United States Department of Agriculture (usda.gov): USDA-NIFA: National Institute of Food and Agriculture

Expected Data Type

Describe the type of data (e.g. digital, non-digital), how it will be generated, and whether the data are primary or metadata.

- Research examples include: lab work, field work and surveys.
- Education examples include: number of students enrolled/participated, degrees granted, curriculum, and training products.
- Extension examples include: outreach materials, number of stakeholders reached, number of activities, and assessment questionnaires.

Guidance:

- Data Management Plan for NIFA-Funded Research, Education, and Extension Projects
- NIFA Data Management Plan Frequently Asked Questions
- USDA National Agriculture Library Guidelines for Data Management Planning

Data Format

For scientific data to be readily accessible and usable it is critical to use an appropriate community-recognized standard and machine readable formats when they exist. If the data will be managed in domain-specific workspaces or submitted to public databases, indicate that their required formats will be followed. Regardless of the format used, the data set must contain enough information to allow independent use (understand, validate and use) of the data.

Guidance:

- Data Management Plan for NIFA-Funded Research, Education, and Extension Projects
- NIFA Data Management Plan Frequently Asked Questions
- USDA National Agriculture Library Guidelines for Data Management Planning

Data Storage and Preservation

Data must be stored in a safe environment with adequate measures taken for its long-term preservation. Applicants must describe plans for storing and preserving their data during and after the project and specify the data repositories, if they exist. Databases or data repositories for long-term preservation may be the same that are used to provide Data Sharing and Public Access. Estimate how much data will be preserved and state the planned retention period. Include any strategies, tools, and contingency plans that will be used to avoid data loss, degradation, or damage.

Guidance:

- <u>Data Management Plan for NIFA-Funded Research, Education, and Extension Projects</u>
- NIFA Data Management Plan Frequently Asked Questions
- USDA National Agriculture Library Guidelines for Data Management Planning

Data Sharing and Public Access

Describe your data access and sharing procedures during and after the grant. Name specific repositories and catalogs as appropriate. include a statement, when applicable, of plans to protect confidentiality, personal privacy, proprietary interests, business confidential information, and intellectual property rights. Outline any restrictions such as copyright, confidentiality, patent, appropriate credit, disclaimers, or conditions for use of the data by other parties.

Guidance:

Applicants are encouraged to consider using platforms, catalogs, and workspaces provided by USDA (e.g., the <u>Ag Data Commons</u>), and include adequate funds in the budget to support data management and submission fees as required by the platforms, catalogs, etc.

- Data Management Plan for NIFA-Funded Research, Education, and Extension Projects
- NIFA Data Management Plan Frequently Asked Questions
- USDA National Agriculture Library Guidelines for Data Management Planning
- Ag Data Commons

Roles and Responsibilities

Who will ensure DMP implementation? This is particularly important for multi-investigator and multiinstitutional projects. Provide a contingency plan in case key personnel leave the project. Also, what resources will be needed for the DMP? If funds are needed, have they been added to the budget request and budget narrative? Projects must budget sufficient resources to develop and implement the proposed DMP.

Guidance:

- Data Management Plan for NIFA-Funded Research, Education, and Extension Projects
 NIFA Data Management Plan Frequently Asked Questions
 USDA National Agriculture Library Guidelines for Data Management Planning