

RALLY INNOVATION DISTRICT PARTNERSHIP | ROLLING SUBMISSIONS OPEN

4Roots Farm Innovation & Food System Transformation

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THE PROBLEM WE ARE SOLVING

Central Florida's food system is under pressure from multiple directions at once. Over 90,000 residents live in food deserts across 16 identified communities including Parramore, South Apopka, Pine Hills, and parts of Osceola County. Orange County alone has more than 143,000 people experiencing food insecurity, with an annual food budget shortfall exceeding \$101 million.

At the same time, the agricultural land base that should be feeding this region is shrinking fast. Florida loses approximately 45,000 acres of farmland every year. The state's predominantly sandy soils are structurally low in organic matter and highly susceptible to nutrient leaching — a challenge compounded by rising temperatures, more frequent drought and flood cycles, and accelerating soil carbon loss.

These conditions are interconnected. Access, production, health, and sustainability cannot be solved independently. That is what this initiative is designed to address.

90,000+

Central Florida residents in food deserts across 16 identified communities

\$101M+

Annual food budget shortfall in Orange County alone

45,000

Acres of Florida farmland lost to development each year

ABOUT THE PARTNERS

4ROOTS FARM

Central Florida's living lab for food system change

Founded in 2015, 4Roots Farm is an 18-acre nonprofit campus in Orlando's Packing District. The campus includes a 1-acre greenhouse with 9 unique growing systems capable of producing 40,000 lbs. of produce per week, the Culinary Health Institute (partnered with AdventHealth, Gordon Food Service, and Florida Blue), a SNAP-enabled Mobile Market, and Fresh by 4Roots — a CSA serving 1,100+ households in partnership with 57 in-state producers. The Education Building is the only structure in Florida and the second in the Southeast meeting the Living Building Challenge.

RALLY

Central Florida's civic innovation infrastructure

Rally connects vetted ventures with institutional partners to test social and environmental solutions in real-world settings. Operating across a 12-county footprint with municipal contracts with the City of Orlando and Orange County, Rally manages the full Understand, Source, Build, Test, Scale pathway — providing sourcing, pilot design oversight, stakeholder alignment, and data evaluation so 4Roots Farm can address its most urgent objectives without absorbing the risk of pursuing unproven approaches.

HOW THE PARTNERSHIP WORKS

The venture (you)

Leads the pilot. Brings the emerging technology or business model and executes the testing plan.

4Roots Farm

The host. Provides access to controlled campus assets — greenhouse, fields, CHI, Mobile Market — to enable the test.

Rally

The infrastructure. Designs the pilot, aligns stakeholders, and ensures the test produces decision-ready results.

What 4Roots Farm opens to pilots at no cost

-  1-acre greenhouse with 9 growing systems (40,000 lbs./week capacity)
-  Regenerative agriculture fields and Permaculture Forest
-  Culinary Health Institute facilities and clinical staff
-  SNAP-enabled Mobile Market infrastructure
-  Living Building Education Building
-  Staff expertise across agriculture, culinary, health, and education
-  OCPS, AdventHealth, and Valencia College partner channels
-  Evaluation and data support for pilot outcomes

PILOT OPPORTUNITY AREAS

4Roots Farm is accepting pilot proposals on a rolling basis across nine areas. Each represents a real gap in Central Florida's food system with active assets available for testing.

1 REGENERATIVE AGRICULTURE AND SOIL HEALTH

Florida's sandy soils have low organic matter and are highly susceptible to nutrient leaching. Rising temperatures and shifting precipitation patterns are accelerating soil carbon loss across the region.

Soil regeneration

Methods for improving microbial health, enhancing nutrient cycling, and building topsoil.

Climate resilience

Farming methods that can withstand environmental shifts specific to Central Florida.

Water efficiency

Irrigation technologies that protect regional water resources.

2 CONTROLLED ENVIRONMENT AGRICULTURE (CEA) INNOVATION

The 1-acre greenhouse with 9 growing systems and tilapia-powered aquaponics is one of the most sophisticated CEA environments in the Southeast and is actively seeking technology partners.

Advanced greenhouse technology

CEA automation, sensors, and robotics to improve yield and reduce labor intensity.

System enhancements

Aquaponics optimization and climate efficiency solutions to reduce energy footprint.

Workforce training tools

Curriculum preparing students and adults for careers in high-tech agriculture.

3 LOCAL FOOD ACCESS AND NUTRITION

16 food desert communities have been identified across Central Florida. Structural barriers — transportation, digital access, cultural relevance — prevent fresh food from reaching the populations who need it most.

Fresh food pathways

Distribution strategies that shorten the supply chain between farm and community.

Access technology

Digital or physical food access tools tested in real distribution environments.

Cultural relevance

Distribution models serving the diverse populations of Central Florida.

4 MOBILE MARKET INNOVATION

The SNAP-enabled Mobile Market is an active vehicle bringing local produce into underserved communities. It is looking for technology and operational partners to expand reach and improve performance.

Operational optimization

Route optimization and cold-chain preservation to maintain produce quality in transit.

Equitable systems

SNAP integration tools to ensure seamless transactions for underserved community members.

5 CSA INNOVATION — FRESH BY 4ROOTS

Fresh by 4Roots serves 1,100+ household members across Central Florida in partnership with 57 in-state producers. It is one of the largest CSA programs in the Southeast and is actively growing.

Logistics and waste

CSA logistics improvements and models that minimize farm-level waste.

User experience

Member engagement platforms that build long-term community loyalty.

6 CIRCULAR SYSTEMS AND WASTE INNOVATION

4Roots operates in active partnership with O-Town Compost and has an ongoing UCF School of Engineering collaboration developing an aerobic biodigester that converts food waste into solid organic fertilizer.

Resource recovery

Composting process optimization and biodigester technology advancement.

Product innovation

Upcycled food products that create value from surplus ingredients.

7 CULINARY HEALTH AND FOOD AS MEDICINE

The Culinary Health Institute is a live clinical and educational environment partnered with AdventHealth and led by a Chief Medical Officer. It is one of the few institutional settings in the region structured around food-first health intervention.

Clinical models

Nutrition interventions and community health models tested in a real-world setting.

Curriculum development

Culinary medicine programs for patients, clinicians, and the broader community.

8 YOUTH AND EDUCATION

The Living Building Education Building — the only one in Florida — and active partnerships with OCPS, Valencia College, and Orlando Science Center provide a real student pipeline for agriscience and sustainability programs.

Academic integration

STEM-aligned agriscience programs and experiential learning models meeting educational standards.

Career pipelines

Workforce pathways leading students into agriculture, culinary arts, and sustainability careers.

9 FARMER PROSPERITY AND MARKET ACCESS

Florida loses roughly 45,000 acres of farmland per year, in part because farming is not economically viable for the next generation. Fresh by 4Roots and the Reverse Demand Model are active platforms for testing farmer income solutions.

Market growth

Value-added processing and digital market linkage platforms to expand a farmer's reach.

Financial stability

Technologies and business models that stabilize income streams and reduce financial risk.

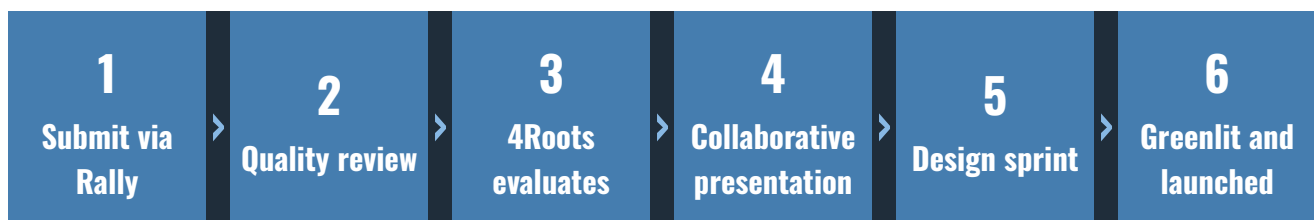
PILOT REQUIREMENTS

- Pilots are unpaid. Clearly identify all in-kind resource needs from 4Roots Farm.
- Duration up to one year. Must be feasible within that window.
- Align explicitly with the food system challenges identified in a specific pilot area above.
- Include a structured learning and evaluation plan to capture data.
- Pose minimal operational, environmental, or community risk.
- Demonstrate a clear pathway from validation to regional sustainability or scale.

WHAT MAKES A STRONG SUBMISSION

- ✓ Clear articulation of the specific problem and the desired outcomes for 4Roots Farm.
- ✓ Evidence of engagement with relevant stakeholders — farmers, families, educators, or clinicians.
- ✓ Realistic in-kind resource needs that fit with available campus assets.
- ✓ Proven team capacity to execute within a professional infrastructure.
- ✓ A defined pathway for how the solution moves from validation to regional standard.

SELECTION AND IMPLEMENTATION PROCESS



Rally oversees execution during the pilot — coordinating stakeholder check-ins, managing documentation, and capturing all data. The goal at every stage is a result that is decision-ready for 4Roots Farm and useful to the region.

Ready to apply? Review the Pilot Prep Guide before submitting. It outlines every question in the submission form and the level of detail required.

Prep guide: [HERE](#)

Submit your proposal: [HERE](#)

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