



Strengthening NC's Farmer-Led Innovation Ecosystem: Deploying a "Farmer-Engaged" Accelerator

(A Recommendation of the ALIGN Technology with Demand Working Group)

The Problem

Through NC Ag Leads focus groups and the "ALIGN Technology with Demand" working group research, we discerned two repeated, consistent concerns.

- Ag technology (broadly) is often developed and even deployed without considerable farmer input, or at best that farmer input comes too late in the developmental process to be meaningful, which results in the promotion of impractical solutions that ultimately fail in the field.
- Despite North Carolina's place in the national innovation ecosystem, our farmers feel as if they nonetheless lack direct, meaningful access to North Carolina's ag-tech ecosystem, specifically early-stage innovation.

The Big Idea

NC Ag Leads identified the need for a farmer-engaged accelerator model that brings farmers into the innovation process early, ensuring technology development is demand-driven, practical, and relevant to North Carolina agriculture. This initiative creates a statewide ag-tech accelerator that connects farmers, researchers, Extension, and industry partners to hasten the validation and adoption of new technologies. The goal of this model is to address North Carolina-specific research needs, deliver solutions that are readily deployed on North Carolina farms, and ultimately to drive commercialization of technology that increases returns for North Carolina agriculture.

Our goal is to:

- Elevate farmer voices in ag-tech development
- Improve adoption and impact of new technologies
- Position North Carolina farmers at the forefront of emerging innovation

The Specifics

NC Ag Leads proposes investing in AgLaunch, a proven, farmer-centric accelerator model that directly addresses this challenge. AgLaunch connects farmers and ag-tech startups early in product development, embedding innovation into real farm environments rather than after-the-fact demonstrations. This gives farmers a front row seat and an active role in shaping the next generation of ag technology.

1. A Proven Partner

AgLaunch is a Memphis-based organization that invests in and operates a farmer-first accelerator model. Through its AgLaunch365 program and farmer innovation networks,



AgLaunch places startups into multi-year, on-farm trials, pairing founders directly with farmer partners.

In North Carolina, this model would include:

- Local coordination and farmer engagement
- Structured on-farm trials
- Data collection and validation
- Regular farmer feedback loops and demonstration events

2. Elements of a NC-style Solution

AgLaunch brings capabilities and structure that NC Ag Leads does not have and which we are not convinced we could build as effectively from scratch. That structure includes:

- A proven system to attract and screen startups
- A farmer-led process to identify high-demand, high-impact solutions
- Operational expertise to deploy, test, and refine technology on farms
- An established Farmer Innovation Network to share results and drive adoption

NC Ag Leads would supplement this standard operating procedure with two key additions, one on the front-end and one on the back-end. On the front end, with the aid of the state's two public land grant institutions, we would establish a much larger farmer innovation network from which to take cues on the most pressing needs. This would be done in collaboration with the farmer advisory group already relied upon by NC State in their Plant Science Initiative. Similarly, we would add educational efforts to the back-end of this model, also in partnership with the land grants, to extend the learnings more deeply into the ag community.

3. Practically, What This Looks Like

- Farmer-led selection & screening: Farmers help screen and select technologies for pilots
- Farmer-immersive acceleration: Startups are embedded with growers through multi-season trials*
 - o *Separate funding will have to be secured for this element of the program
- On-farm trials & data: Technologies are tested under real NC conditions
- Local coordination: Regional staff and partners manage logistics, trials, and field engagement
- Knowledge dissemination: NC Ag Leads supports outreach to the farmer and ag community, as well as partner engagement (NCSU PSI, Extension, Biotech Center,



Research Triangle AgTech Cluster, AgTech Innovation Corridor, private sector partners)

4. What's Undetermined/Input Needed

- We need a fair, comprehensive way to engage the ag community in the initiative. The NC Ag Leads brand will help, but we heard many times that getting farmers to engage could be as difficult as ever. This is particularly true on the heels of another year in which margins were challenged.
- We need to raise funds from a third-party partner without diluting the value of the Golden Leaf partnership.
- We need your input on the “starting point” for what research areas should be at the forefront.

5. Budget Highlights

Total to AgLaunch over 3 years*: \$1,625,000

*See Appendix for more information

- | | |
|---|----------------|
| - NC Farm Trial & Farmer Success Specialist | \$160,000 X 3 |
| - Travel and Materials | \$ 53,333 X 3 |
| - AgLaunch US Team Programmatic & Admin Support | \$ 278,333 X 3 |
| - AgLaunch Playbook | \$ 50,000 X 3 |



Appendix

1. NC Farm Trial + Farmer Success Specialist

Why this matters: Expanding AgLaunch’s farmer-vested innovation model in NC requires dedicated capacity to translate public investment into on-farm innovation and equitable growth. This position will build the infrastructure to connect NC farmers with innovation opportunities. This position will ensure good communications between farmers, the AgLaunch team, and startups, as well as manage the implementation of farm trials.

- One full-time employee with fringe benefits of new AgLaunch employee based in NC that supports farm trials and works under the national AgLaunch farm team.
- Adding additional staff support in year three could be justified based on growth projections. This may be an intern, part-time support or other on-the-ground resources.

2. AgLaunch US Team Programmatic & Admin Support

This line item is for North Carolina’s percentage of time to implement the farmer network, covering farm team time to set up trials and executive time to support the overall effort. This can include, but is not limited to, executive-level team members who may be engaged in program setup and business strategy. The AgLaunch executive team will train and manage the NC Farm Trial Specialist position and will be involved with the execution of farm trials, information gathering, and information dissemination.

3. AgLaunch Playbook

This line item is North Carolina’s IP access to the data collected through on-farm trials and all that AgLaunch has learned through the process on deploying new technology and products on farms. This includes, but is not limited to the AgLaunch toolbox, data co-ops, access to the start-up database, and customized trial protocols.

4. Budget Breakdown

Budget Item	Year 1 (Start up)	Year 2 (Ramp up)	Year 3 (Grow up)	Total
NC Farm Trial + Farmer Success Specialist* ¹ <i>(Employee in-state, including fringe)</i>	\$140,000	\$140,000	\$200,000	\$480,000
Travel and Materials	\$55,000	\$55,000	\$50,000	\$160,000
AgLaunch US Team Programmatic and Administration Support	\$300,000	\$275,000	\$260,000	\$835,000
AgLaunch Playbook <i>(Tech stack that supports AgLaunch Farmers)</i>	\$50,000	\$50,000	\$50,000	\$150,000
Total	\$545,000	\$520,000	\$ 560,000.00	\$1,625,000



Investing in Workforce Needs Data

(Building on the work of the EMPOWER and Equip the Agricultural Workforce Working Group)

The Problem

Through NC Ag Leads focus groups and the work of the “EMPOWER and Equip the Agricultural Workforce” working group, we discerned several repeated, consistent concerns across North Carolina’s agricultural and agribusiness community.

- 1) Employers continue to struggle to fill positions, even as significant investments are made in training, education, and workforce development programs
- 2) Education and training providers lack clear, validated signals from employers about true workforce demand, required skills, and job quality, resulting in misalignment between training pipelines and real-world needs.

The Big Idea

NC Ag Leads identified the need to establish a reputable, employer-centered data foundation (“true north”) before advancing broader workforce solutions for North Carolina agriculture. Rather than presupposing solutions, this initiative prioritizes understanding employer demand, skills, and workforce conditions clearly and consistently, so future decisions can be informed by shared, validated data.

Our goal is to:

- Build a trusted, shared understanding of employer workforce needs in North Carolina agriculture
- Create alignment across employers, education and training providers
- Ensure future workforce investments and initiatives are grounded in credible, employer-validated research
- Convene an advisory council of employers and education system leaders to guide the work and ensure a strong, boots-on-the-ground perspective

The Specifics

NC Ag Leads proposes investing in a six-month workforce research initiative focused on collecting and analyzing employer workforce data for North Carolina agribusinesses. This effort is intentionally sequenced as data first, solutions second, ensuring future workforce actions are informed, coordinated, and aligned with employer realities.



1. An Employer-Centered Research Effort

This investment would support a six-month research study focused on a defined region of the state, engaging a cohort of agricultural employers with shared workforce challenges. The study would establish a standardized, antitrust-compliant process for collecting and analyzing employer data related to workforce demand, job quality, and skills.

2. Elements of an NC-Style Workforce Research Model

The research effort would be designed to generate both actionable insights and a repeatable methodology, including:

- Employer-driven definitions of critical knowledge, skills, and abilities
- De-identified, antitrust-compliant data collection
- Aggregation of workforce demand and job quality signals
- Translation of findings into insights usable by educators, workforce partners, and policymakers

The methodology would be designed so it could be replicated in other regions or applied to other agricultural sectors if warranted.

3. Practically, What This Looks Like

- Advisory council formation: NC Ag Leads convenes employers and education system leaders to guide the scope, ensure relevance, and validate findings
- Employer cohort identification: Agricultural employers with shared workforce needs are identified and recruited
- Antitrust-compliant data collection: Employers provide de-identified data on workforce demand, job quality, and skills
- Skill validation: Employers define and validate the most critical skills required for priority roles
- Data synthesis: Findings are aggregated into clear, actionable insights and summary dashboards
- Methodology documentation: Tools, templates, and workflows are finalized for potential future use

4. What's Undetermined / Input Needed

- What workforce data would be most valuable for North Carolina agriculture to have at this stage?
- How should employers, educators, and policymakers best use the results of this research?



- How should NC Ag Leads handle the transition from research findings to future workforce investments or initiatives? Do you see a path for this transition? Do you envision our only investment to be the data development?
- How can we ensure the research balances diverse employer needs, and how can we scale to include all types/skill levels of jobs?

5. Budget Highlights

Estimated total investment*: \$100,000

*See Appendix for more information

- | | |
|--|----------|
| - Project Lead - NC Chamber Foundation | \$25,000 |
| - Ag Project Manager / Stakeholder Liaison | \$30,000 |
| - Job Quality & Workforce Metrics Consultant | \$20,000 |
| - Instructional Designer / CCS Partner | \$16,000 |
| - Travel & Meeting Facilitation | \$9,000 |

Estimated timeline: Six months



Appendix

This workforce data initiative is intentionally sequenced as a foundational effort. Its purpose is not to advance specific solutions, but to establish a shared, employer-validated understanding of workforce demand, skills, and job quality within North Carolina agriculture.

The data generated through this work would provide a credible baseline to support future coordination and prioritization of workforce-related efforts, including the evaluation and potential pursuit of recommendations emerging from Phase Two of NC Ag Leads. By grounding future discussions and initiatives in consistent, defensible data, NC Ag Leads aims to reduce fragmentation and ensure subsequent investments are aligned with employer realities.

The budget details included in this proposal reflect a preliminary estimate based on the scope and structure of the six-month research effort. Additional detail on budget assumptions and components is provided in this appendix.

Category	Cost	Notes
Project Lead – NC Chamber Foundation	\$25,000	Strategic lead (majority in-kind, partial cost offset)
Ag Project Manager / Stakeholder Liaison	\$30,000	Employer outreach, coordination, and milestone management
Job Quality & Workforce Metrics Consultant	\$20,000	Tool development, compliance, data collection, de-ID, and documentation
Instructional Designer / CCS Partner	\$16,000	KSA facilitation, curriculum translation, and framework development
Travel & Meeting Facilitation	\$9,000	Site visits, virtual platforms, group sessions, transcription
Total	\$100,000	



**Investing in Farmland Loss Research:
GroundTruth NC**

(Building on the work of the HARMONIZE Land and Resource Use Working Group)

The Problem

Through NC Ag Leads focus groups and the work of the “HARMONIZE Land and Resource Use” working group, we discerned two repeated, consistent concerns.

- 1) Farmland loss and land conversion are growing concerns across North Carolina. Working group members also noted the “downstream” impacts of those two factors.
- 2) The true scale and nature of the loss remain unclear. At present, there is no shared, credible dataset that shows how much farmland is being lost, where it is occurring, what types of land are affected, or the cumulative impacts on agriculture and related industries.

The Big Idea

NC Ag Leads identified the need to establish a clear data-driven baseline (“true north”) before advancing solutions, investments, or policy recommendations related to farmland preservation. Rather than presupposing answers, this initiative prioritizes understanding the problem clearly and comprehensively, so future decisions can be informed by shared facts rather than competing assumptions.

Our goal is to:

- Build a trusted, shared understanding of farmland loss in NC
- Ensure future investments and policy discussions are grounded in credible, neutral research
- Discern the potential to create alignment across agriculture, development, conservation, and adjacent industries

The Specifics

NC Ag Leads proposes investing in GroundTruth NC, a comprehensive farmland research initiative, by contracting with American Farmland Trust (AFT) to conduct the analysis. This investment is intentionally sequenced as data first, solutions second, ensuring that any future action is informed, coordinated, and aligned with farmer and stakeholder realities.

1. A Trusted Research Partner

NC Ag Leads proposes investing in GroundTruth NC by contracting with American Farmland Trust (AFT) to conduct the research. AFT is a nationally recognized leader in land-use analysis



and agricultural land research, with a track record of delivering credible, neutral studies that are relied upon by farmers, policymakers, and industry leaders.

2. Elements of a NC-Style Research Effort

AFT brings experience and analytical capacity that NC Ag Leads does not have and would be difficult to build quickly or credibly in-house. That capacity includes:

- Proven methodologies for analyzing farmland loss and land conversion
- Expertise in geospatial mapping and land-use trends
- Ability to pair land-use data with economic impact analysis
- A reputation for neutral, data-driven research

NC Ag Leads would supplement this work with North Carolina-specific context and convening power, ensuring the research reflects the realities and questions facing the state.

3. Practically, What This Looks Like

- Advisory council formation: NC Ag Leads convenes leadership from agriculture and adjacent industries to guide scope and ensure relevance
- Data collection and analysis: AFT conducts and combines geospatial mapping (soil quality, land conversion, low-density residential development, etc.) and economic analysis of impacts on agriculture and related industries
- Ongoing engagement: AFT will be held to regular check-ins with NC Ag Leads and advisors throughout the research process to allow for feedback and refinement
- Policy-neutral posture: Findings are delivered without advancing specific policy recommendations
 - o Note: AFT has a policy department. Following the completion of the research, we may want to work with AFT and develop some policy solutions. That work will not be done until the research is completed.



4. What's Undetermined / Input Needed

What types of data would be most valuable for the state to have regarding farmland loss?

Many public policy officials have prioritized farmland preservation over the last two decades. In your opinion, what is the highest and best use of the research we will produce with this project?

How should NC Ag Leads handle the transition from research to potential policy or investment discussions once the data is complete?

Everyone has many different opinions on how to solve the farmland pressures facing the North Carolina agricultural industry. We want to create research that will be beneficial and useful to everyone. How do we balance those opinions and move forward in developing the scope of the research?

How can we best ensure the research answers the questions North Carolina most needs addressed?

5. Budget Highlights

Estimated total investment*: \$250,000 (including \$25,000 fringe)

*See Appendix for more information

- Geospatial Mapping	\$65,000
- Economic Analyses	\$100,000
- Policy Evaluation	\$25,000
- Data Toolkit/Presentation Materials	\$35,000
- Fringe	\$25,000

Estimated timeline: 18 months



Appendix

NC Ag Leads is working to finalize the scope of work with American Farmland Trust (AFT), informed by input gathered during the Advisory Council meeting, survey responses from Advisory Council members, and feedback from the NC Ag Leads Steering Committee. A consistent theme that emerged from these conversations was the importance of the “so what?” of the research—put another way, what comes next and how the findings will be used or influence future decision-making.

While we do not yet know what the research will ultimately reveal, there is broad agreement that North Carolina currently lacks reliable, granular data that clearly and consistently describes the scope and drivers of farmland loss. This research is intended to provide a credible, shared foundation of information that can support future work, including the pursuit and prioritization of recommendations emerging from Phase Two of NC Ag Leads. Having solid, defensible data will ensure that any next steps are grounded in evidence and informed by a clear understanding of the landscape.

The budget included reflects a preliminary estimate provided by AFT during early conversations about the potential scope of this research and their role in executing it. While a final budget has not yet been established, AFT has shared a reasonable ballpark range, which is what is presented here. We ask that the Golden LEAF Board consider the background and rationale for the research and provide approval that would allow staff the flexibility to finalize the scope and budget, provided the final cost remains within a reasonable range.

KEY COMPONENT	AMOUNT	TIME
<i>Geospatial Mapping</i> (including development scenarios and ancillary services)	\$65,000	Months 0-10
<i>Economic Analyses</i>	\$100,000	Months 4-12
<i>Policy Evaluation</i>	\$25,000	Months 12-16
<i>Localized Toolkit</i> (including toolkit handoff and virtual trainings)	\$35,000	Months 6-18
TOTAL	\$225,000	18 months