



F3 LOCAL FEASIBILITY STUDY

Market Analysis

Aggregation, Small-Scale Processing & Food Hub Infrastructure
Fresno • Kings • Madera • Merced • Tulare Counties

August 5, 2026



Prepared by New Venture Advisors, Feasibility Study supported by UC Agriculture & Natural Resources

TODAY'S SESSION

Agenda

The full market analysis was shared in advance; today we will summarize key points and discuss these findings. More conversations will take place to further refine and move the concept forward.



Context & Where We Are

Project scope, study region, and how this phase connects to what comes next

15 min



What We Found

Headline findings across the literature, data, mapping, and stakeholder research

30 min



Next Steps

Concept modeling and remainder of project

10 min



Open Discussion / Breakouts

Input to shape the questions concept modeling needs to answer

35 min

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PART ONE

Context & Where We Are

Study objectives and focus, and how the findings connect to next steps

WHY THIS STUDY EXISTS

Agricultural Strength, Local Food Challenge

\$25.38B

in regional agricultural sales in 2023 -
36.4% of California's total

17.0%

average food insecurity rate across the
five counties, vs. 13.7% statewide

21.6%

child food insecurity rate- rising to
24.4% among Latino residents

The core finding: production alone doesn't explain food access challenges.

Produce grown in the Central Valley is often shipped outside the region for washing, cutting, and packing before returning to serve local schools and retailers. Small and mid-scale producers face real barriers to aggregation, cold storage, processing, and reliable distribution.

STUDY REGION

Five Counties

Fresno	Kings	Madera	Merced	Tulare
Population 1,012,152	Population 152,830	Population 158,790	Population 285,597	Population 475,774
Median Income \$71,434	Median Income \$68,750	Median Income \$75,496	Median Income \$65,044	Median Income \$90,157

- 2,085,143 residents regionwide - population up nearly 8% since 2010
- majority Hispanic/Latino (60%)
- median household income \$22,000 below the California average (\$74,176 vs. \$96,334).



12,300+
farms across the five-county region



7–12%
decline in farm counts, every county, 2017–2022



< 1%
of farms produce value-added products

STUDY PURPOSE

What This Feasibility Study Is Designed to Answer

Commissioned by UC Agriculture & Natural Resources as part of the F3 Local initiative, this study is **assessing the viability of food infrastructure models across the region** - not proposing a single predetermined solution.



Function & Scale

What combination of facility types and scales would best serve the region's needs?



Site(s)

Which communities have the highest potential for successful implementation, based on existing infrastructure, market access, and stakeholder interest?



Infrastructure Types

Which infrastructure types - processing, shared kitchens, mobile units, aggregation, food halls, etc - best fit documented needs?



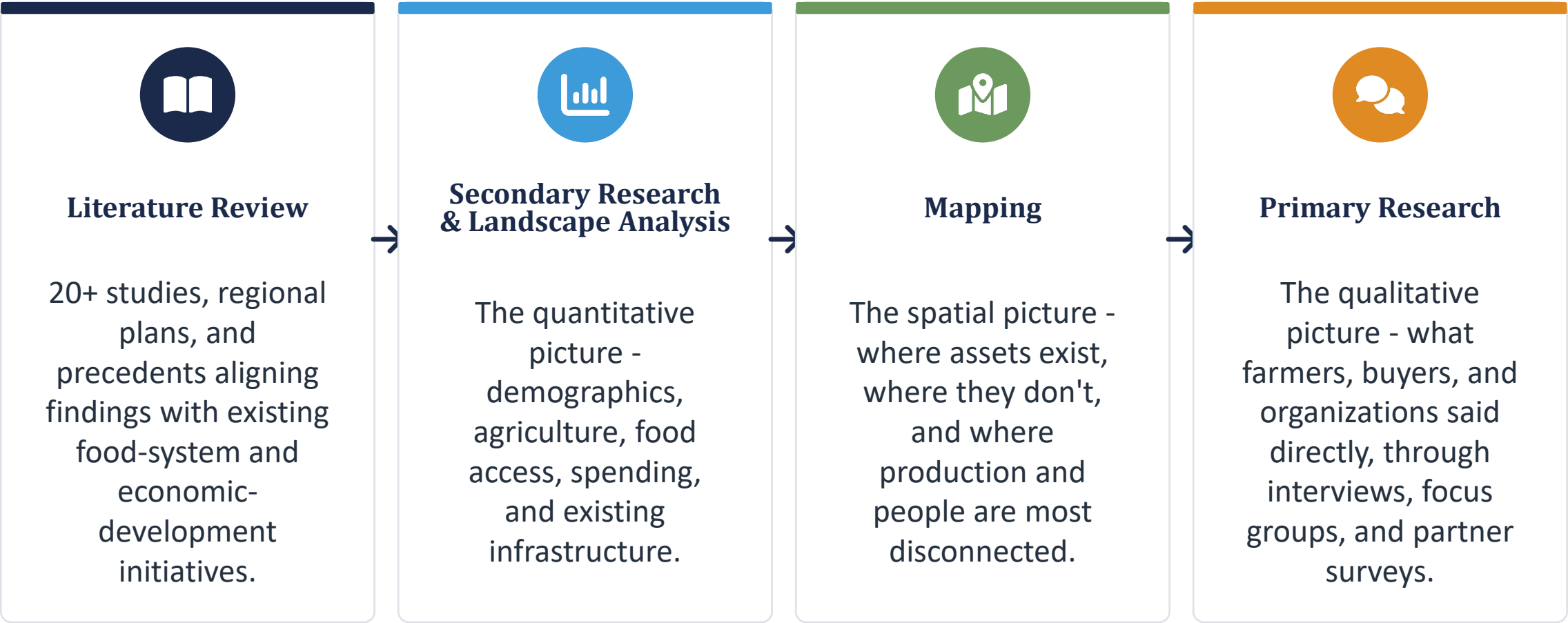
Audiences

Which producers, entrepreneurs, buyers and/or communities stand to benefit most, and what would it take to serve them well?

Today's session covers the market analysis (Part 1) that grounds these questions in evidence — concept modeling (Part 2) is where we work to develop answers or solutions.

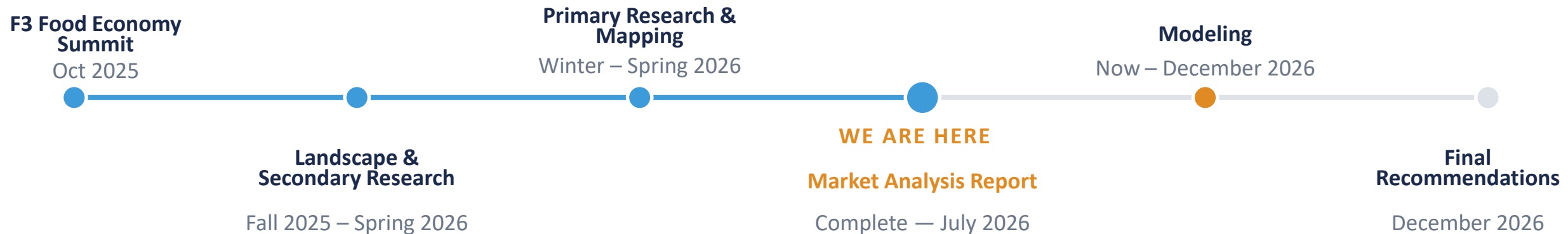
Market Analysis Tools

Each tool offers valuable insight on its own - the clearest picture of regional opportunities and challenges emerges where they intersect.



PROJECT TIMELINE

Where Today's Findings Fit in the Overall Study



- *Part 1 (this report) is complete.*
- *Part 2 — concept modeling — runs now through December 2026 and is where scale, siting, governance, and financial questions get resolved.*

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PART TWO

What We Found

A multi-method research effort drawing on four complementary sources of evidence.

RESEARCH BREADTH

A Comprehensive Look at the Region



studies & regional plans reviewed



stakeholder interviews across 6 categories



in-person workshops and activities



GIS maps + regionwide ecosystem mapping



complementary partner research streams



Counties represented

The Research Nationally Points the Same Direction

- The “missing middle” of the supply chain - cold storage, processing, commercial kitchens, aggregation - is the consistent gap named across 15+ food system plans nationally.
- Networked, hub-and-spoke models are more commonly documented as successful than single centralized facilities in comparable regions.
- Long-term success depends on trusted relationships and inclusive governance as much as on physical assets, not capital investment alone.

CASE STUDIES CITED

Veggielution Food Hub Feasibility Study

Santa Clara County — recommended a phased regional network over one centralized facility

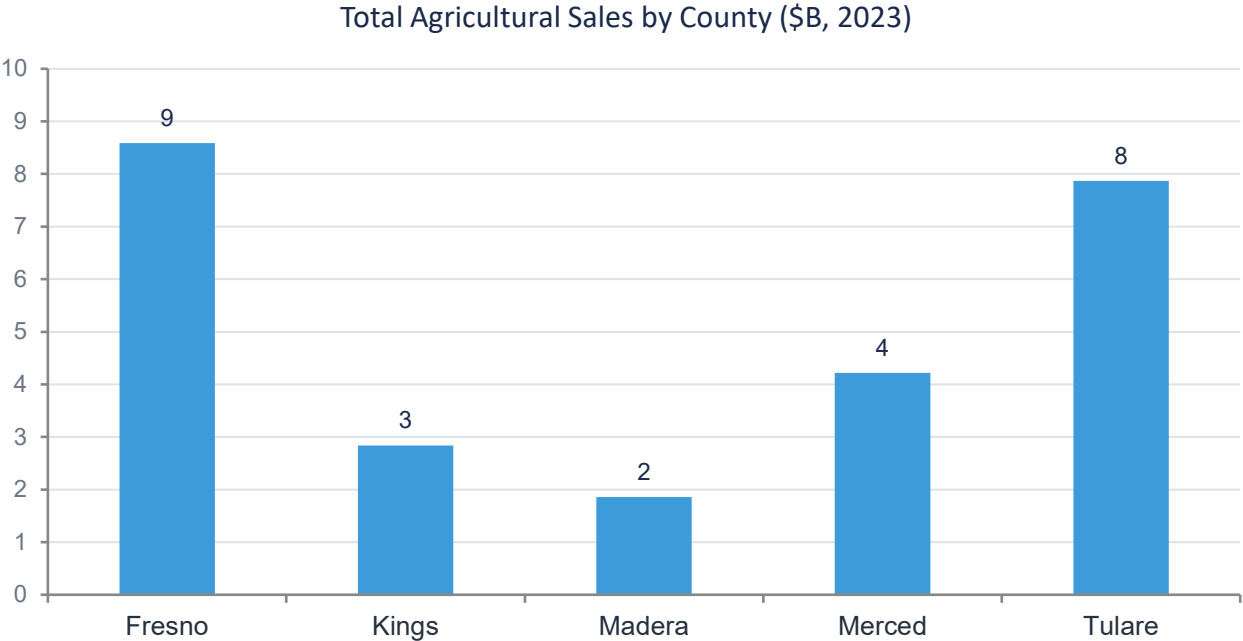
New England Food Hub Network

Shared logistics & cross-docking achieved economies of scale without full centralization

Butte County Baseline Food Assessment

A strong ag economy exporting ~98% of its food while 14–19% of residents face insecurity

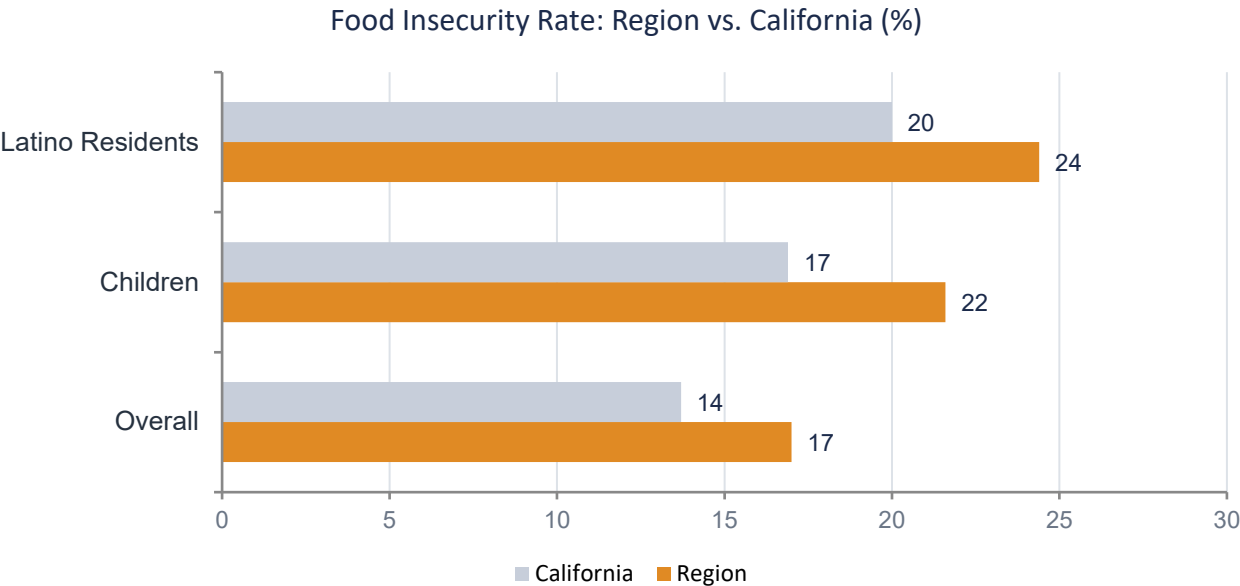
Big Agricultural Economy, Small Share Reaching Local Markets



Source: USDA 2022 Census of Agriculture; CDFA County Crop Reports, 2022–2024

- 45% of ag sales come from fruit & nut production (\$11.37B)
- ~50% of all farms operate on 1-49 acres - too small to invest independently in infrastructure
- 3% of farms sell direct-to-consumer; just 119 farms (< 1%) produce value-added goods

Demand Exists



Source: Feeding America Map the Meal Gap, 2023; County Health Rankings, 2024; Esri Consumer Spending, 2024

Consumer Spending (avg. household / year)

\$6,401	spent on food at home
\$3,591	spent on food away from home
\$1,413	on meat, poultry, fish & eggs - the single largest category

SECONDARY RESEARCH

Capacity Is Uneven



15

certified farmers markets



8

existing food hubs



11

shared kitchens & kitchen incubators



239

food manufacturing establishments
(+343 non-employer micro-enterprises)



SIZE is a critical lever in supporting capacity, growth and opportunity.

Despite a high volume of “food manufacturing” being represented in the region – a large majority are reported to be beyond the reach of existing producers and small food businesses for needed functions (processing, cut/wash/pack, co-pack).

New opportunity will have to be evaluated with SIZE as a main factor (both for producer scale and production scale).

MAPPING

Support Organization Density Varies by County

Local organizations mapped across six support categories, shown by raw count and adjusted for population—accounting for the wide range in county sizes (Fresno's population is roughly 6–7x that of Kings or Madera).

County	Population	Local Orgs (non-statewide)	Per 100K Residents
Fresno	1,012,152	22	2.17
Tulare	475,774	8	1.68
Merced	285,597	3	1.05 (lowest)
Kings	152,830	9	5.89 (highest)
Madera	158,790	5	3.15

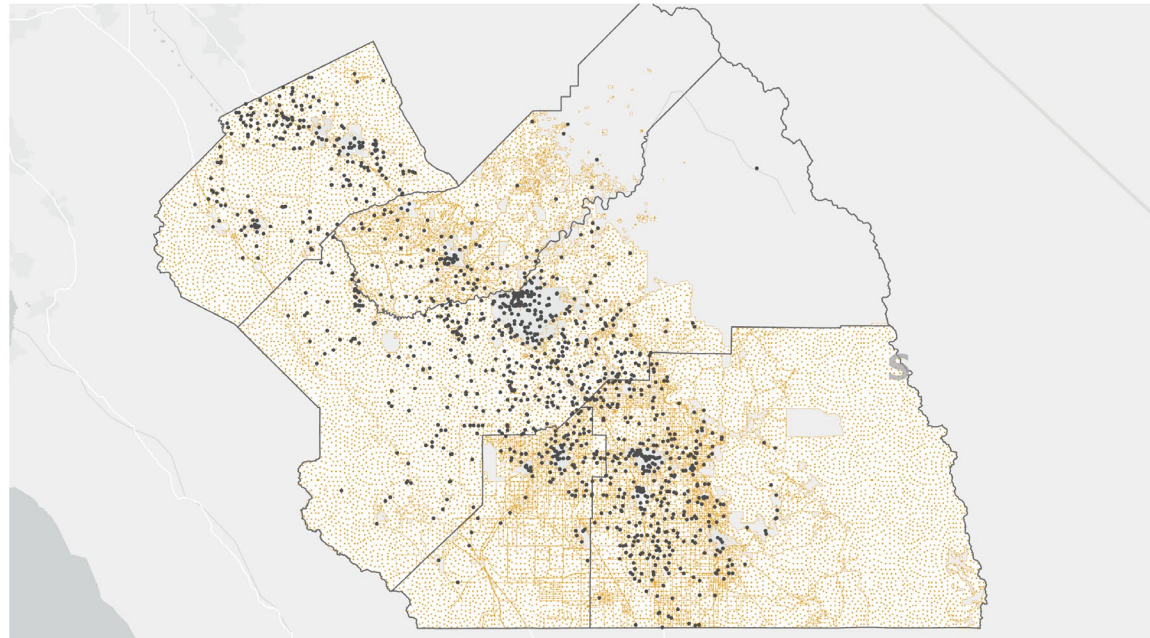
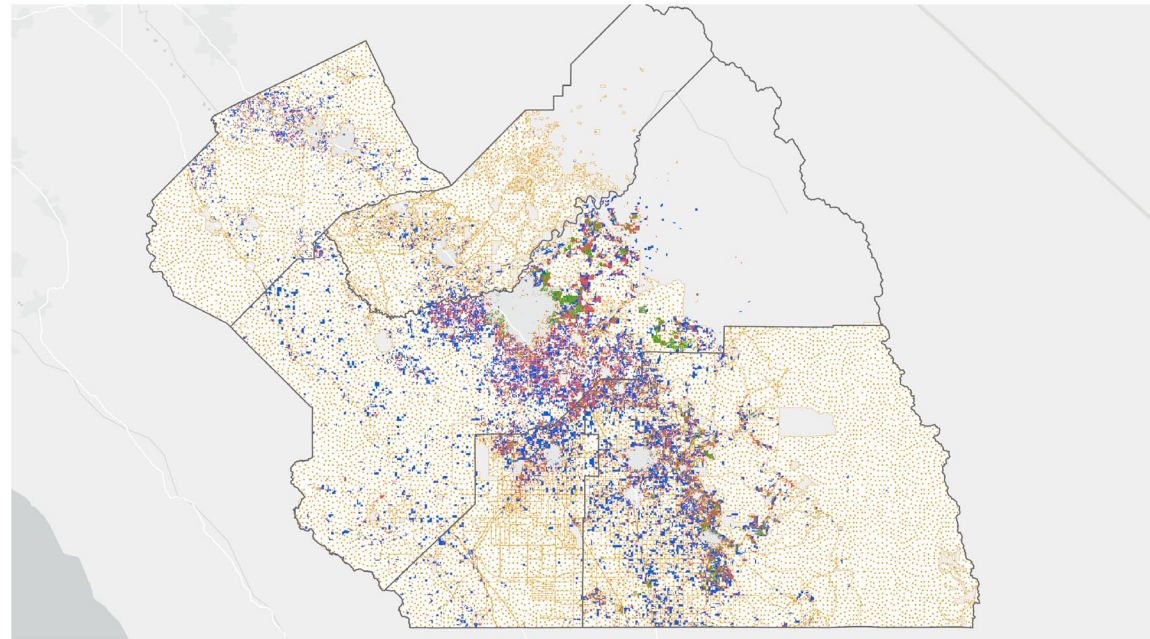
*Thirteen statewide organizations provide nominal coverage in every county. Fresno's larger population accounts for much of its lead in raw local organization counts, but on a per-capita basis, **Kings has the highest density of local organizations in the region, and Merced has the lowest.***

Where Production & Infrastructure Are Misaligned



Agricultural Logistics

- In preliminary mapping, at least 5 distinct corridors showed significant agricultural production with limited processing and logistics connectivity.
- The most acute: a corridor running north and south of Mendota, in western Fresno and Merced counties.
- Updated production mapping (RIGHT) shows SMALL scale farms and production capacity is being refined for the next round of site/corridor discussions.



PRIMARY RESEARCH

Stakeholder Distribution



Agricultural & farm businesses



Buyers & distributors



Community & food access orgs



Food businesses & entrepreneurs



Government partners



Resource & program support orgs

38 interviews across five counties and statewide partners, spanning six stakeholder categories — including interviews conducted in Spanish with translation support.

A concrete illustration: Fresno Unified School District

\$29M annual food budget, with **\$5.4M (~19%)** already directed to locally produced food. Yet stakeholders reported local producers often can't meet institutional requirements — *not because of limited production, but limited access to facilities for washing, processing, packaging, and preparing to spec.* Produce sometimes travels to South San Francisco or Los Angeles for processing before returning to the Valley for distribution.

One Theme Rose to the Top, Consistently



Cold storage

The infrastructure gap most frequently cited across interviews, field visits, and focus groups alike — named more often than any other single need.



Post-harvest processing

Washing, packing & light processing — described as interconnected with cold storage, not separate

INFRASTRUCTURE OPPORTUNITY



Regulatory navigation

Permitting & administrative complexity, especially for new and small food businesses

SERVICE/PROGRAM NEED



Relationships & trust

Market coordination, buyer relationships, and trusted intermediaries — as important as physical assets

SERVICE/PROGRAM NEED

PRIMARY RESEARCH

On the Ground: Field Visits + Interviews



7

on-site farm, kitchen & food-service visits



\$300K

est. cost to build a private 2,000 sq. ft. cold storage facility



\$3,000

per month in electricity — one producer's cost to run existing cold storage



150

registered users at the shared commercial kitchen the site team visited; it is operating near capacity, self-sustaining through user fees



A concrete opportunity: Fresno Economic Opportunity Center's plans for an adjacent processing facility

FEOC, a multi-program community impact nonprofit operating a production kitchen and a refrigerated delivery fleet, is exploring the development of adjacent property into a processing facility for small- and medium-scale producers — one of several existing organizations positioned to expand regional capacity.

Source: NVA field research — on-site visits to 7 locations and a food entrepreneur focus group, Fresno County, 2026

Three Partner Sources



Triangulated findings

Three independent partner research efforts — different methods, different stakeholder groups — converge on the same core infrastructure gaps this study identified directly.

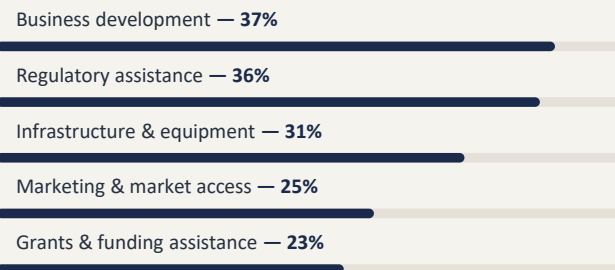


BIPOC Food Hub Study

Among 13 interviewed farmers, 62% identified **cold storage** as an unmet need and 85% reported losses from unsold product.



TA Needs Assessment



RFSI Mapping Survey

Existing cold storage, kitchens & processing assets typically serve one organization at a time, not a connected network.

**A 4th study – focused on consumer access to produce and grocery (and consumer preferences) also conducted in the region is finalizing and will be integrated into study findings at a later date (early fall 2026).*

A Fragmented System

“The San Joaquin Valley is not starting from a blank slate.” -Interviewee

Commercial kitchens, food hubs, farms, processors, and food recovery organizations already exist throughout the region — but largely operate independently rather than as an integrated network.



**Interconnected,
context-specific needs**

Cold storage, processing, aggregation & distribution reinforce one another — no single facility meets the full range of regional demand.



**Accessibility vs.
efficiency trade-off**

Producers want facilities within ~25–30 miles; larger shared infrastructure benefits from economies of scale. Both matter.



**Compatibility &
relationships across
infrastructure**

Market coordination, multilingual communication, and trusted intermediaries determine whether physical assets get used at all.

OVERALL CONCLUSIONS

Five Conclusions Ground the Next Phase

- 1 Infrastructure needs emerged AND are interconnected**
Cold storage, post-harvest processing, aggregation, refrigerated transport, and appropriately scaled value-added processing — limitations in one affect the viability of the others.
- 2 A connected regional network is a strong opportunity model**
The region's scale and diversity suggest a single facility likely can't serve everyone. Some functions favor regional scale; others favor distributed, community-level access.
- 3 Geographic context should inform infrastructure planning**
Kings County and portions of Madera, Tulare, and western Fresno/Merced show comparatively fewer assets, need and opportunity aren't evenly distributed.
- 4 Capacity requires relationships as much as infrastructure.**
Buildings and equipment solutions alone are insufficient. The relationships behind them, supporting market coordination, buyer development, regulatory navigation, and business support, determine whether they get used.
- 5 Concept modeling should connect opportunity AND capacity**
This market analysis documents needs — how to best support needed function, adjust to scale, fine tune siting, and address governance and financing are the next steps ahead.

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PART THREE

Next Steps

What concept modeling will help resolve between now and December 2026.

Documented Needs to Testable Concepts

Concept modeling takes what this market analysis heard and observed and translates it into concrete infrastructure options for the region.

1



Model the system, not just one site

Explore function and scale and how the relationships between existing organizations and facilities (existing or in progress) will impact the overall "system"

2



Refine the mapping

A small-farm-filtered agricultural map can now be combined/matched to refined infrastructure and can highlight what is in progress and where need still exists

3



Evaluate opportunity corridors

Transportation access, zoning, utilities, wastewater capacity, and proximity to supply & demand

4



Resolve governance & financing

Ownership structure, operating model, and realistic financial resources to support BOTH function and scale

The Questions Concept Modeling Will Address

- ? **Function & Audience** — which infrastructure and services should be prioritized, and who will they best serve?
- ? **Scale & Configuration** — which functions work regionally vs. locally, and how can they best connect or interact?
- ? **Existing Assets & Partnerships** — which sites or entities could serve as partners, pilots, or growth opportunities?
- ? **Siting & Accessibility** — which locations (corridors) offer the right mix of access, zoning, and support functionality?
- ? **Ownership & Governance** — how does this structure to support the intended users and services?
- ? **Financial Feasibility & Resources** — what capital and operating costs are needed, and who supports those?
- ? **Funding & Capital Sources** — what is the existing funding landscape and how does it support this growth/opportunity?

How to Stay Involved Between Now and Finalization



Today's discussion

Your breakout input directly shapes the priorities and concepts that will focus the next round of work



Targeted follow-up

What conversations do we need to allow space for as the concept/model moves forward? (support next steps)



Advisory Committee touchpoints

Upcoming reviews will be scheduled to shape concept and model, before recommendations are finalized



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Primary point of contact for questions, data requests, or partnership conversations between sessions

OPEN DISCUSSION

Breakout Prompts

We will now break into small groups to discuss the following — we will share (post call) key takeaways to the full group.

QUESTION 1 — FUNCTIONS, USERS & SCALE

Which infrastructure functions — cold storage, processing, aggregation, commercial kitchens — feel most urgent for the users (audience) you represent? Are there top priorities?

QUESTION 2 — EXISTING ASSETS & PARTNERSHIPS

Are there existing facilities, organizations, or sites in your area that could serve as partners, pilot locations, or growth opportunities— rather than starting from scratch?

QUESTION 3 — GOVERNANCE, FINANCING & IMPLEMENTATION

What management or resource model would you trust to run/support shared infrastructure long-term, and what support (multilingual, technical assistance, logistics) would make it most usable for the people you serve?



Thank You

The full market analysis report and today's slides are available for reference.

Questions or follow-up? Contact michelle@newventureadvisors.net

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APPENDIX

Reference Tables: Primary Research Detail

Supplementary detail for those who want to go deeper on what different groups said and how the research streams compare.

APPENDIX

What We Heard, By Group

Stakeholder Group	Top Priorities / Needs Cited	Notable Pattern or Distinguishing Note
Agricultural & Farm Businesses	Cold storage; post-harvest wash/pack; barriers entering institutional & wholesale markets (food safety certs, volume, format)	Strong preference for facilities within 25–30 miles; many rely on informal, self-built solutions rather than shared infrastructure
Buyers & Distributors (institutional & for-profit)	Reliable volume, food safety certification, consistent delivery, product format/spec compliance	Genuine local-procurement interest (Fresno Unified directs ~19% of its \$29M food budget locally) but blocked by processing/prep capacity, not producer interest
Community & Food Access Organizations	Freezer/cold storage capacity for donated protein; distribution logistics; closing population-vs-retail-access gaps	Emphasize operational capacity (staffing, logistics) as much as physical space — infrastructure alone doesn't close access gaps
Food Businesses & Entrepreneurs	Capital/financing (ranked #1 in focus group); sales channels & buyer connections; shared processing space; packing; transportation	Existing shared kitchens seen as valuable but underused — awareness and a preference for home-based production limit uptake
Government Partners	Streamlined permitting/zoning support; siting guidance; economic-development framing for investment	Noted the region lacks dedicated staff to help producers navigate permitting — unlike some Northern California counties
Resource & Program Support Organizations	Multilingual technical assistance; regulatory navigation help; business development support	Flagged uneven capacity across counties (Kings & Madera comparatively sparse) and disruption from the end of LFPA funding

Primary Research Sources Compared

Research Stream	Scope & Method	Where It Aligns With Others	Where It Diverges / Adds Tension
NVA Stakeholder Interviews	38 interviews, 6 stakeholder categories, regionwide + statewide partners	Cold storage, post-harvest processing & aggregation are the top-cited gaps — consistent with every other source	Only source capturing government-partner and community/food-access perspectives directly
NVA Field Visits & Focus Group	7 on-site visits + entrepreneur focus group (~20 participants), concentrated in Fresno County	Same infrastructure gaps confirmed with concrete costs (\$300K to build cold storage, \$3K/mo to operate)	Focus group ranked capital/financing above infrastructure as the #1 barrier — a nuance interviews alone didn't surface as sharply
BIPOC Food Hub Study (partner)	13 farmer interviews from a 200+ grower network; English/Spanish/Hmong	Cold storage again the top need (62% unmet); reinforces reliance on a trusted intermediary for multilingual/market support	Sharpest quantified losses in the data — 85% reported losses from unsold product; SJV has less mid-supply-chain infrastructure than the Bay Area
TA Needs Assessment (partner)	87 respondents, 4 languages, weighted toward Tulare & Fresno counties	Regulatory/permitting complexity confirmed as a widely shared barrier	The only source ranking business development (37%) and regulatory assistance (36%) above physical infrastructure (31%)
RFSI Infrastructure Mapping Survey (partner)	7 regional respondents; ongoing survey, not statistically representative	Confirms "not a blank slate" — cold storage, kitchens & processing assets already exist across organizations	Existing infrastructure typically serves one organization at a time —evidence that coordination, not new construction, is a gap