



# Sacramento Region Food Hub Feasibility Analysis

Project Findings

May 20, 2015

S A C R A M E N T O R E G I O N



R U R A L - U R B A N  
C O N N E C T I O N S S T R A T E G Y



DH Consulting  
Planning • Economic  
Development

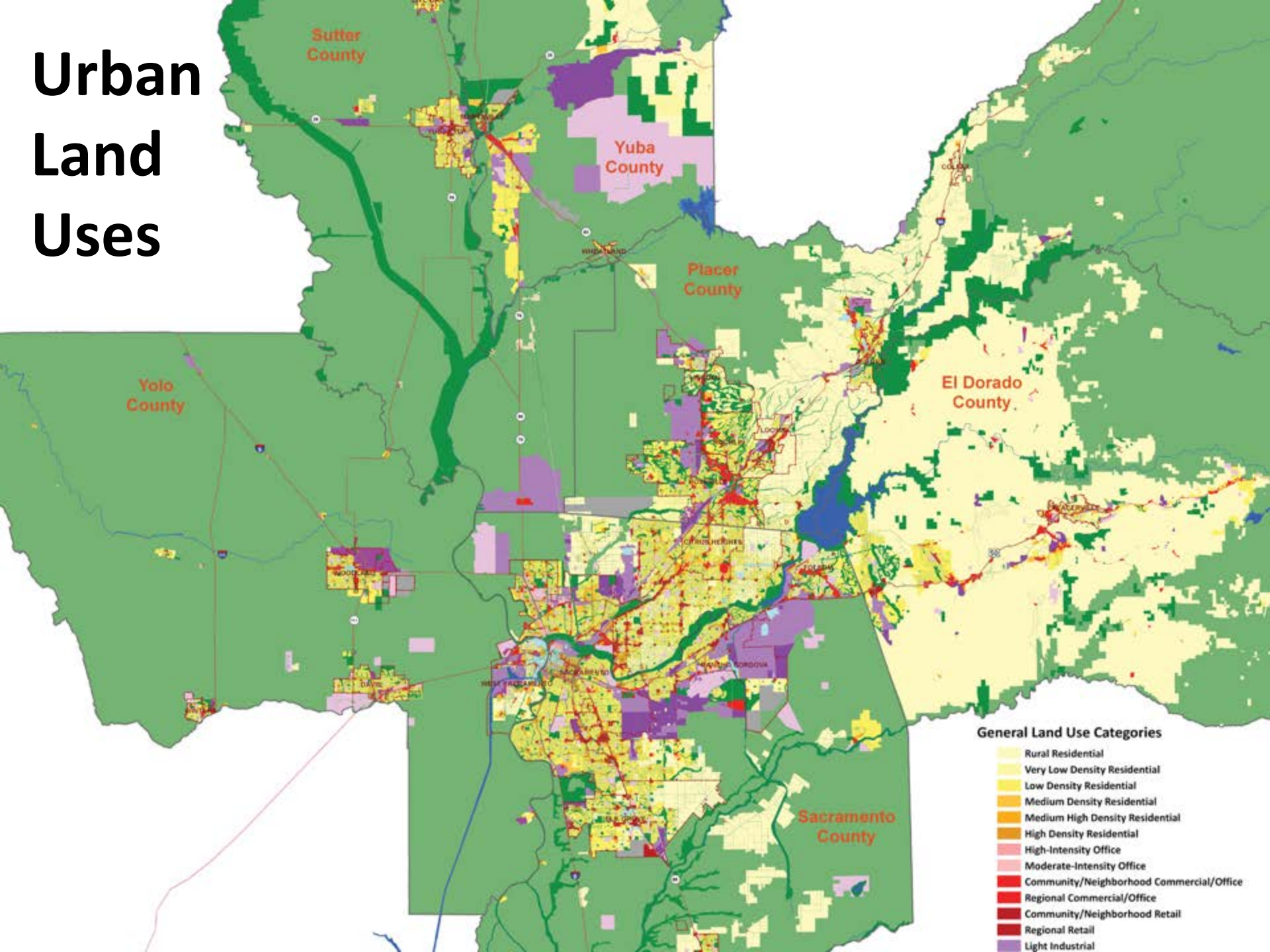


S A C O G

22 cities  
6 counties

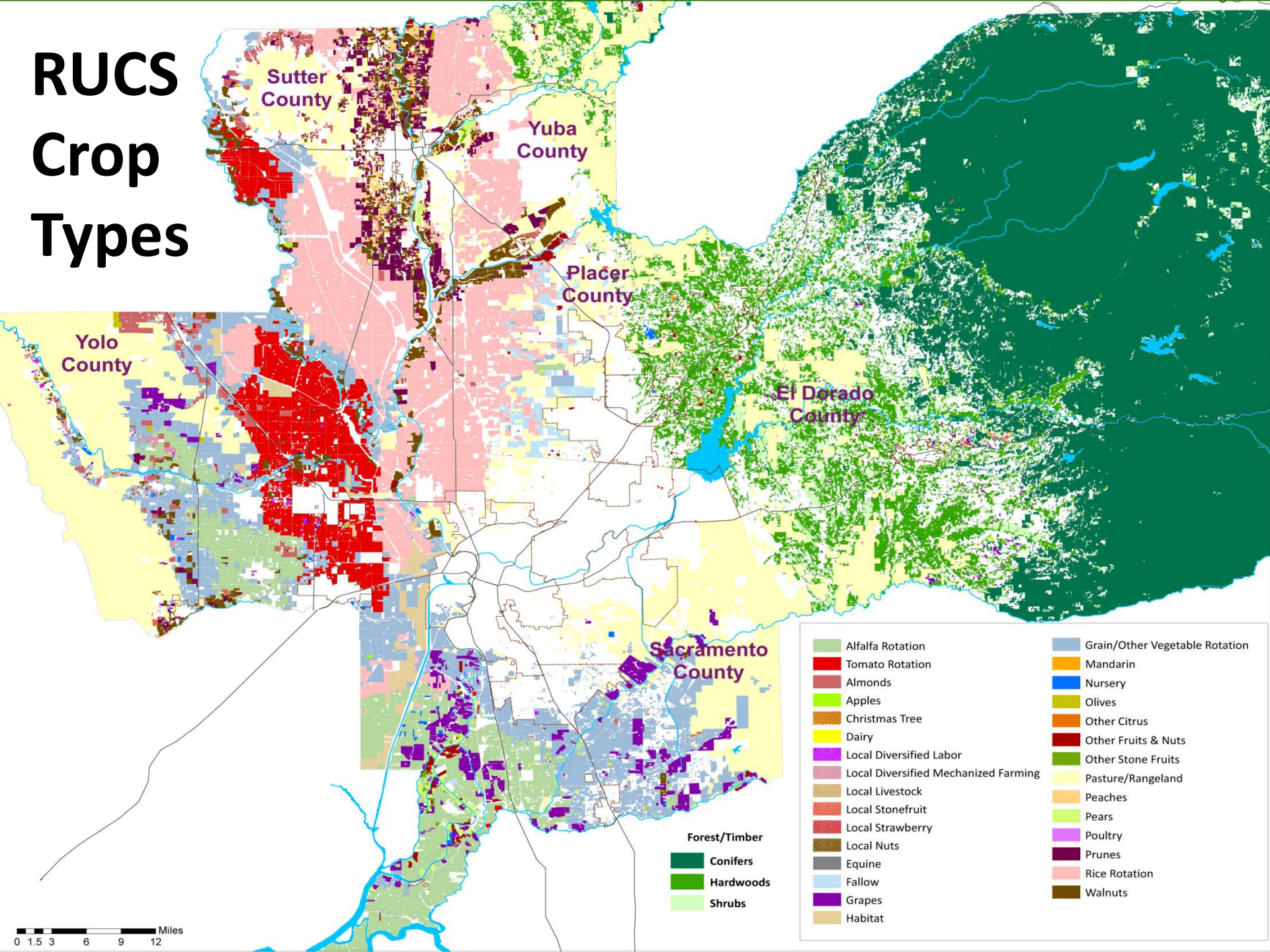


# Urban Land Uses





# RUCS Crop Types





Housing Choices



Transportation  
Choices



Compact  
Development



Use Existing Assets



Mix Land Uses



High Quality Design



Protect Natural  
Resources





# Land Use-Transportation Plan

For every 1,000 new residents:

1988-2005

**333**

**acres**

2008-2035

**42**

**acres**







# Sacramento Region Food Hub Feasibility Study





# Project Deliverables

- *Research Analysis of Food Hub Trends and Characteristics*
- *Sacramento Region Food Hub Cost Estimate Analysis*
- *Sacramento Region Food Hub Business Plan*
- *Financial Feasibility Toolkit*
- *Impediments to Supplying Locally Grown Specialty Crops*
- *Project Summary*



# Project Methodology

- *Research on food hub models from around the country*
- *Emerging food system trends and demand drivers*
- *Local and regional consumption and production patterns*
- *In-depth market and crop analysis*
- *Engineering studies*
- *Local, regional and national interviews; community meetings*



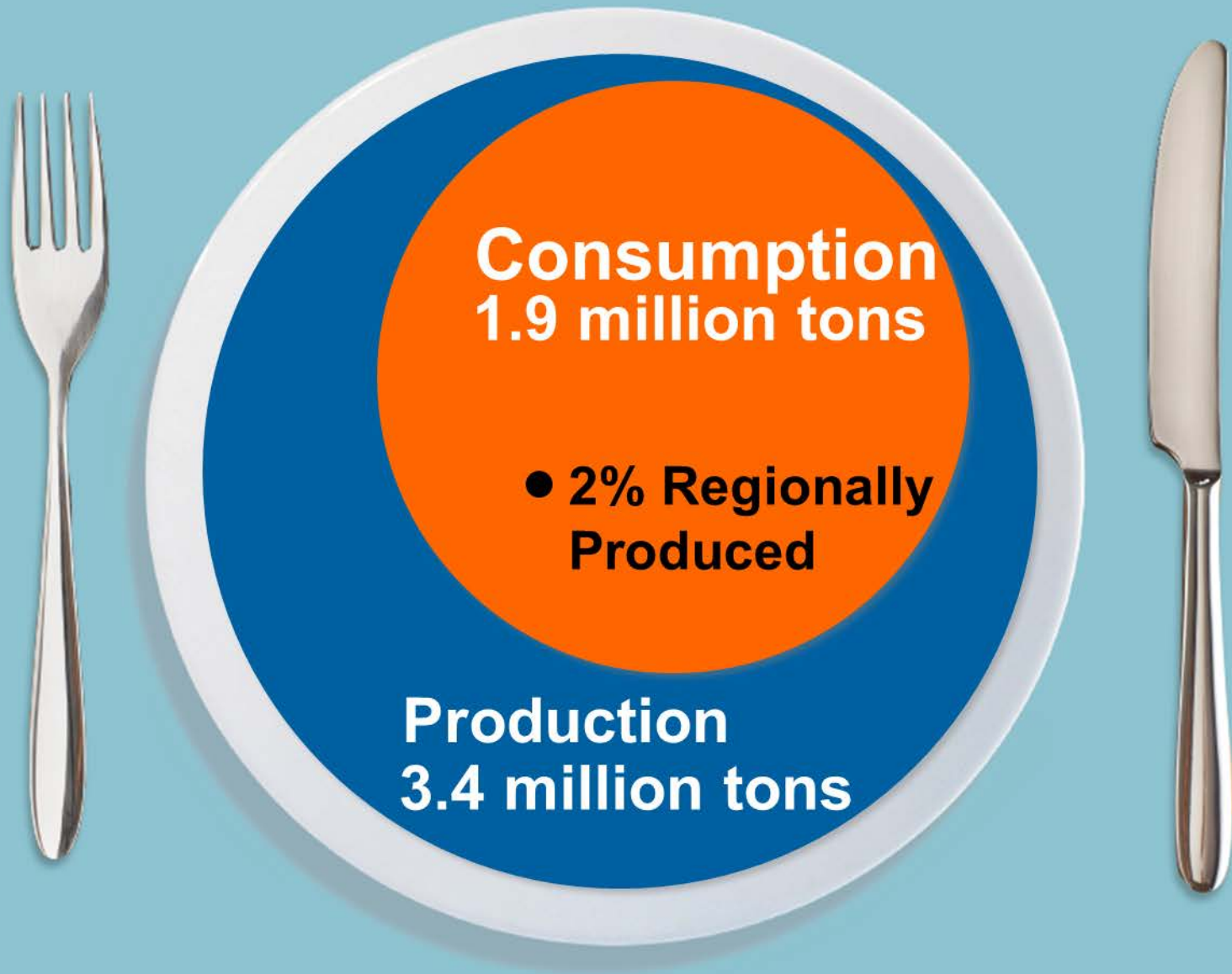


# ANNUAL TOTAL FOOD CONSUMPTION BY COUNTY AND REGION, 2012

## (IN PRIMARY WEIGHT TONS)

| Food Group        | SACOG Region     |  | Sacramento       | El Dorado      | Placer         | Sutter        | Yolo           | Yuba          |
|-------------------|------------------|--|------------------|----------------|----------------|---------------|----------------|---------------|
| Fruits            | 385,393          |  | 236,356          | 29,432         | 58,956         | 15,489        | 33,272         | 11,887        |
| Vegetables        | 669,185          |  | 410,403          | 51,105         | 102,369        | 26,895        | 57,773         | 20,641        |
| Nuts              | 5,968            |  | 3,660            | 456            | 913            | 240           | 515            | 184           |
| <b>Subtotal</b>   | <b>1,060,546</b> |  | <b>650,419</b>   | <b>80,993</b>  | <b>162,238</b> | <b>42,624</b> | <b>91,560</b>  | <b>32,712</b> |
| All Other Foods   | 837,127          |  | 513,399          | 63,931         | 128,060        | 33,644        | 72,272         | 25,821        |
| <b>TOTAL tons</b> | <b>1,897,673</b> |  | <b>1,163,818</b> | <b>144,924</b> | <b>290,298</b> | <b>76,268</b> | <b>163,832</b> | <b>58,533</b> |





Regional Food Production and Consumption Estimates



# Local Food System Gaps

- Lack of mid-scale infrastructure
- Strength of international contract agriculture
- Fragmentation of purchasing power and procurement policies
- Undeveloped market channels



# SACRAMENTO VALLEY FOOD HUB

## On-Farm or Off-Farm Mini-Aggregation Facility



- Pre-cooling
- Sorting
- Washing
- Packing
- Aggregating



## RECEIVING STATION:

## FRESH PRODUCE FACILITY

- Pre-cooling
- Grading
- Sizing

Fresh  
Un-Cut:



### PROCESSING LINES:

**Line 1:**  
Fresh Pack  
& Fresh  
Cut Tender



**Line 2:**  
Fresh Pack  
& Fresh  
Cut Firm



**Line 3:**  
Frozen



- Sorting
- Washing
- Aggregating

- Packing
- Packaging

- Storage
- Distribution



## TO MARKETS:

•Distributors



•Schools



•Hospitals



•Retailers



•Others:

- Wholesalers
- Governments
- Restaurants
- Food Processors





**PHASE I**  
Incubation  
start up with  
existing  
facility/partner

**Year 1**

**PHASE II**  
Scaling Up  
Increasing market  
and operations,  
½ ton per hour

**Year 2-3**

**PHASE III**  
Stabilization  
2+ processing  
lines, 2 tons per  
hour

**Year 4-5**

**PHASE IV**  
Expansion  
3-4 processing  
lines, 3 tons per  
hour Year 6, 4 tons  
per hour Year 7

**Year 6-7**

**FOOD HUB FACILITY PHASING**



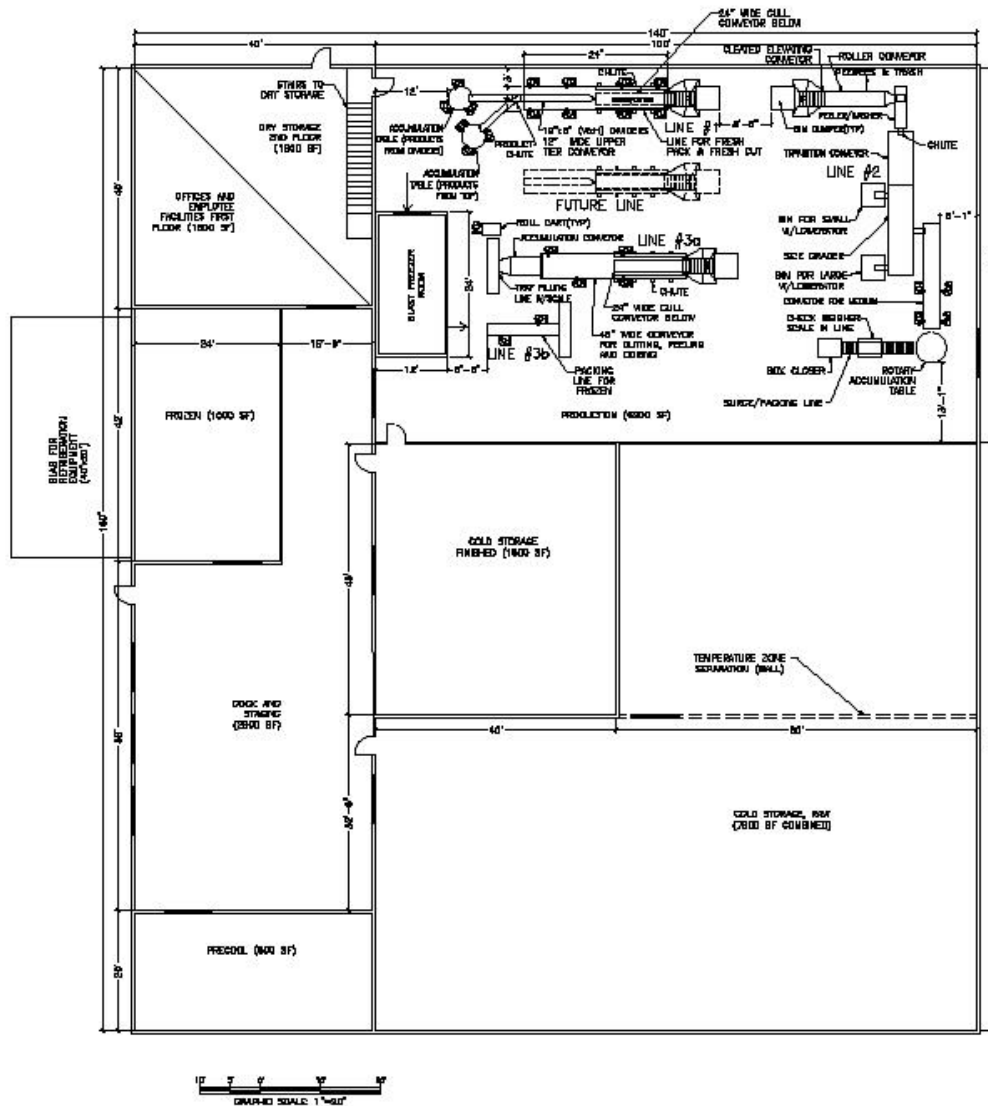


Estimated Acres of Ag Production Needed for Food Hub Operations

|  | Year 1       | Year 4     | Year 5     | Year 6     | Year 7     |
|--|--------------|------------|------------|------------|------------|
| Number of hub processing lines                               | 2<br>limited | 2          | 2+         | 3          | 4          |
| Tons of production per hour                                  | -            | 1          | 2          | 3          | 4          |
| Annual tons  | 312          | 2,059      | 4,076      | 5,830      | 7,787      |
| <b>Ag Acres Needed</b>                                       | <b>27</b>    | <b>171</b> | <b>351</b> | <b>539</b> | <b>743</b> |
| People Fed (at 25% of person’s annual fruit/veg consumption) | 2,635        | 16,700     | 34,250     | 52,600     | 72,500     |



# Food Hub Prototype Facility



- 23,000 square feet
- Capital costs of \$6.9 million (\$3.5 million upfront)
- Volume of 7,800 tons per year (at scale)
- Advisory role at facility to assist farmers

## Food Hub Pro Forma Analysis

|                                  | Year 0      | Year 1             | Year 5             | Year 8              | Year 10             | Year 15             | Year 20             |
|----------------------------------|-------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Revenue</b>                   |             | <b>\$459,030</b>   | <b>\$8,828,863</b> | <b>\$18,257,245</b> | <b>\$18,257,245</b> | <b>\$18,257,245</b> | <b>\$18,257,245</b> |
| Processing Lines                 |             | \$459,030          | \$8,828,863        | \$18,257,245        | \$18,257,245        | \$18,257,245        | \$18,257,245        |
| Add'l Services Revenue           |             |                    |                    |                     |                     |                     |                     |
| <b>Expenditures</b>              |             | <b>\$707,462</b>   | <b>\$7,530,961</b> | <b>\$16,004,295</b> | <b>\$16,004,295</b> | <b>\$16,004,295</b> | <b>\$16,004,295</b> |
| COGS (w/pkging)                  |             | \$383,609          | \$5,018,658        | \$11,642,894        | \$11,642,894        | \$11,642,894        | \$11,642,894        |
| Labor                            |             | \$271,863          | \$1,305,793        | \$2,094,198         | \$2,094,198         | \$2,094,198         | \$2,094,198         |
| Operating Costs                  |             | \$51,989           | \$1,206,511        | \$2,267,204         | \$2,267,204         | \$2,267,204         | \$2,267,204         |
| <b>Net Op. Inc. (EBITDA)</b>     |             | <b>(\$248,432)</b> | <b>\$1,297,902</b> | <b>\$2,252,950</b>  | <b>\$2,252,950</b>  | <b>\$2,252,950</b>  | <b>\$2,252,950</b>  |
| Percent of Sales                 |             | -54%               | 15%                | 12%                 | 12%                 | 12%                 | 12%                 |
| <b>Debt Serv. On Capital</b>     |             |                    | (\$601,457)        | (\$744,466)         | (\$744,466)         | (\$143,611)         | 0                   |
| <b>Annual Equity Investments</b> | (\$353,731) | (\$255,213)        | (\$105,531)        | \$0                 | \$0                 | \$0                 | \$0                 |
| <b>Net Cash Flow</b>             | (\$353,731) | (\$503,645)        | \$590,915          | \$1,508,484         | \$1,508,484         | \$2,109,339         | \$2,252,950         |
| <b>Internal Rate of Return</b>   |             |                    |                    | 6%                  | 15%                 | 22%                 | 24%                 |
| <b>Operating Characteristics</b> |             |                    |                    |                     |                     |                     |                     |
| Total Tons Processed             |             | 312                | 4,076              | 7,787               | 7,787               | 7,787               | 7,787               |



# Additional Components of Food Hub Feasibility Analysis

- Customizable Pro Forma Tool
- Detailed Capital Cost Estimates
- Business Plan with Financial Resources
- National Trends and Promising Business and Social Enterprise Models
- Targeted Findings for Jurisdictions, Growers, Investors



# Project Team Representatives

GARETT BALLARD-ROSA

Planner II

SACOG

TRISH KELLY

Principal, Applied Development Economics

Senior Vice President, Valley Vision

LON HATAMIYA

President & CEO

The Hatamiya Group

SACRAMENTO REGION



RURAL - URBAN  
CONNECTIONS STRATEGY



DH Consulting  
Planning • Economic  
Development