2024-2025 Precision Agriculture Infrastructure Grant (PRO-AG) Grant Application (Docket C-5600)

Submit signed PDF applications with all attachments via email to
*psc.broadband@nebraska.gov by **January 17, 2025, 5:00 p.m. Central Time***.

IMPORTANT: Applicants must carefully review the PRO-AG Program Guide and PRO-AG Scoring Reference Sheet for details on application requirements and scoring. This includes but is not limited to application field descriptions, attachment content, and other necessary documentation and requirements. These resources, along with examples of allowed and disallowed costs are available on our website at https://psc.nebraska.gov/telecommunications/2024-2025-precision-agriculture-infrastructure-grant-program-c-5600.

If additional space is needed for any section of the application, you may include extra pages if needed, noting the application Section, Subsection, and Field Number on the attachment.

NOTE: This application is a fillable PDF and should be submitted in its original format, rather than as a printed or scanned copy. If technical difficulties or other challenges prevent you from submitting the form in this format, please contact us to discuss alternative solutions.

Subprogram Descriptions:

Connectivity Subprogram: Grants within the Connectivity Subprogram shall be used to provide adequate precision agriculture connectivity to on-farm structures and devices, including, but not limited to, tractors, combines, irrigation systems, livestock facilities, and farm offices. Adequate precision agriculture connectivity means at least 100 megabits per second download and 20 megabits per second download speeds (100/20 Mbps).
Note: Applications for the Connectivity Subprogram are permitted from Providers. Agricultural Cooperatives, Agronomists, and Agricultural Producers may apply only if partnered with a Provider.

Devices and Technology Subprogram: Grants within the Devices and Technology Subprogram shall be used to provide: (1) On-farm traceability solutions that satisfy food supply stakeholder demand, including blockchain. (2) Products that improve soil health, water management tools and sensors that facilitate judicious use of water resources, and products that promote the use of water efficiency seed technologies that lower agriculture's water, carbon, and nitrate footprint. (3) Products that use autonomous solutions in agricultural machinery, including but not limited to, grain carts, spreaders, precision drone scouting, and scouting robots.

NOTE: Each subprogram is designed to fulfill a specific purpose, and applicants can submit multiple project proposals in separate submissions. However, applicants must apply separately for each subprogram. It is important to note that each application will be assessed individually, and there will be no priority given to applicants who choose to apply for grants in both subprograms. Each application will be considered on its own merits within the subprogram in which it was filed.

Eligible Applicant Types:

- Provider: A wireless network provider that provides adequate precision agriculture connectivity. Proof needed: Proof of business registration and service authorization in Nebraska.

- Agricultural Cooperatives: A business entity that is cooperatively owned and controlled by agricultural producers, in which members' resources are pooled, and which operates for its members' benefit rather than the benefit of outside investors. Proof needed: Articles of incorporation, membership information, and proof of registration as a cooperative in Nebraska.

- Agronomist: A scientist who specialized in the science of farming, including but not limited to crop production, soil control, or soil management. Proof needed: Professional certifications, degrees in relevant fields, and portfolio of agriculture-related projects.

- Agricultural Producer: An individual or entity directly engaged in the production of agricultural products, including the cultivating, growing, and harvesting of plants and crops, including farming; breeding, raising, feeding, or housing of livestock, including ranching; forestry products; hydroponics; nursery stock; or aquaculture, and whereby 50 percent or greater of their gross income is derived from these products. Proof needed: See "Agricultural Producer Affidavit" on our website.

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Section I: Applicant Details *(Applies to __all__ applicants)*	
1. Subprogram Type: *(See Descriptions Above)*	
2. Applicant name (Legal name of the farm/business applying for the grant):	
3. Applicant type: *(See Definitions Above)* Proof of applicant type should be included with application as Attachment B.	
4. Applicant street address:	
4a. Applicant city:	
4b. Applicant state:	
4c. Applicant zip code:	
5. Applicant contact (first and last name):	
6. Applicant e-mail:	
7. Applicant phone number:	
8. Executive Summary: Provide an overview of the applicant, detailing the history, mission, and goals of the farm or business. Include specific objectives related to precision agriculture connectivity or technology adoption.	

Section II: Project Details *(Applies to all applicants)*	
1. Project name:	
2. Precision agriculture production type:	

3. Project location description: (This should include a detailed description of the project area and location(s) to be served.)

4. Project Proposal: (a) Description of the precision agriculture project you plan to implement. -AND- (b) Explanation of how the on-farm connectivity or devices and technology will be utilized to enhance productivity, efficiency, and sustainability. *Please include information showing that the applicant is prepared to move forward immediately upon award of grant.*

5. Total Project Cost *(include allowable costs only)*: *See project budget instructions and examples on our website.*	$

6. Total Match Commitment Amount (in dollars), *if applicable*: NOTE: The project budget (attachment A) must detail any matching funds committed by source. Additionally, documentation of match commitment must be submitted as Attachment E. See "Contribution Certification Form" on our website.	$
7. PRO-AG Grant Amount Requested:	**$**
8. Estimated number of locations served in project area:	
9. Technology type(s) used in proposed project:	
10. Expected Start Date (*Should <u>not</u> be prior to 4/15/25):*	
11. Expected completion date (*Should <u>not</u> be after 4/15/26):*	
12. Timeline: Please outline the timeline for your project deployment, including clear milestones and indicators of readiness for immediate action upon grant award. Provide an explanation of any measures you have in place to address potential challenges during the implementation process.	

13. Sustainability: Provide an explanation of how the project will be sustainable for a minimum of five years; include strategies and considerations for long-term success. Attach any evidence of sustainability to the application as Attachment F.

Section II Project Details – Subsection A: *Applies to Connectivity subprogram ONLY*	
1. Farm Site Size (acres):	
2. Number of Key Operational Locations:	
3. Number of Connected On-Farm Entities:	
4. Current maximum connection speed bandwidth in project area in Mbps: *(Must be < 25/3 Mbps)*	
5. Speeds upon completion: *(Must be $\geq$ 100/20 Mbps)*	
6. Do you certify that the farm site(s) to be served are currently unserved or lacking broadband Internet service at speeds of at least 25/3 Mbps download/upload?	
7. Do you certify that upon completion of the project, the farm site(s) served by the project will have access to minimum speeds of 100/20 Mbps for precision agriculture connectivity to on-farm structures and devices, as required by Neb. Rev. Stat. § 86-1404(2)(a)? NOTE: If the FCC National Broadband Map indicates that the location is already receiving speeds of 25/3Mbps or higher, applicants are required to submit evidence refuting the data on the broadband map. (Include as Attachment F)	

Section III: Technical Summary *(Applicants must complete the relevant subsection)*

Section III: Technical Summary – Subsection A: *Applies to Devices and Technology subprogram ONLY*

1. Applicant's Experience: Overview of the applicant's experience and expertise in precision agriculture devices and technology solutions, specifically as related to the devices/technology included in the application. In cases where the applicant lacks direct experience, an explanation is required on how they plan to acquire the necessary skills and knowledge to operate the equipment effectively. Provide details of past successful projects or initiatives related to precision agriculture or similar technologies.

2. Program Details: Provide details about the proposed program involving precision agriculture devices and technology, including specifications and technical requirements. Include an explanation of how the chosen technologies align with the goals of the project.

3. Expected Useful Life: The expected useful life of devices/technology included in the request for funding. Please identify any components which may require more frequent repair or replacement.

4. Maintenance Plan: Applicants should explain how the devices/technology funded with PRO-AG grant funds will be maintained for at least five years following project completion.

Section III: Technical Summary – Subsection B: *Applies to Connectivity subprogram ONLY*
1. Applicant's Experience: Describe the applicant's experience providing precision agriculture on-farm connectivity solutions including their technical capability to meet the requirement to provide a minimum 100/20 Mbps. Include details of past successful projects or initiatives related to precision agriculture connectivity or similar technologies. Specifically, whether they currently provide broadband at the minimum 100Mbps/20Mbps speeds, and if so, where.

2. Innovation and Technology: Provide a detailed description of the proposed network architecture including the specific technologies and strategies to provide service, a list of the on-farm structures and devices to be connected by project, placement of access points, data collection devices, and other key elements.

3. Scalability Evaluation: Explain how the solution ensures reliable and scalable connectivity. This could include a plan for network expansion along with a description of strategies for preserving performance with increased device density.

4. Maintenance Plan: Include details regarding the expected useful life of the facilities to be built. Include a statement as to the technological components used, and, if applicable, which components may require more frequent repair or replacement. Applicants should explain how the project will be maintained throughout the useful life of the facilities along with the applicant's plans to meet the minimum speed requirements in place for the PRO-AG grant for a minimum of five years following completion.

5. Latency: Include the expected latency of the network (in ms) upon completion. Explain how the expected latency aligns with the needs of your application. How does this latency impact the ability to perform real-time operations or data transfers in the context of precision agriculture?

Section IV: Legal *(Applicants must complete the relevant subsection)*
Section IV: Legal – Subsection A: *Applies to Devices and Technology subprogram ONLY*
1. Provide a detailed outline of the pertinent qualifications and certifications essential for the proposed devices/technology. Explain whether the applicant currently holds the necessary qualifications and certifications, including any expiration dates. If not currently secured, define the planned steps and timelines for acquiring any essential qualifications and certifications.
Section IV: Legal *(Applicants must complete the relevant subsection)*

2. Detail the applicant's strategies and commitments for sustaining the qualifications and certifications over the five-year post-deployment period.

Section IV: Legal – Subsection B: *Applies to Connectivity subprogram ONLY*	
1. Applicant's Nebraska ETC Status:	
2. Legal Representative Name (Must be licensed and in good standing to practice law in Nebraska or admitted pro hac vice)	
3. Legal Representative Email:	
4. Legal Representative Phone:	

5. A description of any risk factors or legal challenges that must be addressed prior to or during the project in question (examples include local zoning, permitting, access to rights-of-way, etc.), as well as a plan for mitigation. Additionally, explain any engagement measures with proposed project location(s) or impacted communities.

Section IV: Legal – Subsection B: *Applies to Connectivity subprogram ONLY*

6. Has the applicant received letter(s) of support or approval from the owner of each farm site included in the grant application? Yes/No. NOTE: Letters of support must be attached to the application as attachment G and should clearly express the owner's consent for the connectivity project and their understanding of the proposed on-farm connectivity services and rates charged for service.	

Section V: Project Impact *(Applies to all applicants)*

1. Demonstrated Substantial Economic Benefit: Describe the significant economic impact your project will have on rural Nebraska. What tangible benefits can you quantify, such as job creation and income generation? Please provide illustrative examples.

2. Continuing or Increasing Economic and Technological Impacts: How will your project provide ongoing economic and technological benefits over time? Outline the strategies you will implement to ensure sustained growth and progress beyond the initial implementation phase.

3. Water Conservation Focus: If applicable, please explain in what ways does your project prioritize water conservation? Explain the innovative strategies, technologies, or practices you plan to implement to promote sustainable water management and mitigate water usage.

Section VI: Financial Projections *(Applies to __all__ applicants)*

1. Provide comprehensive financial projections for the project. This should include both short-term (1-3 years) and long-term (4+ years) forecasts, detailing anticipated costs, revenues, and key financial health indicators such as net cash flow and profitability ratios. The projections should demonstrate a realistic estimate of income and expenses and the overall financial impact of the project.

Section VI: Financial Projections *(Applies to __all__ applicants)*

Section VII: Cost Benefit Analysis *(Applies to <u>all</u> applicants)*

1. Provide a detailed cost-benefit analysis for the project. This analysis should quantify the expected return on investment (ROI), outlining the financial impact of the project in both the short-term (1-3 years) and long-term (4+ years). The analysis should clearly demonstrate the financial returns of the investment.

Section VII: Cost Benefit Analysis *(Applies to <u>all</u> applicants)*

Section VIII: Monitoring and Evaluation *(Applies to all applicants)*
1. Clearly list the major milestones that will be used to track the progress of your project. This should include a timeline for deployment of connectivity OR devices and technology. Each milestone should include an expected completion date. Examples: (1) Installation of connectivity infrastructure by [insert date]. (2) Deployment of smart sensors by [insert date]. (3) Full project implementation by [insert date].

2. Identify the specific Key Performance Indicators (KPIs) that will be used to measure the success of the project following implementation. Each KPI should be measurable and aligned with the project's objectives. Examples: (1) [X]% increase in crop yield by [insert date]. (2) [X]% reduction in water usage within [insert time frame]. (3) [X] number of devices connected to the system by [insert date]. (4) [X]% improvement in farm operational efficiency by [insert date].

3. Please explain the plan for monitoring and evaluating the success of the precision agriculture project. Include a detailed explanation of how Key Performance Indicators (KPIs) included in Section VII, field 2 above will be tracked and monitored throughout the project. Include specific metrics, tools, and timelines that will be used to track progress and measure outcomes.

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Attach/Include (see Program Guide for details):

<u>ALL</u> Applicants Must Include:

☐ Attachment A. Project Budget/Documentation
☐ Attachment B. Eligible Entity Documentation
☐ Attachment C. Cybersecurity
☐ Attachment D. DJI Attestation
☐ Attachment E. Match Documentation
☐ Attachment F. Other Supporting documentation
                 (if applicable)

Connectivity Subprogram Applicants Must Also Include:

☐ Attachment G. Legal
☐ Attachment H. Technical
☐ Attachment I. Financial Statements
☐ Attachment J. Rate Comparability
☐ Attachment K. Shapefiles
☐ Attachment L. Project Diagram
☐ Attachment M. List of Key Operational Locations

APPLICANT CERTIFICATION:

I, the undersigned _____ representing _____, hereby
                             [Legal Name]   [Farm/Business Name]

certify the eligibility of our entity/project for the Precision Agriculture Grant (PRO-AG). By signing this statement, I

confirm the legal name, contact details, size, and location of the farm site(s), along with our eligibility type as a

_____. Attached are supporting documents
[Provider/Agricultural Cooperative/Agronomist/Agricultural Producer]

validating our eligibility, and I declare adherence to all requirements outlined in Precision Agriculture Connectivity

Infrastructure Grant Act (Neb. Rev. Stat. § 86-1401 et seq.) & Commission Order C-5600. I certify that all information we

have submitted on this application and its supporting documents is true and correct. I certify that we are not currently

using, nor will we use, prohibited communications equipment and services developed by organizations on the Federal

Communications Commission's Covered List pursuant to 47 U.S.C. § 1601. I understand that the submission of any false

information or failure to comply with Commission requirements may result in penalties towards me and/or my

organization.

Your signature confirms the accuracy and authenticity of the provided information. It will be considered binding for all

purposes related to this application and any subsequent agreements or certifications.

_____   _____
Printed Name of Authorized Person   Date

_____
Title of Authorized Person

_____   _____
Signature of Authorized Person