# New Mexico Food, Farm, & **Hunger Initiative**

### Chili Yazzie, Jeff Witte, Kendal Chavez, Sherry Hooper

### **November 22<sup>nd</sup>, 2021**





Office of the Governor

HUMAN



Office of the Governor
MICHELLE LUJAN GRISHAM

New Mexico **Indian Affairs** Department



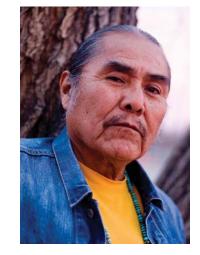
NEW MEXICO HIGHER EDUCATIO DEPARTMENT Fostering Student Success from Cradle to Caree





### **SPEAKERS**









**Jeff Witte** Secretary of Agriculture

**Chili Yazzie** Member, FFH Steering Committee

Kendal Chavez Food & Hunger Coordinator, Office of Governor Michelle Lujan Grisham

**Sherry Hooper** Executive Director, Food Depot in Santa Fe

# TOPICS

- Context of FFH in NM
- FFH Initiatives in NM
- Current promising practices

- Framework for FFH Initiative
- Investments in FFH for the benefit of all New Mexicans

# BEFORE WE START...

On behalf of all colleagues in the community and state government, we humbly acknowledge we are on the unceded ancestral lands of the original peoples of the Apache, Navajo and Pueblo past and present.

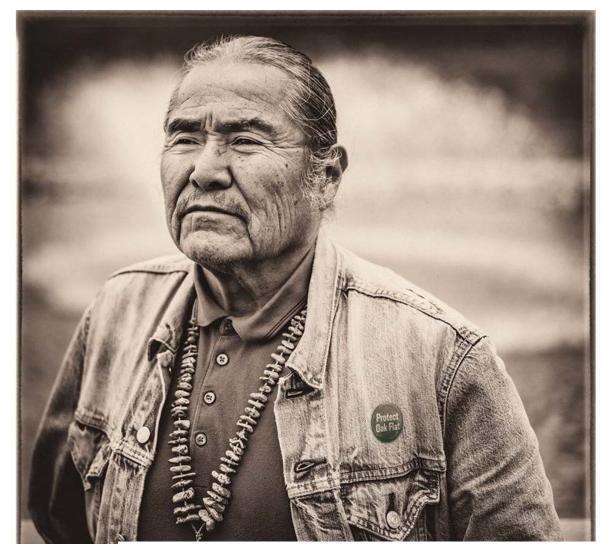
With gratitude we pay our respects to the land, the people and the communities that have contributed to what today is known as the State of New Mexico.





# MEET CHILI YAZZIE: GRANDPA, FATHER, EARTH DEFENDER

- Chili Yazzie retired after 45 years in Navajo government.
- His full-time job is caring for the large family farm in Shiprock, NM.
- Chili knows that 1 in 4 indigenous children are food insecure.
- As Chili, his wife Betsy of 46 years, and family enjoy the bounties of their farm, they helped form a local farmers' collective to promote locally grown solutions to for the hunger and poor nutrition surrounding their community.



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# NATIVE FOOD SYSTEMS

- Tribal and Indigenous farming and ranching
  - Long history of self-sustaining food systems prior to colonization
  - 24% of New Mexico's farmers and ranchers are Native American; their average farm size is 1.287 acres
  - Pueblo and Tribal water rights, Tribal sovereignty, land access and land improvement, and crossjurisdictional regulations impact native food systems
  - Federal Tribal Reservation Program: generated loss of generational food knowledge; caused malnutrition

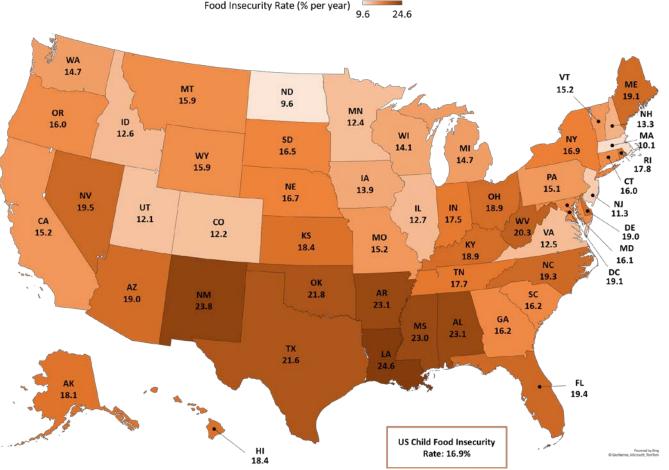




# OVERVIEW: FOOD, HUNGER & FARM INITIATIVE

- 2021 Legislature appropriated \$275,000 to HSD to "develop and implement a comprehensive plan to address hunger and food insecurity and to strengthen food systems in the state in partnership with other agencies and stakeholders in the agriculture, food and hunger-alleviation sectors."
- \$100,000 appropriated to HED "to develop and implement a comprehensive pilot to address hunger on New Mexico college campuses."
- \$100,000 appropriated to EDD to "develop a healthy food financing program."
- The Governor's Office, partnering with community members, HSD, Dept. of Agriculture, Indian Affairs, Higher Education, and others to develop 5-year strategic plan to measurably reduce hunger in NM.

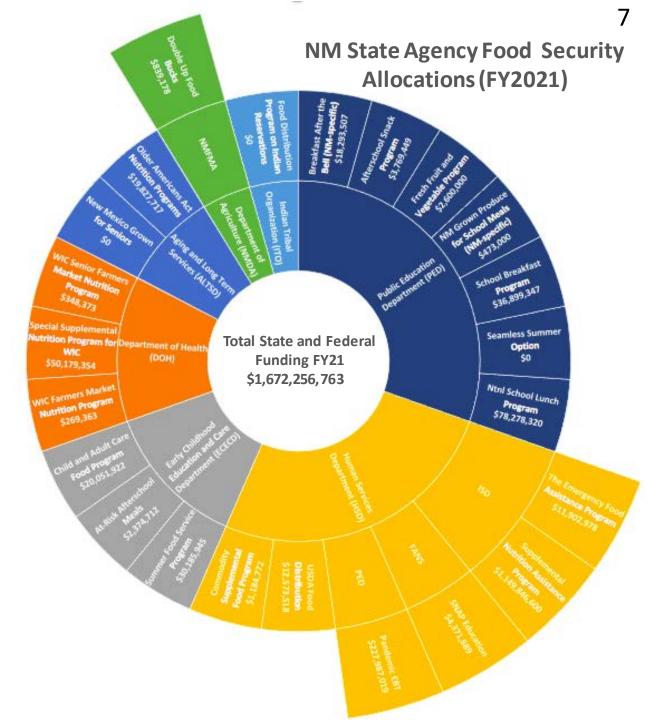
#### Child Food Insecurity Rate by State, 2018



Source: Gundersen, C., A. Dewey, E. Engelhard, M. Strayer & L. Lapinski. Map the Meal Gap 2020: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2018. Feeding America, 2020.

# INTERAGENCY APPROACH TO FOOD SECURITY

- Governor Lujan Grisham's commitment to interagency collaboration
- NM consistently at top of national rankings for child food insecurity (2nd, 2018; 3rd, 2021)
- New Mexico was one of the first states to implement the Pandemic Electronic Benefit Transfer (P-EBT); 562,000 children have received benefits
- Emergency food: 2,608,435 pounds of food were provided to counties across the state; 516,000 pounds of local foods were provided to Tribes
- The Governor's Office and HSD are partnering to coordinate and manage the implementation and oversight of a 5-year strategic plan across state government

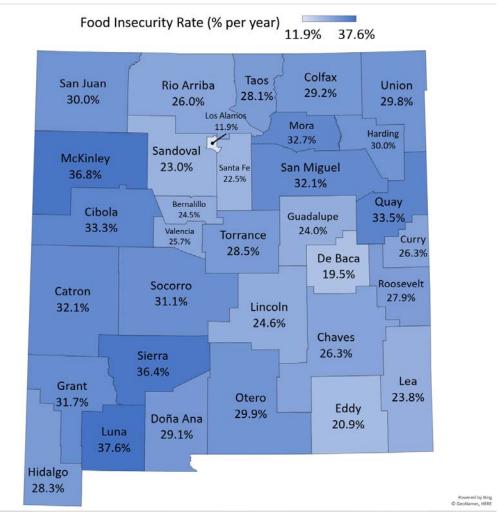


# HEALTH AND WELLBEING IMPACTS OF FOOD INSECURITY

- COVID-19 pandemic has increased food insecurity among US families<sup>1</sup>
- Food insecurity is especially detrimental to the health, development, and wellbeing of children<sup>2</sup>
- In children, food insecurity is linked to birth defects, high blood pressure, asthma, behavioral and social-emotional problems (i.e. depression, anxiety, suicidal ideation), poor educational performance and academic outcomes<sup>2</sup>
- In seniors, food insecurity is linked to higher prevalence of chronic diseases, poor management of chronic diseases, and decreased health-related quality of life<sup>3</sup>

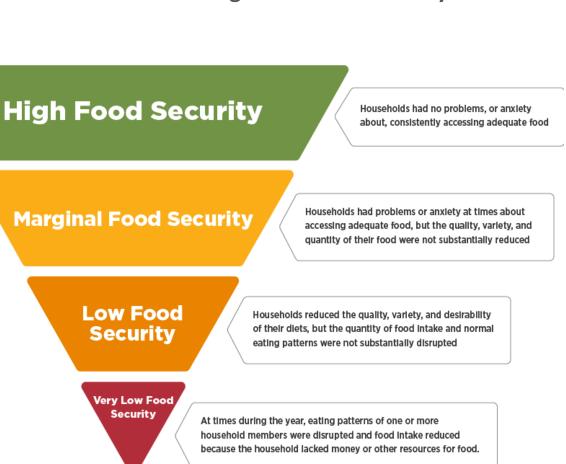
Source: Gundersen, C., M. Hake, A. Dewey, E. Engelhard (2021). The Impact of the Coronavirus on Food Insecurity in 2020 & 2021, Update March 2021 [Data file and FAQ]. Available from Feeding America: research@feedingamerica.org.

#### Food Insecurity in New Mexico

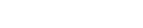


# INTERSECTIONAL FOOD SYSTEM CHALLENGES

- Market dynamics
  - Only six percent of NM producers sell directly to consumers
  - At least 90% of the food New Mexicans buy is from out of state
- Food insecurity (FI)
  - In 2021, ~323,296 New Mexicans expected to experience FI
  - FI is more prevalent in rural communities; child FI rate in rural counties is 4 points higher when compared to the state
- Supply chain inefficiencies
  - 3 NM counties are complete food deserts
  - Transportation challenges and limited cold storage infrastructure result in ineffective supply chains in rural communities



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# U.S. FOOD SECURITY BEST PRACTICES

State	Initiative	Description	Goals
VA	Roadmap to End Hunger	Develops strategies to end hunger mobilizing Local Hunger Action Coalitions with a ground up approach.	End hunger via state and community efforts.
VA	<u>Agriculture Food Assistance</u> <u>Program</u>	Reimburses food producers for costs of harvesting, processing, packaging, or transporting ag products when donating, selling, or providing products to charitable assistance organizations.	Increase access to fresh produce to lower- income families.
ΜΑ	<u>Food Security</u> <u>Infrastructure Grant</u> <u>Program</u>	Multi state agency collaboration. Direct funding for food system partners to scale up and expand their work.	Ensure equitable fresh food access for the whole state.
MI	<u>Good Food Charter</u>	Roadmap food system that rooted in local communities and centered on good food access and economic development.	Grow food economy, emphasize local grown food, food access.
ΡΑ	<u>Farm Bill</u>	Only state farm bill in U.S. Supports agriculture business, workforce, marketing, and sustainability.	Grow agricultural opportunities, remove barriers to entry, and develop future producers.
TN	<u>Agriculture Enhancement</u> <u>Program</u>	Provides cost-share dollars to agricultural to make long-term investments in Tennessee farms and communities.	Help farmers maximize profits, adapt to market, improve operation safety, increase efficiency, and drive local economy.
OR	<u>Farm to Child Nutrition</u> <u>Grant Program</u>	Comprehensive approach to building Oregon's farm to school program via funding procurement, farmer training, and producer infrastructure.	Provide access to locally grown, nutritious foods to school districts, principally low income.

## New Mexico Food, Farm, & Hunger Initiative

### MISSION



**New Mexico Grown** 

To cultivate a just food system that measurably reduces hunger, provides equitable access to nutritious, culturally meaningful foods, and honors the wisdom of our land-based

traditions.

# Community Food Programs



Integrate and innovate NM's hunger relief and nutrition security efforts so resources can be optimized for health, equity, and

efficiency.

Supply Chain



Inventory and measurably improve food supply chain infrastructure to address gaps, weak linkages, and regulatory roadblocks. Work with the legislature and other partners to create a sustainable financial model to support our Mission.

Invest in NM producers through the intentional and values-based expansion of New Mexico's farm to institution programs.



Sustainability

### DRAFT: FOOD, FARM, AND HUNGER GOAL 1: COMMUNITY FOOD PROGRAMS

Goal 1: Community Food Programs – Integrate and innovate New Mexico's hunger relief and nutrition security efforts so resources can be optimized for health, equity, and efficiency.

- Objectives 1: Create a comprehensive statewide, cross-agency nutrition safety net.
- Objective 2: Create a statewide benchmark analysis of state and community nutrition programs based on nutrition quality standards and culturally appropriate and relevant foods.
- Objective 3: Expand federal nutrition programs to their optimum ability.
- Objective 4: Integrate food and nutrition literacy into the state's nutrition safety net.

#### U.S. Nutrition Safety Net Programs Prevent 3.9 Million People from Slipping Into Poverty (2019)

	Under 18 years	18 to 64 years	65 years and older
Social Security	-26.5		
Refundable tax credits		-7.5	
SNAP			-2.5
SSI			-2.9
Housing subsidies			-2.6
Child support received			-0.7
School lunch			-1.2
TANF/general assistance			-0.3
Unemployment insurance			-0.5
LIHEAP			-0.2
Workers' compensation			-0.1
WIC			-0.2

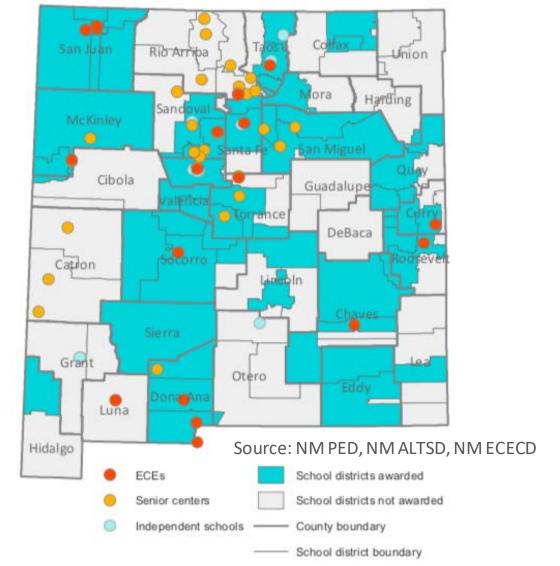
Change in Number of People in Poverty After Including Each Element (In millions)

Link: https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-272.pdf Investing for tomorrow, delivering today.

Goal 2: New Mexico Grown Production Expansion - Invest in New Mexico producers through the intentional and valuesbased expansion of New Mexico's farm to institution programs.

- Objective 1: Substantially increase the institutional purchasing of New Mexico Grown foods that reflect values-based expansion priorities.
- Objective 2: Address issues of liability and risk in New Mexico Grown production expansion efforts.
- Objective 3: Develop a statewide NM Grown stakeholder network focusing on communication, education, and technical assistance.
- Objective 4: Develop a comprehensive, statewide land, water, and infrastructure access and improvement plan for New Mexico Grown production emphasizing climate stewardship.

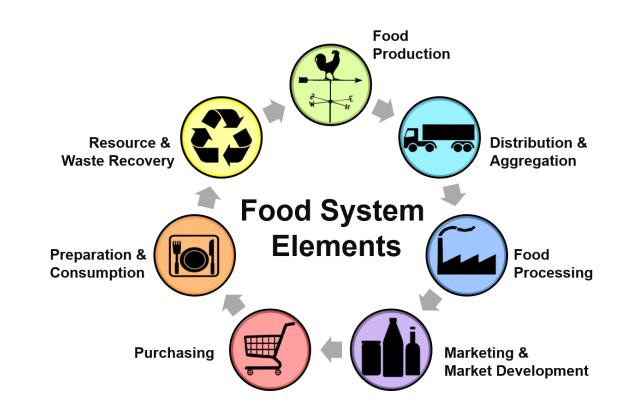
#### Participation in New Mexico Grown FY 2021-2022



### DRAFT: STRATEGIC PLAN: SUPPLY CHAIN

Goal 3: Inventory and measurably improve food supply chain infrastructure to address gaps, weak linkages, and regulatory roadblocks.

- Objective 1: Create a cross agency food and agriculture supply chain (supply chain) workforce infrastructure plan with the aim of equitably fulfilling the needs across New Mexico.
- Objective 2: Create a plan to conduct a comprehensive statewide data analysis on supply chain infrastructure.
- **Objective 3:** Identify and recommend how state government can facilitate a high-capacity supply chain.
- Objective 4: Create a community and capital investment plan in support for community-led supply chain infrastructure improvements.

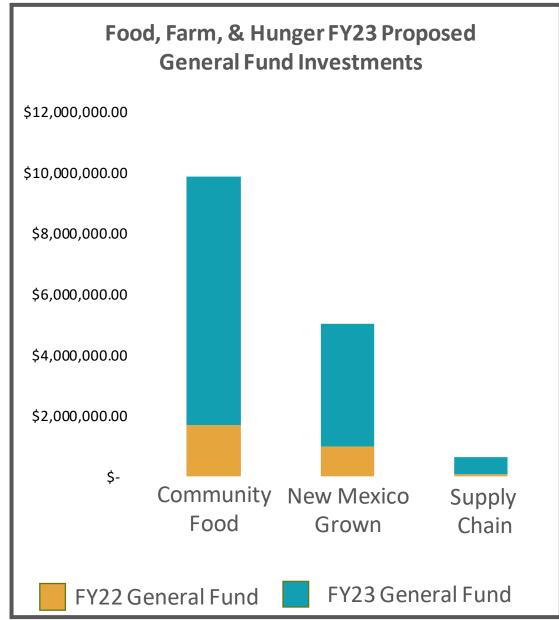


Adapted by Christy Shi, from Cornell University, Discovering the Food System; A Primer on Community Food Systems: Linking Food, Nutrition and Agriculture.

Link: https://localfood.ces.ncsu.edu/food-system-supply-chain/

# INVESTMENTS AND PRIORITIES

- FY23 state agency budget priorities
  - Community Food Programs: \$8,165,900
     GF Difference
  - New Mexico Grown: \$5,518,600 GF Difference
  - Supply Chain: \$562,000 GF Difference
- Food Security Innovation Capital Requests
  - Range from \$10M to \$15M
  - Working with key stakeholders to develop a capital request process for key supply chain investments



# STATE AGENCY BUDGET HIGHLIGHTS BY GOAL AREA

#### GOAL 1: Community Food Programs

#### GOAL 2: NM Grown

#### GOAL 3: Supply Chain

Agency	BU	Description	FY22 GENERAL FUND	FY23 GENERAL FUND	GF DIFFERENCE	FY23 FEDERAL FUND
ALTSD	624	In-House Pantries/Food Boxes for Seniors	\$0.0	\$400.0	\$400.0	\$0.0
DOH	665	Senior Farmers Market Program	\$38.0	\$90.0	\$52.0	\$617.7
DOH	665	Fruit and Vegetable Prescription Program	\$0.0	\$500.0	\$500.0	\$0.0
HED	950	College Hunger Initiative	\$100.0	\$1,000.0	\$900.0	\$0.0
HSD	630	Meal Gap Funding	\$1,200.0	\$5,100.0	\$3,900.0	\$11,903.0
NMDA	954	Double Up Food Bucks	\$367.1	\$700.0	\$332.9	\$825.0
NMDA	954	Farm to Food Bank Program	\$0.0	\$500.0	\$500.0	\$0.0
		SUBTOTAL	\$1,705.1	\$8,290.0	\$6,584.9	\$13,345.7
Agency	BU	Description	FY22 GENERAL FUND	FY23 GENERAL FUND	GF DIFFERENCE	FY23 FEDERAL FUND
ALTSD	624	NM Grown for Senior Programs	\$147.5	\$500.0	\$352.5	\$0.0
ALTSD	624	NM Grown Specialist FTE	\$0.0	\$81.0	\$81.0	\$0.0
ECECD	611	New Mexico Grown for Preschools	\$0.0	\$500.0	\$500.0	\$0.0
NMDA	954	Healthy Soils Program	\$267.9	\$1,000.0	\$732.1	\$250.0
NMDA	954	New Mexico Value-Added Innovation Grant	\$0.0	\$750.0	\$750.0	\$0.0
NMDA	954	Agricultural Workforce Development Act	\$125.0	\$250.0	\$125.0	\$0.0
NMDA	954	Approved Supplier Program Support	\$0.0	\$200.0	\$200.0	\$0.0
NMDA	954	FTE for all expansion projects	\$0.0	\$250.0	\$250.0	\$0.0
PED	624	New Mexico Grown for School Meals	\$472.0	\$1,500.0	\$1,028.0	\$81.0
		SUBTOTAL	\$1012.4	\$5,031.0	\$4,018.6	\$331.0
Agency	BU	Description	FY22 GENERAL FUND	FY23 GENERAL FUND	GF DIFFERENCE	FY23 FEDERAL FUND
EDD	419	Healthy Food Financing Initiative	\$100.0	\$500.0	\$400.0	\$0.0
EDD	419	Healthy Food Financing Specialist	\$0.0	\$162.0	\$162.0	\$0.0
DFA	341	Food Security Innovation Capital Requests	\$0.0	\$10,000.0	\$10,000.0	\$0.0
		SUBTOTAL	\$100.0	\$10,662.0	\$10,562.0	\$0.0

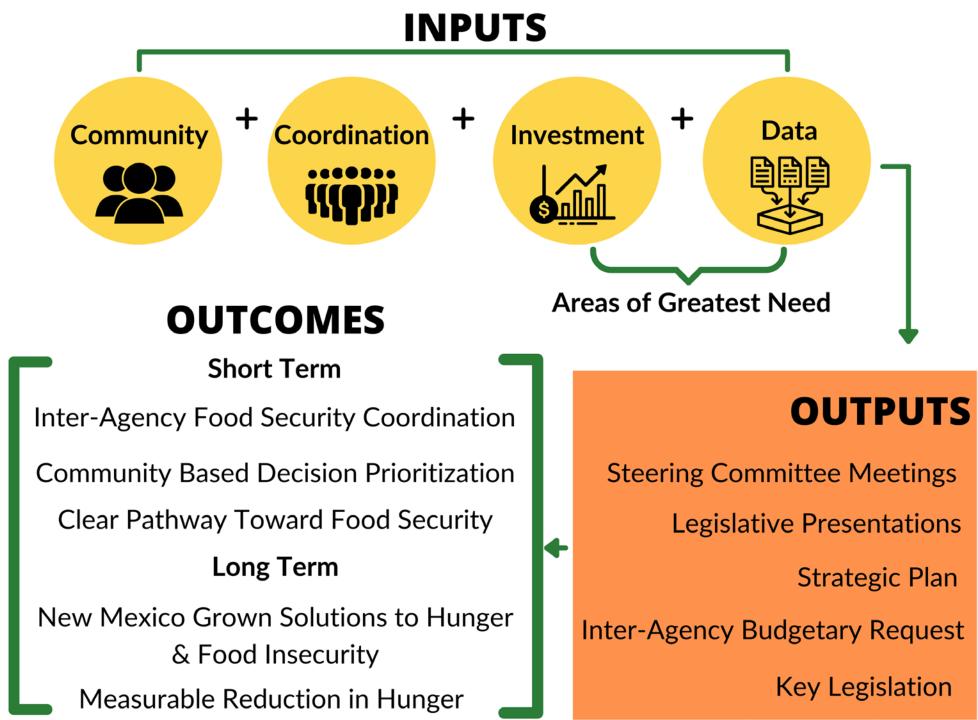
\$2817.5 \$23,983.0 \$21,165.5 \$13,676.7

#### Assumptions

- New Mexico can feed its people
- Food insecurity is preventable
- New Mexico agriculture can contribute to a thriving rural economy while nurturing land and water resources

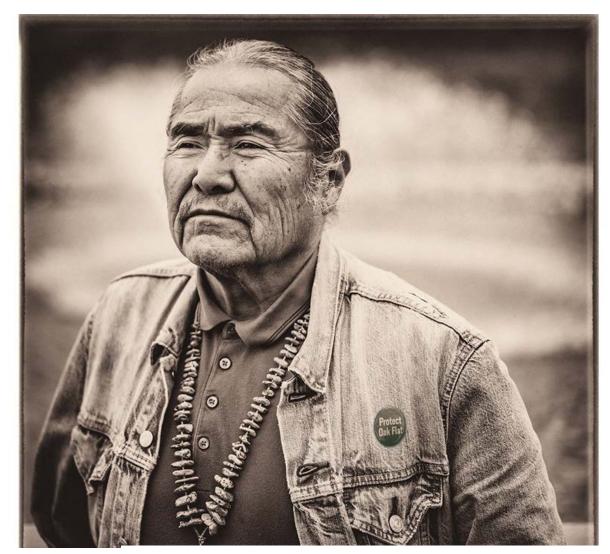
#### Conditions

- Communities and state agencies work together
- State government acts as the backbone of the initiative



# MEET CHILI YAZZIE: GRANDPA, FATHER, EARTH DEFENDER

- Chili helped form the Shiprock Farmers' Collective and enjoys the mutual benefits of working as a unit.
- The Collective coordinates marketing, sales, and delivery of produce to the open market and works with area food hubs and relief programs.
- The goal is to provide healthy, organic produce in response to poor access to food within the community.
- The mission is to have indigenous food sovereignty and healthful food for future generations.
- Chili Yazzie worked to advance the Food, Farm, & Hunger Steering Committee strategic plan forward; he is one of the many voices to make the work possible.



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# New Mexico Food, Farm, & Hunger Initiative

# **QUESTIONS & COMMENTS**

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NEW MEXICO HIGHER EDUCATION DEPARTMENT





# New Mexico Food, Farm, & **Hunger Initiative**

# **APPENDIX**





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NEW MEXICO HIGHER EDUCATION DEPARTMENT Fostering Student Success from Cradle to Career





# FY23 STATE AGENCY BUDGET OVERVIEW

Dollars in Thousands

Agency Name	BUDGET ITEM DESCRIPTION	FY22 GENERAL FUND	FY23 GENERAL FUND	GF DIFFERENCE	FY23 FEDERAL FUND	FY23 Early Childhood Trust Fund
	RECURRING					
ALTSD	NM Grown for Senior Programs	\$147.6	\$500.0	\$352.4	\$0.0	
ALTSD	NM Grown Specialist FTE	\$0.0	\$81.1	\$81.1	\$0.0	
ALTSD	In-House Pantries/Food Boxes for Seniors	\$0.0	\$400.0	\$400.0	\$0.0	
	ALTSD TOTAL	\$147.6	\$981.1	\$833.5	\$0.0	
DOH	Senior Farmers Market Program	\$38.0	\$90.0	\$52.0	\$617.7	
DOH	Fruit and Vegetable Prescription Program (FreshRx)	\$0.0	\$500.0	\$500.0	\$0.0	
	DOH TOTAL	\$38.0	\$590.0	\$552.0	\$617.7	
HED	College Hunger Initiative	\$100.0	\$1,000.0	\$900.0	\$0.0	
	HED TOTAL	\$100.0	\$1,000.0	\$900.0	\$0.0	
HSD	Meal Gap Funding	\$1,200.0	\$5,100.0	\$3,900.0	\$11,903.0	
HSD	Hunger Relief FTE	\$0.0	\$81.0	\$81.0	\$0.0	
	HSD TOTAL	\$1,200.0	\$5,181.0	\$3,981.0	\$11,903.0	
ECECD	New Mexico Grown for Preschools	\$0.0	\$500.0	\$500.0	\$0.0	
ECECD	Summer Nutrition Base Increase	\$0.0	\$750.0	\$750.0	\$0.0	
ECECD	CACFP At-Risk Base Increase	\$0.0	\$750.0	\$750.0	\$0.0	
ECECD	Farm to Pre-K Education Administrator 1 New FTE	\$0.0	\$0.0	\$0.0	\$0.0	\$70.9
	ECECD TOTAL	\$0.0	\$2,000.0	\$2,000.0	\$0.0	\$70.9
EDD	Healthy Food Financing Initiative	\$100.0	\$500.0	\$400.0	\$0.0	
EDD	Healthy Food Financing Specialist FTE	\$0.0	\$162.0	\$162.0	\$0.0	
	EDD TOTAL	\$100.0	\$662.0	\$562.0	\$0.0	
NMDA	Double Up Food Bucks	\$367.1	\$700.0	\$332.9	\$825.0	
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NMDA	Agricultural Workforce Development Act	\$125.0	\$250.0	\$125.0	\$0.0	
NMDA	Approved Supplier Program Support	\$0.0	\$200.0	\$200.0	\$0.0	
NMDA	FTE for all expansion projects (3 FTEs including fringe)	\$0.0	\$250.0	\$250.0	\$0.0	
	NMDA TOTAL	\$760.0	\$3,650.0	\$2,890.0	\$1,075.0	
PED	New Mexico Grown for School Meals	\$472.0	\$1,500.0	\$1,028.0	\$81.0	
	PED TOTAL	\$472.0	\$1,500.0	\$1,028.0	\$81.0	
	RECURRING TOTAL	\$2,817.60	\$15,564.10	\$12,746.50	\$13,676.70	\$70.90

### TOTAL STATE & FEDERAL INVESTMENT:

### \$29.2 million



# **Community Participatory Process**



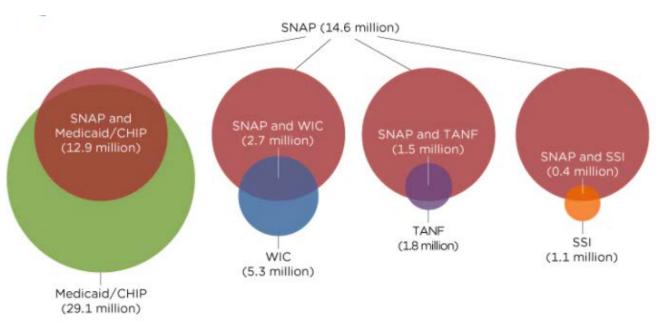
Current as of 11/3 / Investing for tomorrow, delivering today.

### DRAFT: FOOD, FARM, AND HUNGER GOAL 1: COMMUNITY FOOD PROGRAMS

#### Objective 1: Create a comprehensive statewide, crossagency nutrition safety net.

#### Number of U.S. Children Participating in SNAP, Other Government Assistance Programs, or Both (2021)

- Tactic 1: Develop and conduct an assessment aimed at understanding the barriers to accessing and administering nutrition safety net programs at the individual, community, and state agency level.
- Tactic 2: Create and implement a comprehensive, harmonized nutrition safety net data tracking system highlighting the areas of greatest need.
- Tactic 3: Research and recommend a common application/data portal for all food and nutrition needs based programs.
- Tactic 4: Research and recommend streamlined oversight over, and administration of, nutrition safety net programs.
- Tactic 5: Incentivize hunger relief organization participation in the state's nutrition safety net efforts.
- Tactic 6: Conduct outreach and strategic campaign in underperforming nutrition programs (WIC, SNAP college population, Supper Meals for K-12)



Note: Children age 17 and younger.

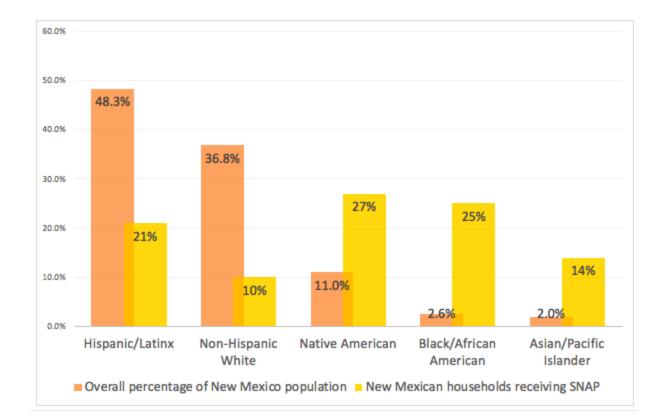
SNAP = Supplemental Nutrition Assistance Program; CHIP = Children's Health Insurance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children; TANF = Temporary Assistance for Needy Families; SSI = Supplemental Security Income.

Link: <u>https://www.census.gov/library/stories/2021/06/most-children-</u> receiving-snap-get-at-least-one-other-social-safety-net-benefit.html

Objective 2: Create a statewide benchmark analysis of state and community nutrition programs based on nutrition quality standards and culturally appropriate and relevant foods.

- Tactic 1: By xxx, evaluate national, state, and community nutrition quality standards with a focus on culturally appropriate and nutrient dense foods.
- Tactic 2: By xxx, create NM statewide nutrition standards guidelines and benchmark analysis of food quality and substance by agency and community organization.
- Tactic 3: By xxx, incentivize implementation of NM statewide nutrition standards.

New Mexican households receiving SNAP by race and ethnicity vs. overall demographics of New Mexico (2019)



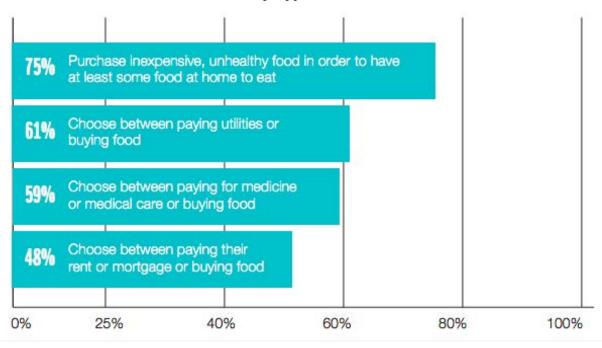
Link: <u>https://www.nmvoices.org/wp-content/uploads/2021/03/Food-Insecurity-Rpt-Sept-2021-update.pdf</u>, <u>https://www.census.gov/quickfacts/NM</u>

### DRAFT: FOOD, FARM, AND HUNGER GOAL 1: COMMUNITY FOOD PROGRAMS

## Objective 3: Objective 3: By xxx, expand federal nutrition programs to their maximum ability.

- Tactic 1: Establish current baseline federal nutrition program usage and federal nutrition program targets to expand programs to their maximum ability.
- Tactic 2: Identify and recommend state statutory changes required to enable federal nutrition program maximization.
- Tactic 3: Research and recommend guidelines to support a bundled approach to multi-generational nutrition programs.
- Tactic 4: Create and implement a resource utilization plan that maximizes draw down of discretionary and formula federal programs for community food programs.
- Tactic 5: Research and recommend models for state contributions to federal nutrition reimbursements or allocations for priority programs.
- Tactic 6: Research and recommend federal waivers to increase the impact of food assistance programs.

# Share of New Mexicans with low food security making tradeoffs by type of choice



Link: <u>https://www.nmvoices.org/wp-content/uploads/2021/03/Food-</u> Insecurity-Rpt-Sept-2021-update.pdf

### DRAFT: FOOD, FARM, AND HUNGER GOAL 1: COMMUNITY FOOD PROGRAMS

#### Objective 4: Integrate food and nutrition literacy into the state's nutrition safety net.

- Tactic 1: Research and recommend food waste and food reuse guidelines for priority programs.
- Tactic 2: Expand and integrate programs that incentivize the consumption of fruits and vegetables.
- Tactic 3: Research and recommend cradle to grave nutrition education interventions.

Link: <u>https://pubmed.ncbi.nlm.nih.gov/27334234/</u>

#### Financial incentives increase fruit and vegetable intake among Supplemental Nutrition Assistance Program participants: a randomized controlled trial of the USDA Healthy Incentives Pilot

#### Lauren Ew Olsho<sup>1</sup>, Jacob A Klerman<sup>2</sup>, Parke E Wilde<sup>3</sup>, Susan Bartlett<sup>2</sup>

**Background:** US fruit and vegetable (FV) intake remains below recommendations, particularly for low-income populations. Evidence on effectiveness of rebates in addressing this shortfall is limited.

**Objective:** This study evaluated the USDA Healthy Incentives Pilot (HIP), which offered rebates to Supplemental Nutrition Assistance Program (SNAP) participants for purchasing targeted FVs (TFVs).

Design: As part of a randomized controlled trial in Hampden County, Massachusetts, 7500 randomly selected SNAP households received a 30% rebate on TFVs purchased with SNAP benefits. The remaining 47,595 SNAP households in the county received usual benefits. Adults in 5076 HIP and non-HIP households were randomly sampled for telephone surveys, including 24-h dietary recall interviews. Surveys were conducted at baseline (1-3 mo before implementation) and in 2 follow-up rounds (4-6 mo and 9-11 mo after implementation). 2784 adults (1388 HIP, 1396 non-HIP) completed baseline interviews; data were analyzed for 2009 adults (72%) who also completed ≥1 follow-up interview.

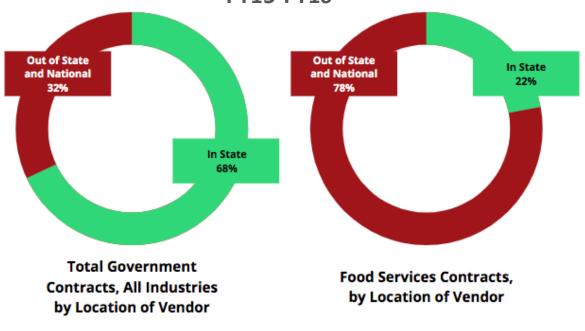
**Results:** Regression-adjusted mean TFV intake at follow-up was 0.24 cup-equivalents/d (95% CI: 0.13, 0.34 cup-equivalents/d) higher among HIP participants. Across all fruit and vegetables (AFVs), regression-adjusted mean intake was 0.32 cup-equivalents/d (95% CI: 0.17, 0.48 cup-equivalents/d) higher among HIP participants. The AFV-TFV difference was explained by greater intake of 100% fruit juice (0.10 cup-equivalents/d; 95% CI: 0.02, 0.17 cup-equivalents/d); juice purchases did not earn the HIP rebate. Refined grain intake was 0.43 ounce-equivalents/d lower (95% CI: -0.69, -0.16 ounce-equivalents/d) among HIP participants, possibly indicating substitution effects. Increased AFV intake and decreased refined grain intake contributed to higher Healthy Eating Index-2010 scores among HIP participants (4.7 points; 95% CI: 2.4, 7.1 points).

**Conclusions:** The HIP significantly increased FV intake among SNAP participants, closing ~20% of the gap relative to recommendations and increasing dietary quality. More research on mechanisms

Objective 1: Substantially increase the institutional purchasing of New Mexico Grown foods that reflect values-based expansion priorities.

- Tactic 1: Conduct a comprehensive baseline assessment focusing on New Mexico's institutional sourcing capacity, needs, assets, and opportunities.
- Tactic 2: Using a community based participatory process, conduct a statewide needs and assets assessment of priority populations' access to New Mexico Grown.
- Tactic 3: Recommend policies to nurture priority populations' access and utilization of NM Grown based on needs and assets assessment.
- Tactic 4: Formalize purchasing benchmarks and supportive purchasing mechanisms for NM institutions.
- Tactic 5: Formalize values-based expansion guidelines that prioritize climate resiliency, nurturing economy principles, and land-based traditions.
- Tactic 6: Coordinate key state agencies, local governments, and nutrition providers to report annually on NM Grown financial expenditures and progress towards established benchmarks.

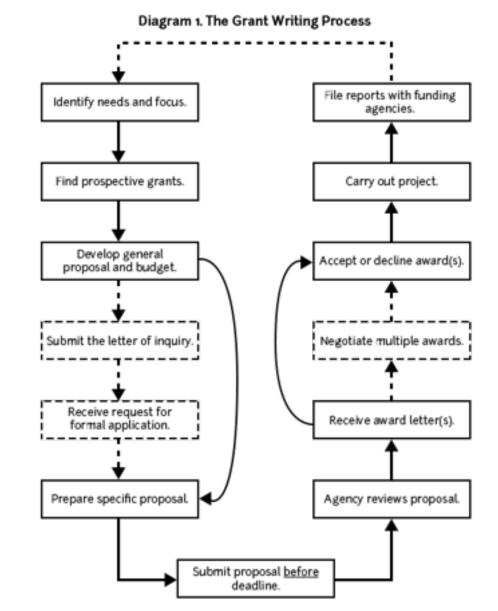
Comparison of out of state/national purchasing and in state purchasing, in all industries and food services, EY15-EY16



Link: <u>https://www.nmlegis.gov/handouts/ERDT%</u> 20083117%20Item%203%20Statewide%20Procur ement%20Report.pdf

**Objective 2: Address issues of liability and risk in New Mexico Grown production expansion efforts.** 

- Tactic 1: Research and recommend liability and crop insurance supports for NM Grown producers.
- Tactic 2: Recommend a pooled capital request program for governmental and quasigovernmental support of the agricultural sector.
- Tactic 3: Research and recommend grant-writing and grant management support, including federal match requirements, for NM Grown producers.
- Tactic 4: Develop and implement incentive programs for priority productions practices, including value-added foods.



Link: https://writingcenter.unc.edu/tips-and-tools/grant-proposals-or-give-me-the-money/

Objective 3: Develop a statewide NM Grown stakeholder network focusing on communication, education, and technical assistance.

- Tactic 1: Assess education, training, and technical assistance needs and assets of NM Grown stakeholders.
- Tactic 2: Develop a comprehensive communication hub designed to meet the education, training and technical assistance needs of NM Grown stakeholders across New Mexico with particular attention on literacy, language, culture, and technology access.
- Tactic 3: Formalize culturally competent, statewide food safety and vendor requirements curriculum for NM producers, ranchers, and food businesses selling to NM institutions.
- Tactic 4: Determine how to formalize a network of New Mexico Grown value chain navigators/coordinator positions in state agencies, NMSU Cooperative Extension offices, and/or community-based organizations.
- Tactic 5: Develop and implement a robust communications and marketing strategy featuring NM Grown stakeholders.



Journal of Agriculture, Food Systems, and Community Development ISSN: 2152-0801 online https://www.foodsystemsjournal.org

Small and minority farmers' knowledge and resource sharing networks, and farm sales: Findings from communities in Tennessee, Maryland, and Delaware

**Abstract** A network analysis can quantify the depth and breadth of a farmer's relationships with other local farmers, buyers and sellers, or other groups and organizations. Such an analysis can potentially also reveal farmers' incentives, situations, and behaviors, and it may explain their economic success more generally.

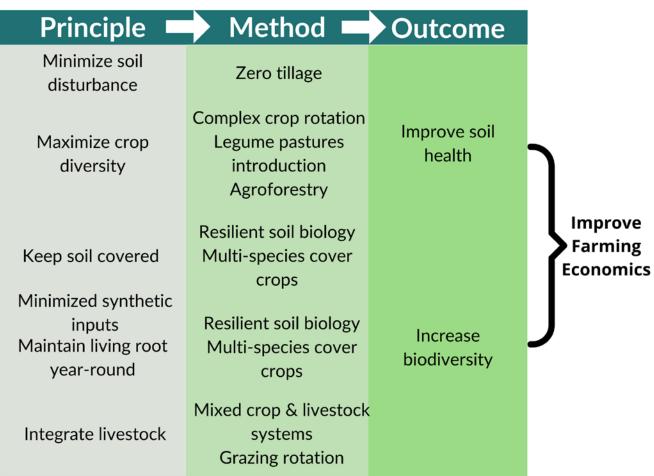
**Method** This study examines small and minority farmers' networks using a primary survey in three farming communities. We emphasize networks related to production, marketing, and resource-sharing activities of 127 farmers (nodes) in Tennessee, 46 in Maryland, and 23 in Delaware, and compute three different measures of network importance or "centrality" for each farmer. We then use generalized least squares analysis relating farmer's age, gender, race, educational attainment, labor use on the farm, and farm location to the farmer's centrality position or importance in the network, defined by number and strength of links or connections.

**Results** In additional regression analyses, we find significantly positive effects of the centrality position on farm sales of specialty crops: our model predicts that a farmer who adds one additional link or connection can expect a 19% to 25% increase in sales, all else equal. Our results can potentially be used not only to disseminate information more efficiently, but also to identify farmers who would benefit the most from more targeted extension services.

Objective 4: Develop a comprehensive, statewide land, water, and infrastructure access and improvement plan for New Mexico Grown production emphasizing climate stewardship.

- Tactic 1: Conduct a baseline assessment on ownership and availability of land, water, and infrastructure resources available to New Mexico producers, ranchers, and food businesses.
- Tactic 2: Formalize recommendations on state investment in resource conservation programs that enable regenerative agricultural practices.
- Tactic 3: Formalize recommendations on state and municipal tax incentives for farmland protection, conservation easements, and/or new or beginning farmers engaged in regenerative agriculture.
- Tactic 4: Research and develop recommendations on incentive programs for owners of land and water to produce and distribute NM Grown foods or provide access to growers to produce and distribute NM Grown foods.
- Tactic 5: Educate state agencies and legislators about the role of regenerative agriculture in supporting achievement of the state's climate, health, and economic goals.

# Regenerative Agriculture Technology and Innovation



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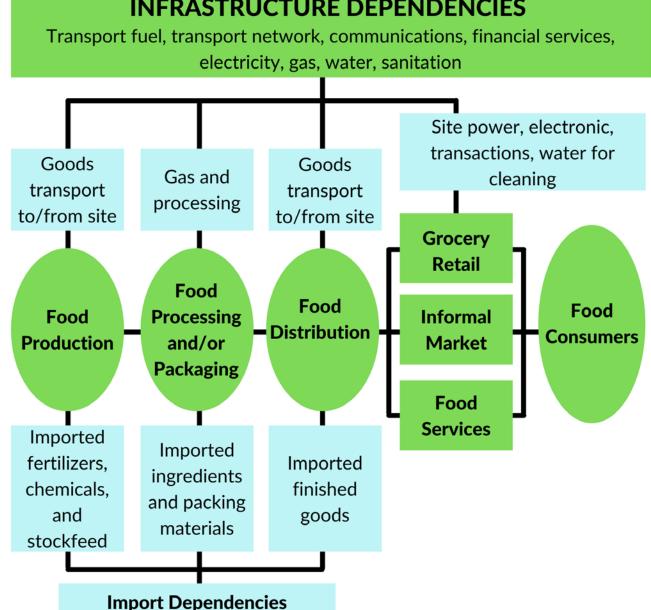
Link: https://www.cleantech.com/regenerative-agriculture-technology-innovation-part-2/

### DRAFT: FOOD, FARM, HUNGER GOAL 3

Goal 3: Inventory and measurably improve food supply chain infrastructure to address gaps, weak linkages, and regulatory roadblocks.

- **Objective 1:** Create a cross agency food and agriculture supply chain (supply chain) workforce infrastructure plan with the aim of equitably fulfilling the needs across New Mexico.
- Objective 2: Create a plan to conduct a comprehensive statewide data analysis on supply chain infrastructure.
- **Objective 3:** Identify and recommend how state government can facilitate a high-capacity supply chain.
- Objective 4: Create a community and capital investment plan in support for community-led supply chain infrastructure improvements.

Link: https://www.cerealsgrains.org/publications/cfw/2020/ian-feb/Pages/CEW-65-1-0002 aspx\_based on Bartos\_et\_AL



#### **INFRASTRUCTURE DEPENDENCIES**

### DRAFT: FOOD, FARM, AND HUNGER GOAL 3: SUPPLY CHAIN INFRASTRUCTURE

Objective 1: Create a cross agency food and agriculture supply chain (supply chain) workforce infrastructure plan with the aim of equitably fulfilling the needs across New Mexico.

**Need for Increased Growth & Investment in Agriculture: Projected Employment Growth by Major Industry in New Mexico** 

2018-2028

33

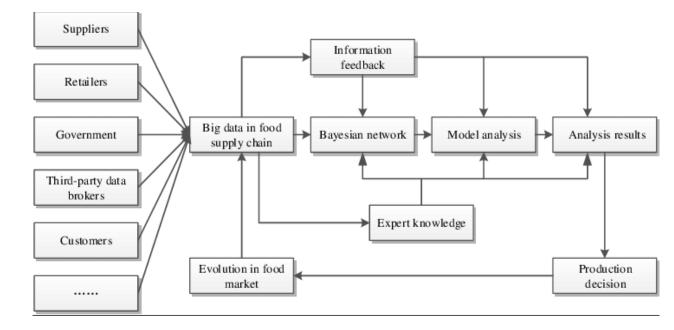
	Health Care & Social Asst.	23,070	17.1%
	Accommodation & Food Svcs	8,570	9.3%
Tactic 1: Conduct a review of existing supply	Professional & Tech. Svcs	6,670	11.7%
chain workforce programs and assets in NM	Construction	5,350	11.3%
including agricultural incubator appropriations	Educational Services	2,940	4.0%
chain workforce programs and assets in NM including agricultural incubator, apprenticeships, internships, work study, and youth education	Self Employed	2,850	5.5%
internships, work study, and youth education	Mining & Oil & Gas Extraction	2,500	10.2%
programs.	Admin. Support & Waste Mgmt		5.1%
	Local Government	1,350	3.1%
Tactic 2: Assess state and national food and	Arts & Recreation	860	6.7%
agricultural pipeline programs.	Transp & Warehouse	850	4.0%
	Other Services	610	2.9%
Tactic 3: Expand and integrate existing supply	Finance & Insurance	550	2.4%
chain workforce programs.	Real Estate	490	4.8%
chant worktorce programs.	Agriculture	370	3.3%
- Tastia 1. Decearch and recommand ways to	Mgmt of Companies	270	4.8%
Tactic 4: Research and recommend ways to	Utilities	-130	-3.0%
incentivize participation in the supply chain	Public Administration	-370	-1.7%
workforce.	Wholesale Trade	-430	-2.0%
	Federal Government	-650	-2.8%
	Information	-780	-6.5%
	Retail Trade	-1,020	-1.1%
	Manufacturing	-1,350	-5.0%
	-		-

Link: https://www.dws.state.nm.us/Portals/0/DM/LMI/NM\_2020\_SOTW\_Report.pdf

# DRAFT: FOOD, FARM, AND HUNGER GOAL 3: SUPPLY CHAIN INFRASTRUCTURE

# Objective 2: Create a plan to conduct a comprehensive statewide data analysis on supply chain infrastructure.

- Tactic 1: Determine data needed, and location of data, to address supply chain infrastructure gaps and weak linkages.
- Tactic 2: Coordinate across key state agencies and community partners to supply data for analysis.
- Tactic 3: Research and recommend supportive legislation to require shared metrics and reporting requirements across state agencies and community partners.
- Tactic 4: Research and recommend a centralized system for the collection and dissemination of supply chain data and information.



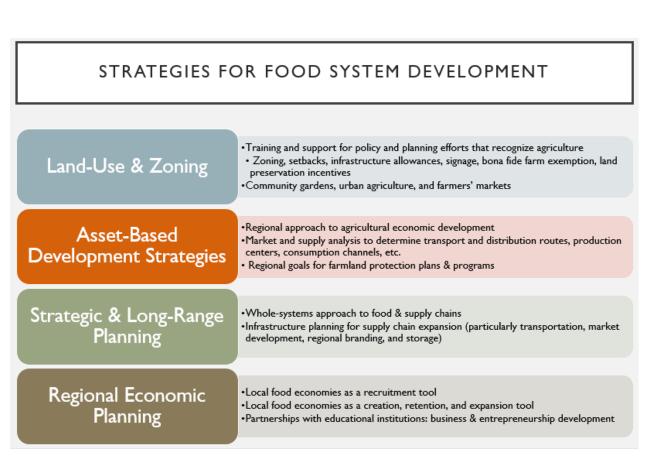
Decision making based on big data in the food supply chain

Link: <u>https://www.researchgate.net/publication/314783523 A Big Data Decision-</u> making Mechanism for Food Supply\_Chain

### DRAFT: FOOD, FARM, AND HUNGER GOAL 3: SUPPLY CHAIN INFRASTRUCTURE

#### Objective 3: Identify and recommend how state government can facilitate a high-capacity supply chain.

- Tactic 1: Conduct a policy scan on state, Tribal, and local regulatory barriers that prevent a high capacity supply chain.
- Tactic 2: Develop guidance on addressing regulatory roadblocks.
- Tactic 3: Research and recommend updates to the procurement code.
- Tactic 4: Establish a process and protocols for community and non-profit use of governmentowned physical assets.
- Tactic 5: Research and recommend how to integrate supply chain support mechanisms across agencies and local governmental entities to eliminate silos and increase communication for collaboration.



Link: <u>https://cefs.ncsu.edu/resources/elgl-emerging-local-government-leaders-food-economies-webinar/</u>

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35

Objective 4: By xxx, create a community and capital investment plan in support for community-led supply chain infrastructure improvements that reflect Equitable Food Oriented Development principles.

- Tactic 1: Research and recommend cost-sharing models for producer and food business operations.
- Tactic 2: Research and recommend tax incentives to inspire private sector supply chain investments.
- Tactic 3: Research and recommend creative financing mechanisms that support grassroots solutions.
- Tactic 4: Establish a process for all scales and sizes of supply chain actors to access capital outlay funds.
- Tactic 5: Establish an oversight board to address equitable access to community and capital investment resources.

#### Advancing Local Food Systems Through Development Finance

#### **The Development Finance Toolbox**

**Bedrock Tools** are the foundational financing tool known as bonds. This is the largest debt market and makes up the foundation of all public finance in the U.S. Over 10,000 bonds are issued annually, representing infrastructure, housing, education, agriculture, manufacturing, healthcare, nonprofits, and more.

**Targeted Tools** are used to target specific geographic areas through the use of taxation, allowing for direct reallocation of specific taxes to pay for the current cost of the development. Tax Increment Financing (TIF), Special Assessment Districts, and Property Assessed Clean Energy (PACE) Financing are common tools in this category. Tax Abatements, which is the relief, rather than a redirection, of taxes is also included in this category.

**Investment Tools** encourage private sector engagement in projects and businesses by attracting investors Tax Credits and Opportunity Zones are the tools that drive this sector and may involve community development, historic rehabilitation, housing, manufacturing expansion, employment growth, site selection, and other targeted objectives.

Access to Capital Tools represent the resources for supporting small businesses, entrepreneurs, and microenterprises to unlock capital for growth. Revolving Loan Funds, Loan Guarantees, Linked Deposit, Microlending, Seed and Venture Capital, and Angel Investor Funds are all examples of tools in this category.

**Federal Support Tools** are the most flexible, least complex, and easily applied in comparison to other development finance tools. A variety of loan guarantees, loan funds, grants, tax incentives, and other programs are available through various federal agencies. Federal support tools are often used in conjunction with other tools in the toolbox and can be applied as gap financing for projects.

Link: <u>https://www.cdfa.net/cdfa/cdfaweb.nsf/ordredirect.html?open&id=KelloggWhite</u> Paper6.html

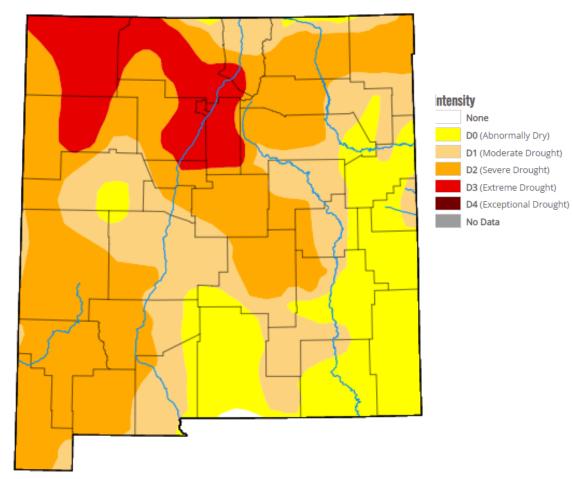
### CLIMATE CHANGE IMPACTS ON IRRIGATED AGRICULTURE

#### Summary of Surface Water and Ground Water Withdrawals (2015)

#### Table 2. Summary of withdrawals (acre-feet) in New Mexico, 2015

Category	wsw	WGW	тw
Public Water Supply	87,399	196,758	284,157
Domestic (self-supplied)	0	27,949	27,949
Irrigated Agriculture	1,255,440	1,120,625	2,376,065
Livestock (self-supplied)	2,904	33,142	36,046
Commercial (self-supplied)	12,326	45,199	57,525
Industrial (self-supplied)	0	8,718	8,718
Mining (self-supplied)	1,141	41,153	42,294
Power (self-supplied)	39,677	10,742	50,419
Reservoir Evaporation	231,081	0	231,081
State Totals	1,629,968	1,484,287	3,114,255

#### U.S. Drought Monitor (2021)



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Link: <u>https://www.nmvoices.org/wp-content/uploads/2021/03/Food-</u> Insecurity-Rpt-Sept-2021-update.pdf

### INVESTMENTS IN CLIMATE SMART AND REGENERATIVE AGRICULTURE

### Climate-Smart Agriculture

- Identify and prioritize climate risks, adaptation opportunities, and potential carbon benefits of USDA programs.
- Reduce food waste and loss.
- Invest in infrastructure improvements critical to the implementation of climate-smart practices.

### **Regenerative Agriculture**

- Recuperation and maintenance of soil health
- Water conservation
- Seed preservation
- Respect for human beings and their labor
- Reduction of non-synthetic chemical/herbicide use



#### CLIMATE-SMART AGRICULTURE AND FORESTRY STRATEGY: 90-DAY PROGRESS REPORT

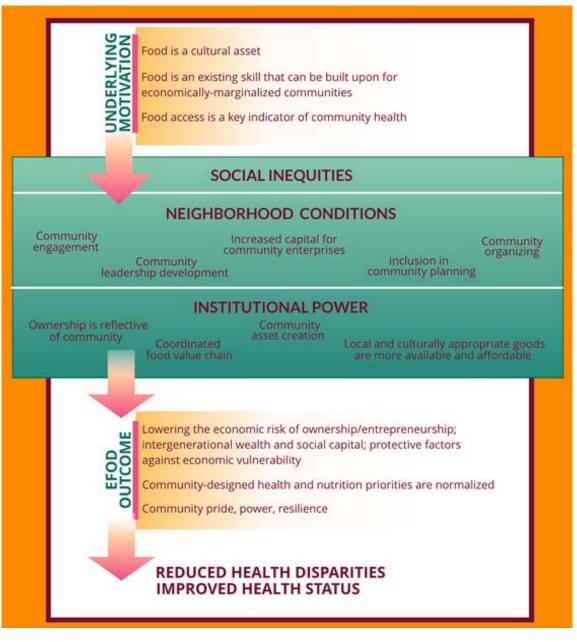


#### 39

### EQUITABLE FOOD ORIENTED DEVELOPMENT

- Equity and justice first
- Place-based; embedded in a community or regional network with a strong community identity
- Use market-based and business strategies; create real, sustainable market opportunities
- Community leadership; serving to maintain community sovereignty and local planning
- Community ownership; uses alternative economic structures so community can have ownership

#### **Equitable Food Oriented Development**



### VALUES-BASED PUBLIC PURCHASING

- Transforms the way public institutions purchase by creating a transparent and equitable food system built on place-based values
- Common purchasing standards include environmental sustainability, valued workforce, animal welfare, and farm size and location
- Purchasing standards are then supported through preferences and other incentives awarded to values- aligned producers
- New Mexico Grown provides a mechanism to operationalize values-based purchasing standards

#### Cities across the U.S. are adopting Good Food Purchasing practices



Link: https://goodfoodcities.org/cities/

### New Mexico Food, Farm, & **Hunger Initiative**

### **INVESTMENTS IN FOOD SECURITY IN NM**





HUMAN

SERVICES



New Mexico **Indian Affairs** Department





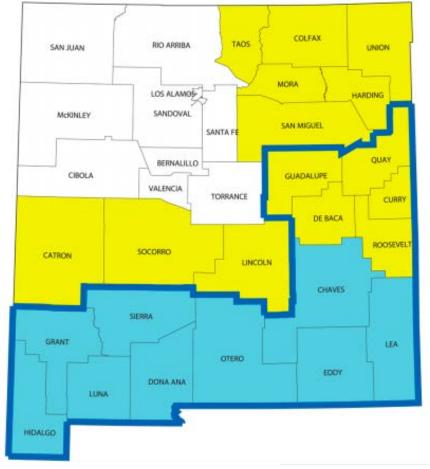




### ECONOMIC CONTRIBUTIONS

- \$2.6 billion of crops and livestock sold; top commodities include milk and dairy, cattle and calves, and pecans
- Farm employment is particularly important in Harding, Mora, De Baca, Catron, Union, and Guadalupe counties
- Most farms in NM are small to mid-sized
  - 34.2% are less than 9 acres; the average size is 4 acres
  - 52% are less than 49 acres; the average size is 22 acres
  - 18% are 1,000 acres or more
- 86% of farms in New Mexico are small or mid-sized, and represent less than 4% of total agricultural products sold; investment in infrastructure is critical to optimizing the potential of New Mexico producers

Farming and Ranching: Major Economic Driver in Rural New Mexico



Yellow = Ag #1 economic driver

Blue = Ag a top 5 economic driver

<u>Blue outline</u> = major food processing counties

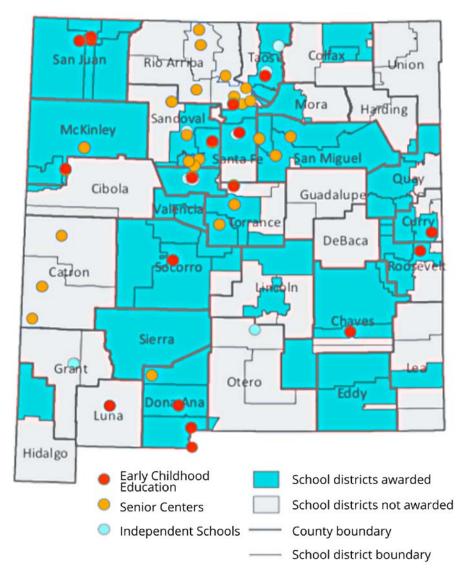
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Link: https://www.nmlegis.gov/handouts/ERDT%20090418%20Item%201%20Resilience% 20in%20New%20Mexico%20Agriculture%20Presentation.pdf

## NEW MEXICO GROWN

- Serves K-12 students, older adults in senior centers, and early childhood education sites across NM; incentivizes consumption of locally produced foods
- New Mexico Grown provides:
  - New Mexicans with regionally grown fresh fruits, vegetables, meat, and other foods
  - New market for agricultural producers and food businesses
  - Economic benefit to both urban and rural areas; in FY 2020, for every \$1 granted, \$2.60 was invested into New Mexico producers
- In FY 2022, 198,000 children and seniors served. At least 238,560 New Mexicans will be directly impacted by the program in FY 2023.

# Participation in New Mexico Grown FY 2021-2022



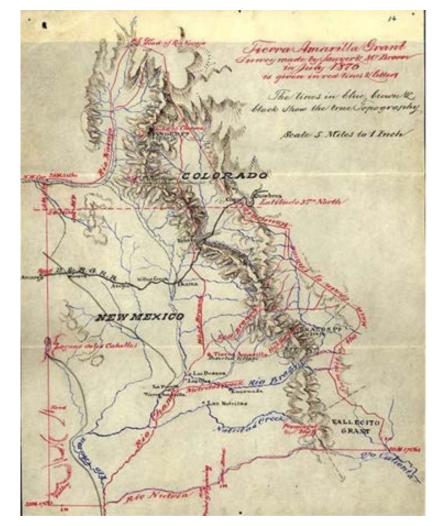
# INDO-HISPANO LAND BASED TRADITIONS

### Acequias

- Centuries-old customs and traditions of sharing scarce water endure in the acequias
- Acequias sustain ancient food traditions in NM on small-acreage farms
- 640 acequias; acequia counties account for over 40% of farms in NM
- Land Grants
  - Communal lands of Spanish and Mexican land grants encompass over 200,000 acres

Link: <u>https://www.nmlegis.gov/handouts/REOTF%20071921%20Item%203%20NMAA-NMAC-ISC%20HANDOUT.PDF</u>

#### Tierra Amarilla Land Grant Survey (1876)



## DOUBLE UP FOOD BUCKS (DUFB)

- Double Up Food Bucks allows people using SNAP EBT to buy fresh fruits and vegetables grown in NM
- For example, if a person spends \$25 SNAP EBT dollars' worth of groceries, they get to spend an additional \$25 worth of NM grown fresh fruits and vegetables
- Double Up program has put more than \$5.6 million dollars into the pockets of NM farmers, many of whom also qualify as low-income and/or historically underserved
- From 2019-2020, DUFB increased by 43% to meet the needs of New Mexicans during the COVID-19 pandemic

#### Double Up Food Bucks Program Feedback



Raul from Rodriguez S & J Farm

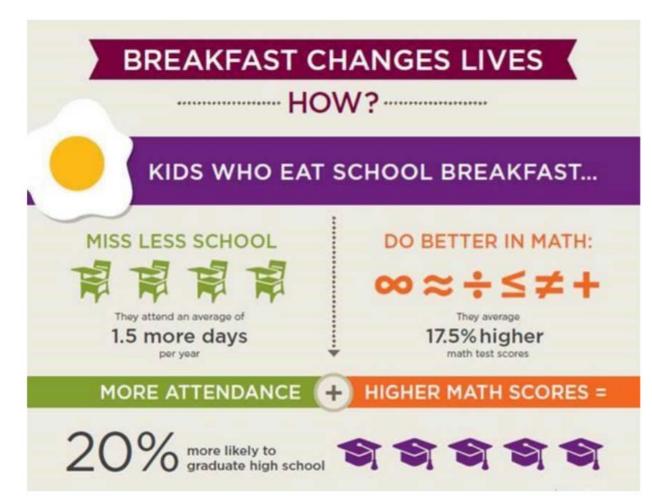


"This program is a blessing for seniors like us who are on fixed incomes. A group of us now take the bus from our senior housing to get here."

— Santa Fe Farmers' Market customer

# BREAKFAST AFTER THE BELL

- The School Breakfast Program (SBP) provides cash assistance to states to operate nonprofit breakfast programs in schools and residential childcare institutions.
- The Food and Nutrition service administers the SBP at the Federal level.
- NM PED administers the SBP at the state level, and local school food authorities operate the Program in schools.

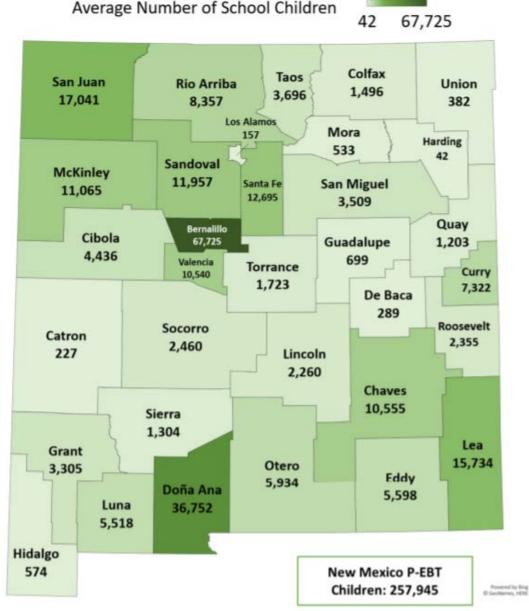


#### Link: https://washingtonbreakfast.org/wpcontent/uploads/sites/2/2018/06/2018-WA\_Breakfast-Master-Kit.pdf

### P-EBT

- The P-EBT benefit was enacted with the Families First Coronavirus Response Act
- P-EBT supplements free or reducedpriced meals children would have received if their schools were not closed due to the COVID-19 pandemic
- P-EBT are used the same as SNAP benefits to purchase food at locations such as grocery stores throughout the state
- 10/21: HSD & ECECD partnered to offer P-EBT benefits to include families with young children

New Mexico Average Number of School Children Issued Pandemic-EBT (P-EBT) by County, School Year 2019 and 2020



Link: https://www.hsd.state.nm.us/wp-content/uploads/FINAL-Data-Book-2021-2.pdf

# SNAP BENEFITS

#### New Mexico Supplemental Nutrition Assistance Program Recipients by County as of October 2021

- SNAP serves more than 539,758 individuals in New Mexico each month, providing food assistance benefits to safeguard the well-being of lowincome, financially eligible households<sup>1</sup>
- SNAP benefits act as a safety net to prevent New Mexicans from slipping into poverty<sup>2</sup>
- October, 2021: SNAP benefits increased 25%—an average of \$36.24 per person each month, or \$1.19 per day.<sup>3</sup>
- Permanent increase represents the single largest permanent investment in SNAP benefits in the program's history<sup>3</sup>

