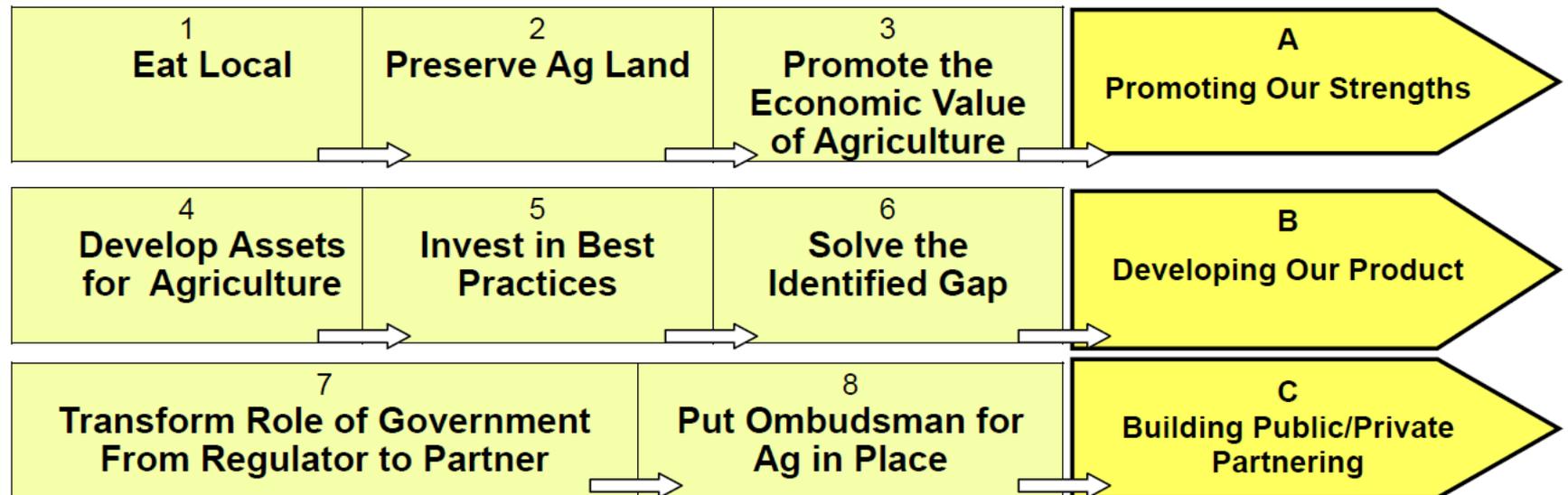
What did we learn?

- We have capacity to grow food chain even more
 - Infrastructure for transport – interstate highways, railways, seaports, airports (*distribution, opportunity*)
 - Infrastructure for education – high school through university (*innovation, lifelong training, opportunity*)
 - Available water and wastewater services (*processing, production, opportunity*)
 - Growing, capable of growing high-value crops with local and global demand (*production, processing, opportunity*)
 - Preservation of valuable farmland (*production, capital commitment, opportunity*)
 - Benefit from other clusters in seed production, seed research, biotechnology, energy (*innovation, opportunity*)

What did we do?



- Held Solano and Yolo Counties Joint Economic Summit in November 2011



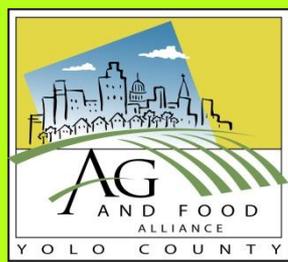


For an in-depth review of studies and information presented at the Joint Economic Summit, including the Food Chain Cluster study:

www.solanocounty.com/jointsummit

California Food System Alliance Network

- Networked community-based multi-stakeholder leadership roundtables
- Producers, economic development, business, environmentalists, health and food access, distribution and processing, labor, civic
- Yolo, Sonoma, San Mateo, Santa Clara, Fresno, Ventura, Santa Barbara and San Diego



Challenges to Scaling-Up

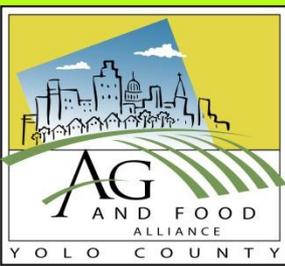
Distribution Infrastructure

Storage and Processing

Liability and Food Safety

Institutional Price-point

Demand and Supply Issues

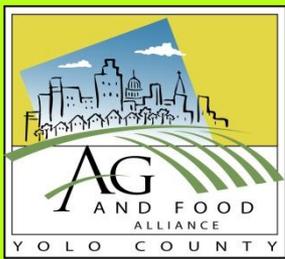


Regional Food Systems Promotion

Farm to School/Institution
Regulatory and Governance
Food Safety

Land use – ag land preservation
Infrastructure Development
Brokering

Regional collaboration activities
Branding/Marketing
Public Assistance Programs



Local Efforts and Solutions

Regional Aggregation and Distribution

Farm to School

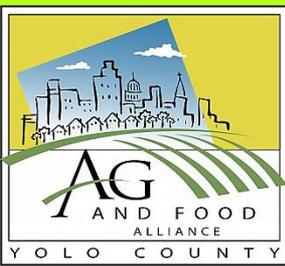
Farmsbudsmen

Food Safety/GAP preparedness

Brokering

Local Policies

Collaboration



Values-based Supply Chains and Food Hubs in California

Gail Feenstra

Ag Sustainability Institute, UC Davis

Shermain Hardesty, Ag & Resource Economics, UC Davis

David Visher, ASI, UC Davis

Tracy Lerman, UC Davis

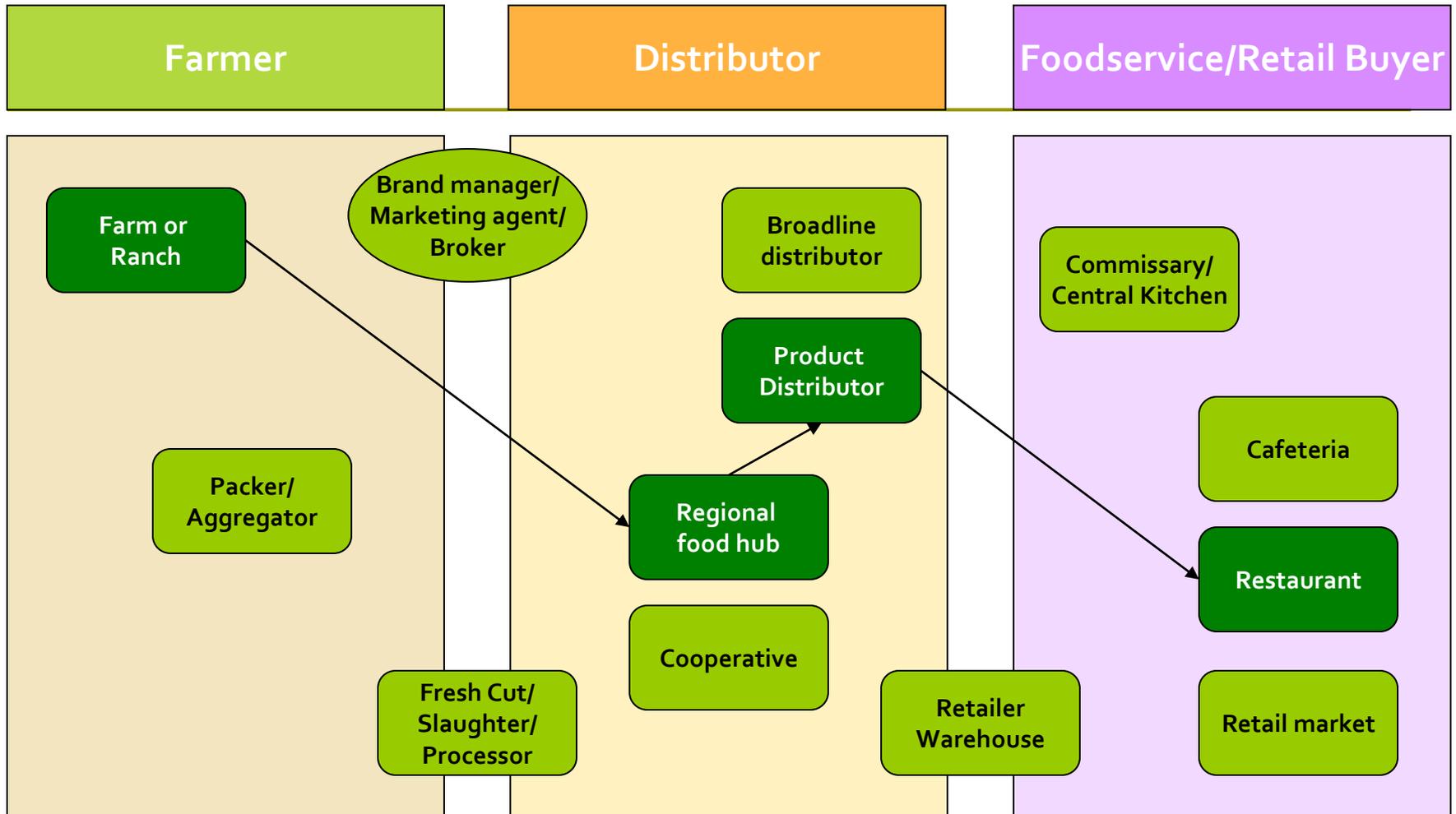


United States
Department of
Agriculture

National Institute
of Food and
Agriculture

This presentation was partially supported by the National Research Initiative of the National Institute of Food and Agriculture, USDA, grant number 2009-55618-05093

Entities Involved in Supply Chain Decision-making



Key:

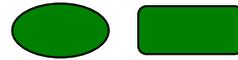
Influencer:
Does not touch
product (Oval)



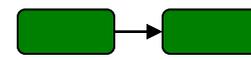
Handles product
(Rectangle)



Typical players in
this chain (Green)



Product flow
(Arrow)



Values-Based Supply Chains (VBSCs)

Wholesale marketing channels that preserve the farmer/rancher identities who grew/raised the product, as well as any environmental, social and community values incorporated into its production.

What constraints do these enterprises face and how to overcome them?

How can these enterprises be strengthened and supported?

Project Goals

[NIFA funded research]

- Identify how the success of “values-based” distribution networks involving small- and medium-scale producers are affected by:
 - **Access to financial capital**
 - **Government, industry regulations and policies**
 - **Business/entrepreneurial savvy**



Methodology

Perspectives from “inside the chain”:

- 11 case studies of western US food distribution networks (values-based supply chains: CA, OR, CO)

- **CALIFORNIA**
 - 4 cases with institutional buyers
 - 1 case with retail buyer

Perspectives from “outside the chain”:

- ~90 interviews with:
 - Financiers, lenders
 - Industry associations and government agencies
 - Economic and community development professionals

Findings across Case Studies:

- **Distribution expertise and prior investment** in infrastructure is important for distributors.
- The “**right balance**” of small, mid-scale and large producers in distribution networks is important for financial viability of distributors.
- **For non-profits, separating distribution and branding/marketing** reduces their financial capital requirements and allows them to focus on their strengths.
- **Producers need to take responsibility** for their own story. Ability to communicate producers’ authentic stories is critical. May trump “local.”

Top challenges faced by VBSCs

- 3 factors most likely to be identified by all 3 sectors as challenges to the viability of an *entire VBSC*:
 - **Market demand**
 - **Appropriately scaled infrastructure**
 - **Economically efficient supply**



Conclusions From Key Informant Interviews

- *Market development, market access, and consumer education* are significant challenges to viability of entire VBSCs
- Development of *local/regional food processing, storage and distribution facilities* could significantly enhance the viability of entire VBSCs, as well as the producers involved....
- **HOWEVER**, farmers need to ask questions before getting involved.

Conclusions From Key Informant Interviews

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- Development of *local/regional food processing, storage and distribution facilities* could significantly enhance the viability of entire VBSCs, as well as the producers involved....
- **HOWEVER**, farmers need to ask questions before getting involved.

How can we support development of VBSCs?

- Assist VBSCs in educating consumers regarding environmental and social benefits
- Provide training on regulatory compliance, business planning, recordkeeping and finance to producers involved with VBSCs
- Conduct assessments of local/regional food processing, storage and distribution facilities
- Facilitate collaboration among producers needing facilities
- Identify potential funding sources for such facilities
- Help plan for long-term sustainability



Rural-Urban Connections Strategy

Enhancing Rural Economic Viability
and Environmental Sustainability



Land Use-Transportation Plan

For every 1,000 new residents:

1988-2005

333

acres

2008-2035

42

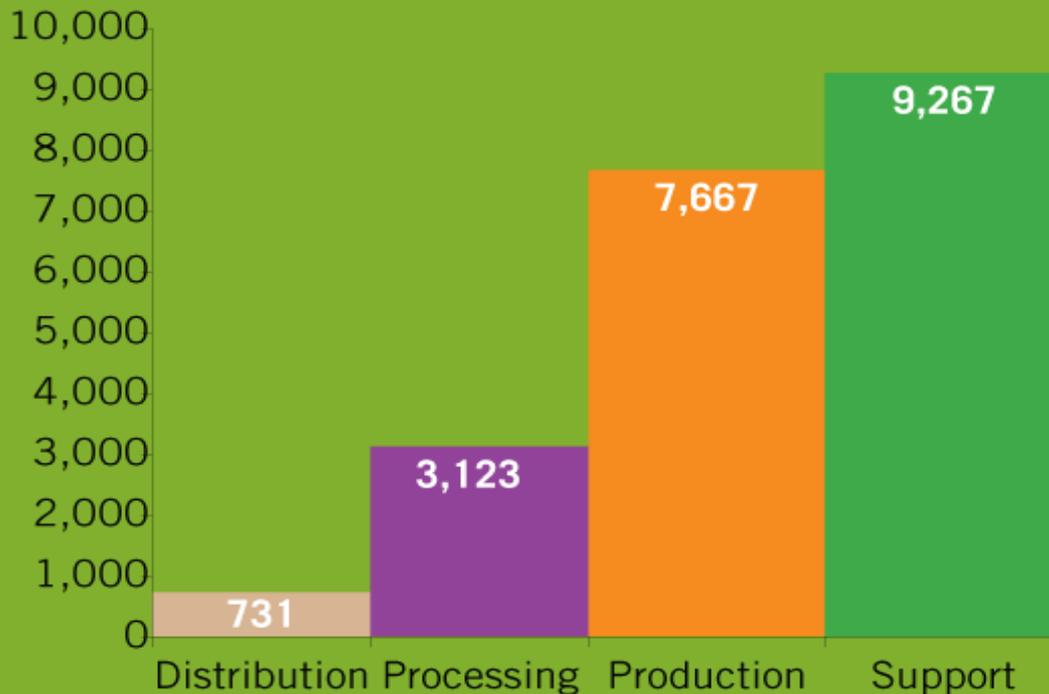
acres



Ag Industry in SACOG Region

Agriculture Industry Employment

Source EDD CREE Data



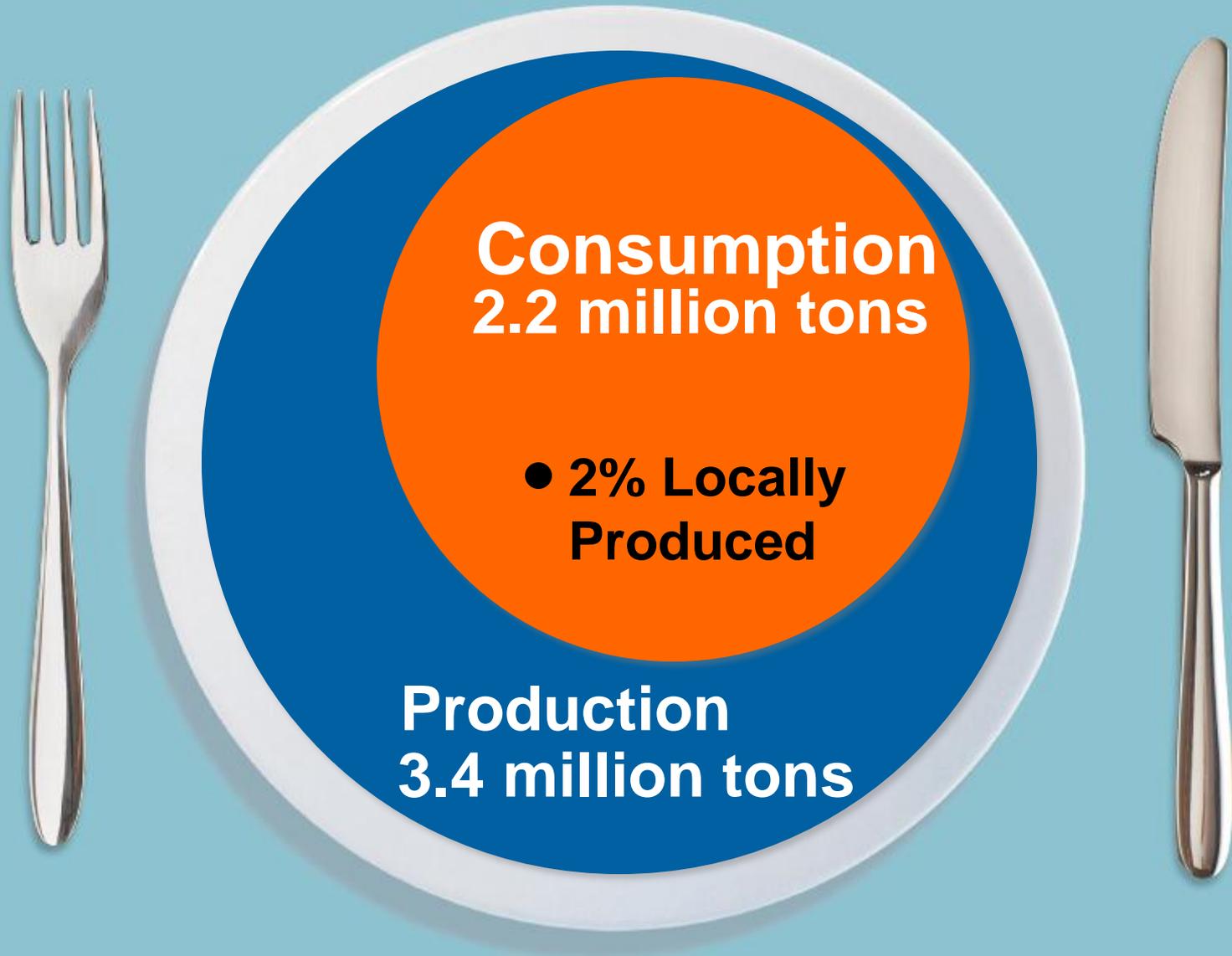
\$1.6B

Farm Gate Value

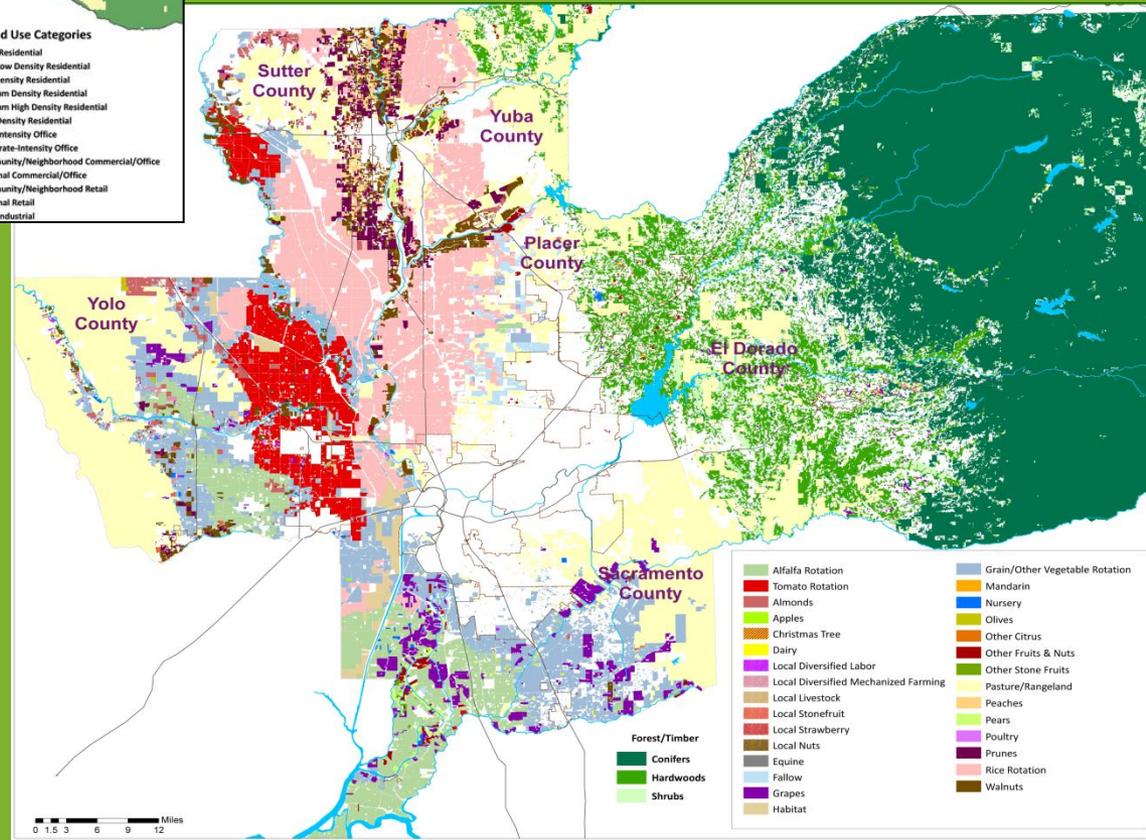
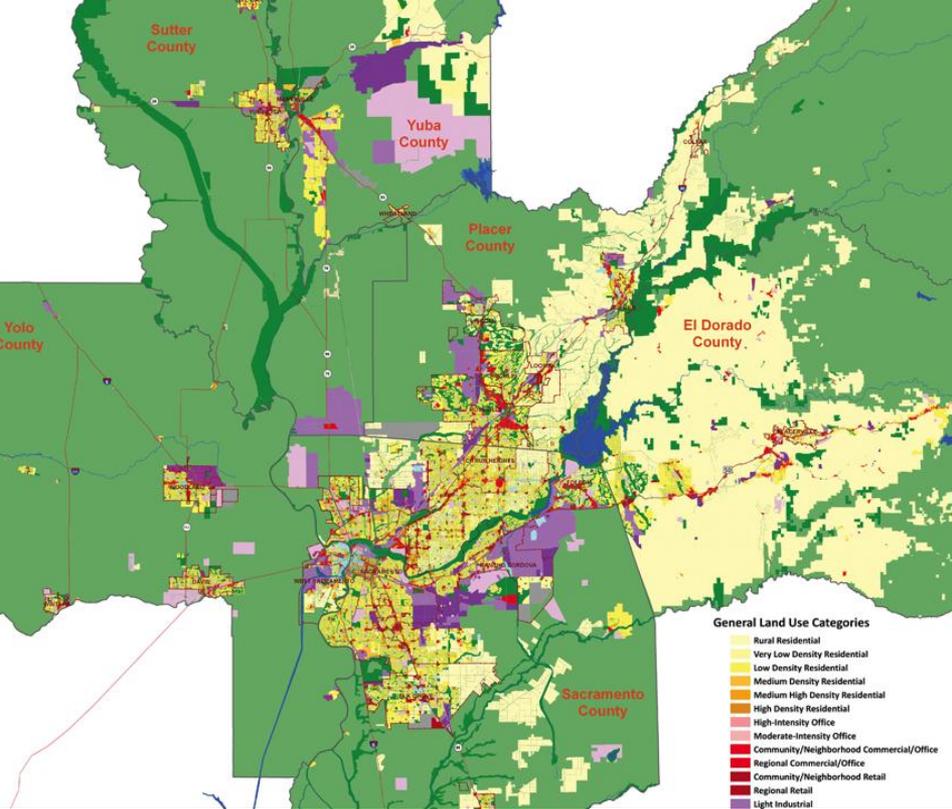
\$3.3B

Ag Sector Value

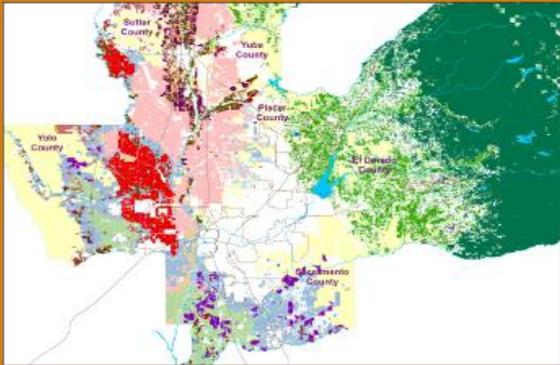
Production and Consumption



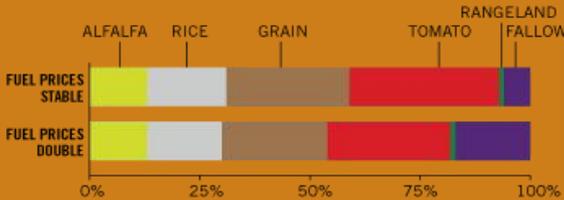
Perspective Shift: Urban → Rural



1 CROP MAP



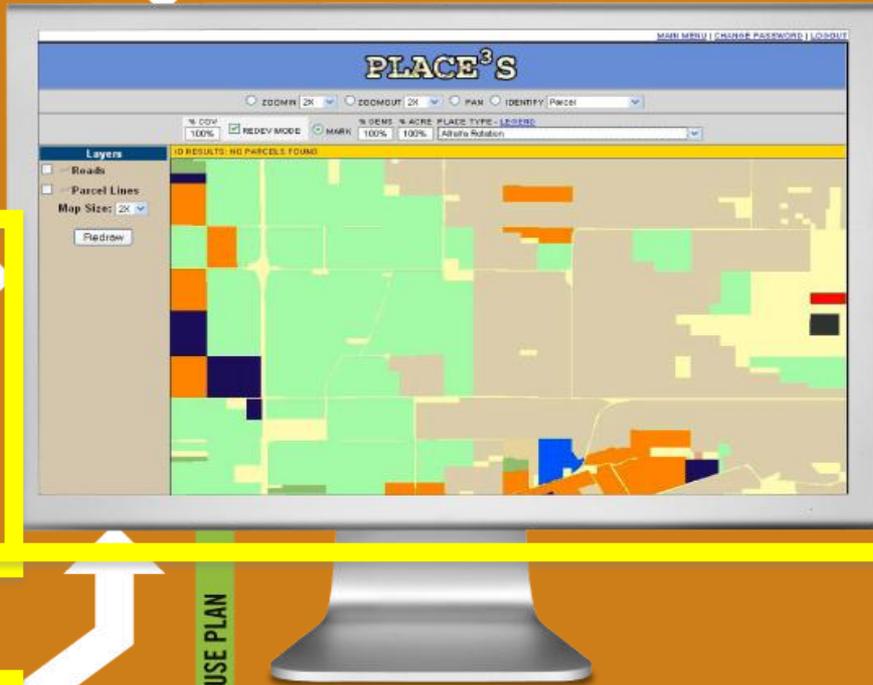
2 ECONOMETRIC MODEL



3 DIET/LAND NEEDS



4 I-PLACE³S



LAND USE PLAN

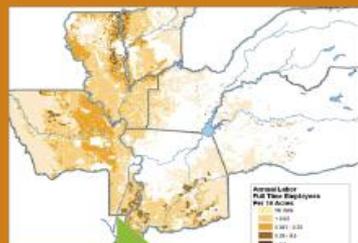
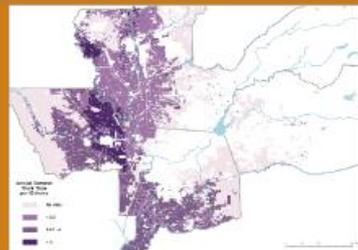
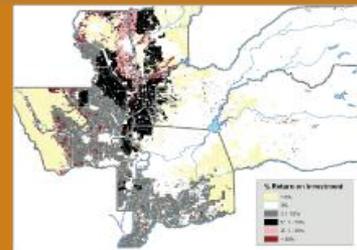
5 INFRASTRUCTURE/FISCAL MODEL (IMPACS)



TYPE & AMOUNT OF INFRASTRUCTURE & SERVICES NEEDED

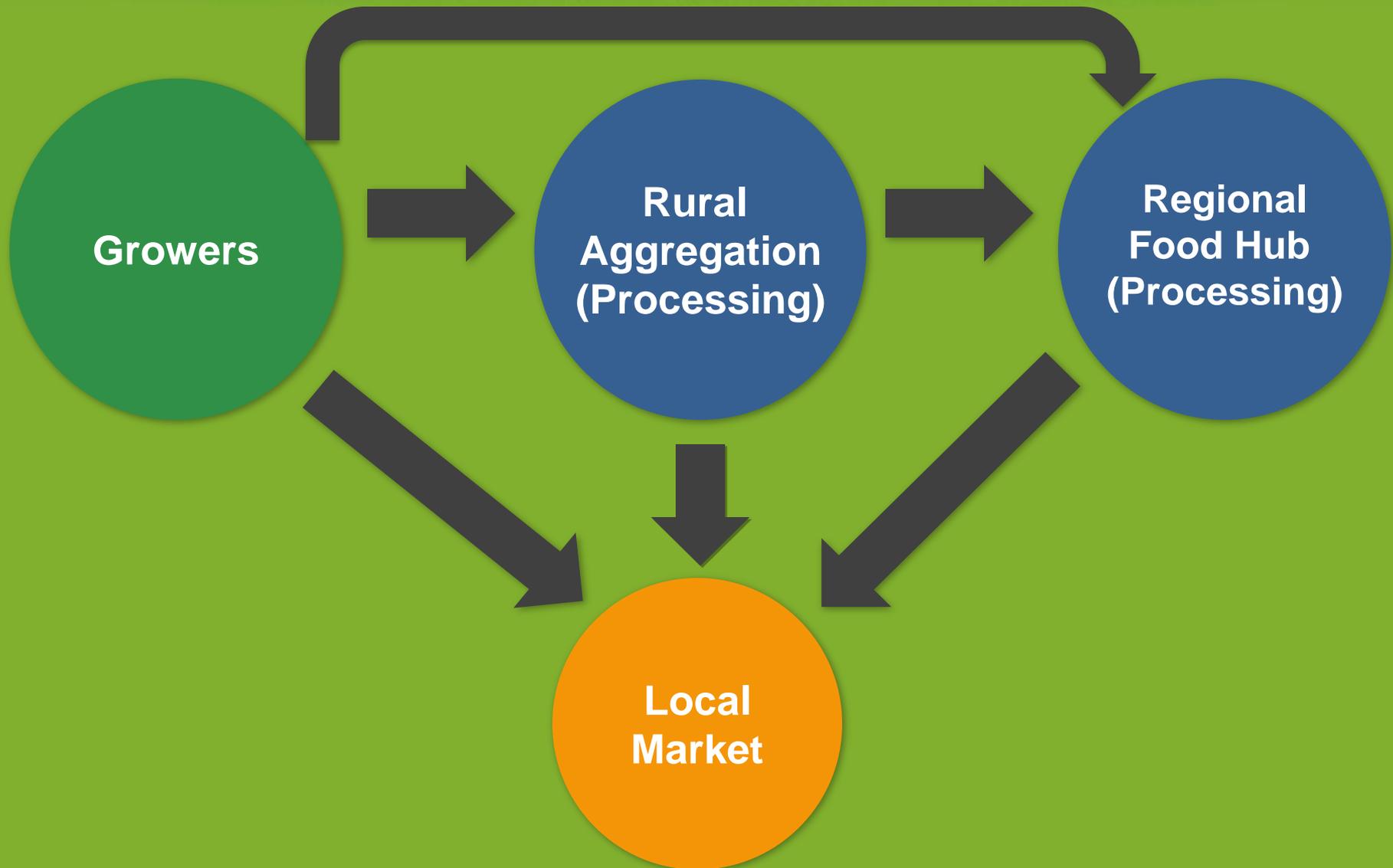
COST TO BUILD, MAINTAIN & PROVIDE SERVICES

\$\$\$ REVENUE GENERATED FROM LAND USE PLAN



SCENARIOS

Regional Food Systems



Policy Considerations

- Land Use and Conservation
- Transportation
- Water and Flood
- Economic Development



Pacific Coast Producers



Company Profile

- ❖ Agricultural Cooperative founded in 1972
- ❖ 165 Member-Owners representing
 - ❖ Tomatoes
 - ❖ Peaches
 - ❖ Pears
 - ❖ Grapes
 - ❖ Apricots
 - ❖ Apples
 - ❖ Cherries
 - ❖ Plums

Production Profile

❖ Tomato Production

- ❖ PCP Owned Facility – Woodland
- ❖ Alliance Facility (Morningstar)– Los Banos

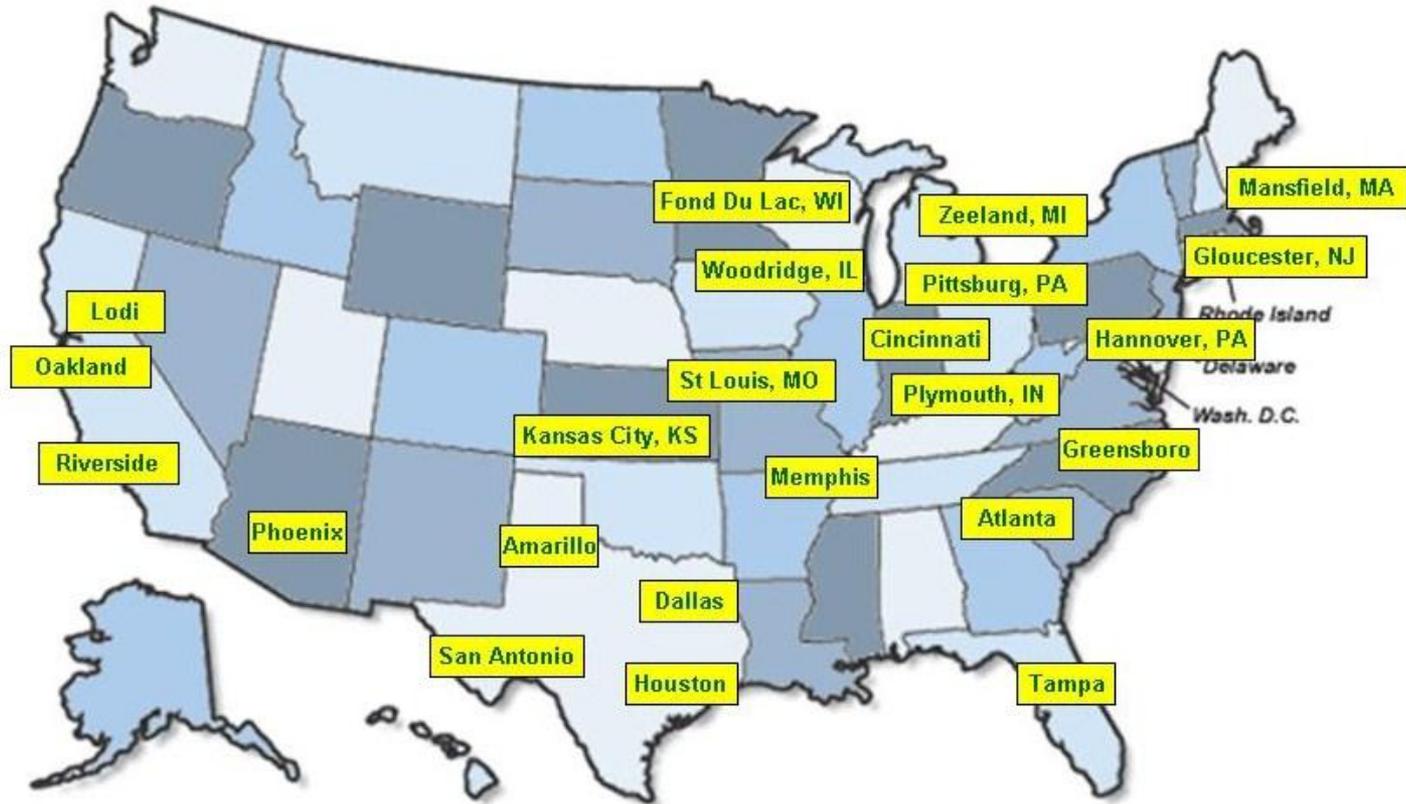
❖ Fruit Production

- ❖ PCP Owner Facility – Lodi
- ❖ PCP Owned Facility – Oroville
- ❖ Alliance Facility (Del Monte) – Yakima, Washington

Distribution Profile

- ❖ West Coast Distribution Center
 - ❖ 955,000 Square Feet Consolidation Warehouse
 - ❖ Multiple Case and Label Lines
 - ❖ 70 – 100 trucks shipped per day
 - ❖ 10 – 14 rail cars shipped per day
- ❖ National Distribution Network
 - ❖ Third-Party Warehouses
 - ❖ Goal – Two-Day lead-time to any customer
 - ❖ Complete integration of import program

PCP's Extensive Distribution Network:



Logistic Challenges

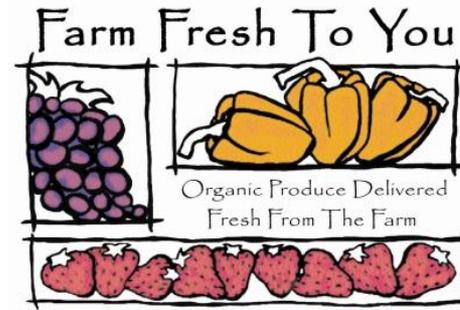
- ❖ Equipment Concerns Have Been Resolved
 - ❖ For Now
- ❖ Concerns for Drivers
 - ❖ Age of Drivers – Need to Bring Renew Workforce
 - ❖ Work Rule Issues – Need for Review – 500 mile rule
- ❖ Different Rules by States
 - ❖ Weight Differences
 - ❖ Axle Differences
 - ❖ Environmental Compliance

Logistic Challenges

- ❖ AB 32 – Cost of Compliance and Conversion
 - ❖ Port Rules
- ❖ Continued Fuel Concerns
 - ❖ Possible Long-Term Natural Gas Solutions
- ❖ Usual Customer Issues
 - ❖ Late-Pickup
 - ❖ Equipment Doesn't Match Weight Requirement

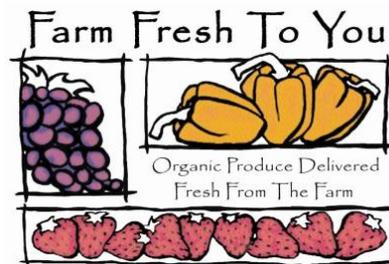
How Can The Government Help?

- ❖ Insure Common Rules Across States
 - ❖ Labor / Driver Rules
 - ❖ Weight Standards
 - ❖ Axle Standards
 - ❖ Environmental Compliance
- ❖ Long-Term Solutions Regarding Fuel Cost
 - ❖ Natural Gas Conversion
 - ❖ Natural Gas Availability
 - ❖ Power Unit Research and Development



History

- Founded in 1976 by Kathleen Barsotti and Martin Barnes
- Second farm to be certified organic in Yolo County
- Farm Fresh To You CSA founded in 1992
- Today, brothers Freeman, Thaddeus and Noah co-own and run the business



Growth of the Firm

- In 2000, FFTY was delivering about 500 CSA boxes
- In 2012, with hubs in South San Francisco, San Leandro, Los Angeles and West Sacramento, we are delivering organic produce to **over 50,000** homes
- How did this happen? Market trends were with us. Utilizing technology, maintaining core competencies.
- Not only is this a sustainable model for us, opportunity for this to be expanded to other farms



Opportunities / Threats

- As a farm, we face challenges with weather, water and pests
- Unlike most farms as we expand our business, we are challenged by the increasing need for state-of-the art, customized IT solutions for the sophisticated internet user and for use in larger scale procurement
- Some wonder if the market trends for organic and local food will falter; we believe these trends have gone mainstream and are here to stay. They have become part of our food system.
- Food Safety Modernization Act

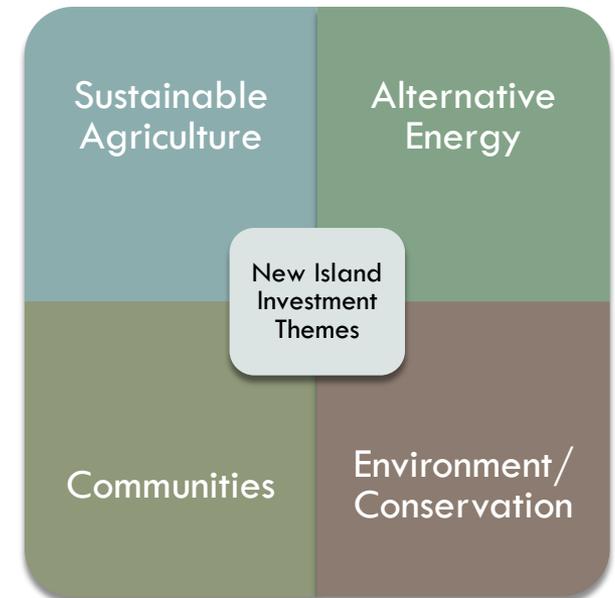
Continuing the mission – connecting people with the land that grows their food





Overview

- Goal of 100% Mission-Aligned Portfolio
- Dual Emphasis on Financial and Impact Outcomes
- Institutional Scale
- Global Mandate
 - Wide Range of Size and Stage
 - All Asset Classes
- Long-term Investment Horizon
- Team of 18 Investment Professionals
- San Francisco-based





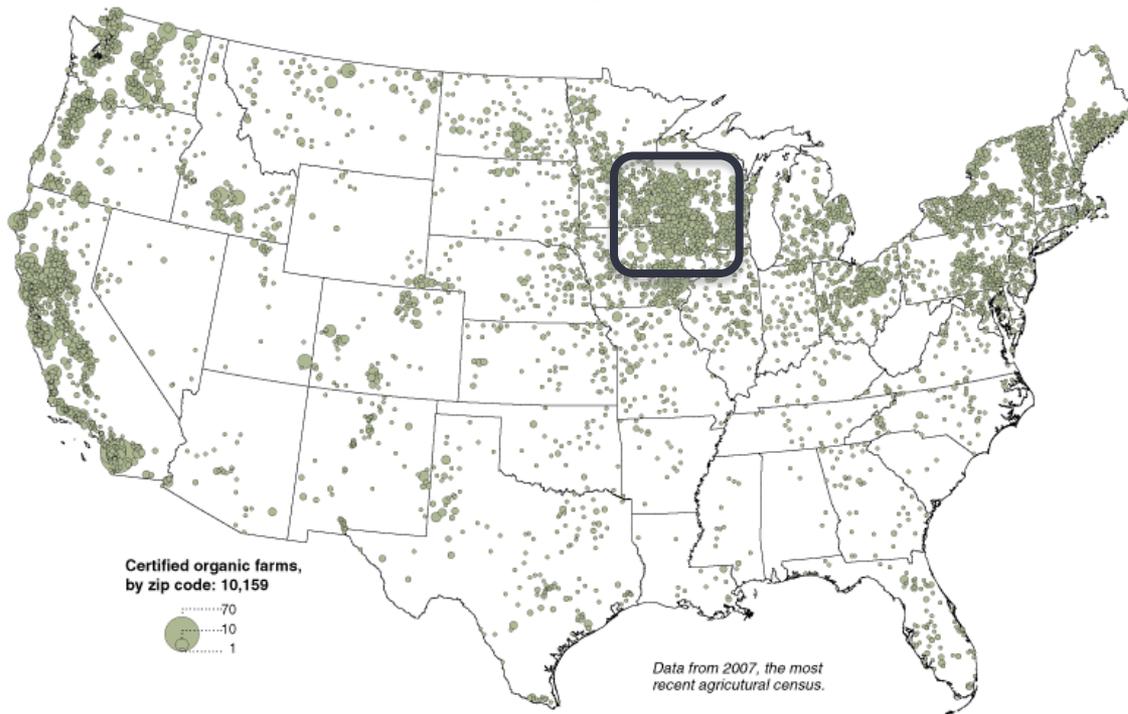
Sustainable Agriculture Value Chain Investments

- **Farmland access**
 - Farmland leased to organic, young/beginning/small farmers, and farmers participating in regional value chains
 - Capacity for long-term leases and equity building options
 - Goal is to bring new acres and farmers into organic production and regional markets
- **Credit Availability**
 - Financing vehicles that create credit opportunities for target farmers and businesses operating in regional value chains
 - Access to credit is currently constrained by a lack of capital targeting these borrowers and limited origination capacity
- **Growth Equity and Private Loans**
 - Private investment in farms, NGOs, cooperatives, and businesses participating in regional value chains



Credit Availability: Upper Midwest Value Chain Financing

Certified Organic Farms



Overview

- Loan participation program created with local CDFI partner
- Eligible borrowers:
 - YBS farmers
 - Cooperatives
 - Nonprofits
 - Land trusts
 - Small and mid-size businesses
- Small individual loans: \$25k-\$250k
- State and Federal loan guarantee programs play an important role reducing borrowing costs