Illinois Office of Broadband

Illinois Department of Commerce & Economic Opportunity
OFFICE OF BROADBAND
JB Pritzker, Governor

BEAD ENVIRONMENTAL & HISTORIC PRESERVATION

Environmental and Historic Preservation Guidebook for Grantees

A user guide to the Illinois Office of Broadband NEPA process

Broadband Equity, Access, and Deployment Program

Environmental and Historic Preservation Guidance

Terracon
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Prepared for grantee use | last updated: November 11, 2026

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Disclaimer

This information is provided as guidance to assist Internet Service Providers (ISPs) in understanding Environmental and Historical compliance under the BEAD Program. This guide is subject to change based on updates from the National Telecommunications and Information Administration (NTIA). In the event of any inconsistencies between this document and NTIA-issued guidance, the most recent NTIA guidance takes precedence. Grantees are encouraged to regularly review official NTIA resources and consult with IOB for clarification.

How to use this guide	Start with the overview and roles, then follow the eight-step workflow. Use the appendices for definitions, Environmental Screening and Permitting Tracking Tool (ESAPTT) context, and step-specific instructions. A full list of acronyms are defined in Appendix A.
Important guidance notice	Appendix D contains specific Grantee Guidance Documents and Instructions for individual steps where grantees have responsibility.

Updates to this guide:

November 11, 2026	• Added NEPA Sub-Project Package Instructions to the Appendix

NEPA Compliance for BEAD

This Guidebook provides information and guidance to help grant recipients comply with environmental and historic preservation (EHP) requirements for the Broadband Equity, Access, and Deployment (BEAD) Program overseen by the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA) and by the Illinois Office of Broadband (IOB).

What is the National Environmental Policy Act (NEPA)?

NEPA (42 U.S. Code Section 4321 et seq.) requires the consideration of environmental effects related to federal actions and federal decision-making. Because projects under the BEAD Program are receiving federal grant funding, the projects must comply with NEPA and related environmental laws, such as the National Historic Preservation Act (NHPA), Endangered Species Act (ESA), and others. NEPA outlines three levels of environmental review in which a project can qualify under one of the following:

- **Categorical exclusion (CatEx):** A project is "categorically excluded" from detailed environmental analysis when it would not have a significant effect on the environment.
- **Environmental assessment (EA):** A project with the potential to result in significant effects on the environment undergoes the EA process to determine whether significant effects would occur.
- **Environmental impact statement (EIS):** A project that would have significant impacts on the environment would require the preparation of an EIS—it is unlikely that a single BEAD project would require an EIS.

The majority of projects under the BEAD Program are anticipated to qualify for a CatEx. Factors impacting the potential for a CatEx include meeting the specific design requirements associated with applicable NTIA and FirstNet exclusions as well as the potential for Extraordinary Circumstances (ECs), which are areas of potential environmental or historic preservation impact that would elevate the project above the CatEx threshold.

CatEx documents will be developed by IOB through use of NTIA's ESAPTT, which evaluates the above information in a question-and-answer format. CatEx projects are expected to take approximately 3-6 months, which includes a 2-week review period and issuance of a decision memo by NTIA. Projects that will need additional review through preparation of an EA or EIS would require a longer timeframe, to be individually determined in coordination with NTIA.

Construction restrictions	Grantees must not begin construction of a BEAD-funded project until NTIA has issued approval through a NEPA Decision Memo.

The Importance of ESAPTT

As previously discussed, CatEx documents will be developed by IOB through use of NTIA's ESAPTT Tool. ESAPTT serves as the official environmental screening record for each NEPA Sub-Project. Information entered in the ESAPTT record reflects what is being built, where project activities will occur, how construction will be completed, and whether environmental or historic resources may be affected. NTIA and IOB use this information to evaluate the applicability of exclusions, identify potential ECs, and establish the supporting administrative record for its NEPA determination. Accurate, complete, and project-specific responses are therefore essential to demonstrating that the project has been appropriately screened and that the necessary environmental and historic preservation considerations have been addressed.

Because NTIA's review is only as reliable as the information provided, grantees should ensure that all information provided for this process result in ESAPTT responses that accurately reflect the final project design, construction methods, locations, and anticipated impacts for each NEPA Sub-Project. Inaccurate, incomplete, or inconsistent responses can result in requests for additional information, delays in review, or the need for additional environmental analysis. Conversely, a well-documented ESAPTT record helps NTIA efficiently determine whether a CatEx applies, evaluate any extraordinary circumstances, document required consultations and permits, and maintain a defensible NEPA administrative record for the project.

As outlined further in this document, the grantee will be responsible for providing ESAPTT responses related to project design as part of the NEPA Sub-Project Package. Any changes to project design after the completion of the NEPA Sub-Project package should be communicated to IOB so the NEPA record can be updated to accurately reflect these changes. Project changes submitted after the NEPA Sub-Project Package step may result in repeating previously completed steps in the process.

Roles and Responsibilities

For Illinois BEAD projects, IOB serves as a joint lead agency alongside NTIA and shares responsibility for ensuring compliance with NEPA and related federal EHP requirements. IOB coordinates environmental review activities within the state to facilitate timely compliance and minimize potential NEPA-related delays during BEAD Program implementation.

IOB Role: IOB shall prepare or supervise the preparation of required EHP compliance documents, depending on the complexity of the deployment activity and the capability of the grantee implementing the deployment activity. In all cases, IOB shall centrally review and concur with the findings and recommendations of all EHP compliance documentation prior to approval. IOB has retained Terracon as a subject matter expert (SME) and Geographic Information System (GIS) specialists to both coordinate review activities and prepare environmental review documents, as necessary.

Grantee Role: Grantees are responsible for the timely submission of project data necessary to complete EHP reviews. In most circumstances, IOB will supervise the preparation of required BEAD EHP compliance documents for the purposes of NTIA approval. Grantees will retain the responsibility for providing requested route and project design information to support EHP reviews; coordinating with IOB on identified EHP concerns and potential design solutions for avoidance and mitigation; and obtaining permits for their construction activities (e.g. construction stormwater permits, wetlands or waters of the US [WOTUS] permits, or right-of-way [ROW] permits). Copies of applications, of issued permits, and other associated documents may be requested from the grantee upon request. The grantee will also be responsible for obtaining a qualified EHP specialist in the case that targeted field studies are required to support agency consultation, the preparation of an EA is required, or another lead federal agency is involved in a project's NEPA process.

IL BEAD Portal: The file sharing platforms used by IOB to facilitate information and document sharing for IOB BEAD EHP projects.

This document serves as a guide to facilitate the transfer of the necessary information to carry out these reviews. Ultimately, the final determination of the environmental review will be made by NTIA.

IOB EHP Process: An Eight-Step Grantee Workflow

IOB EHP Process consists of eight steps, many of which will be completed by IOB. The below graphic illustrates a description of each step and the associated grantee actions. Further process details are provided in the following sections.

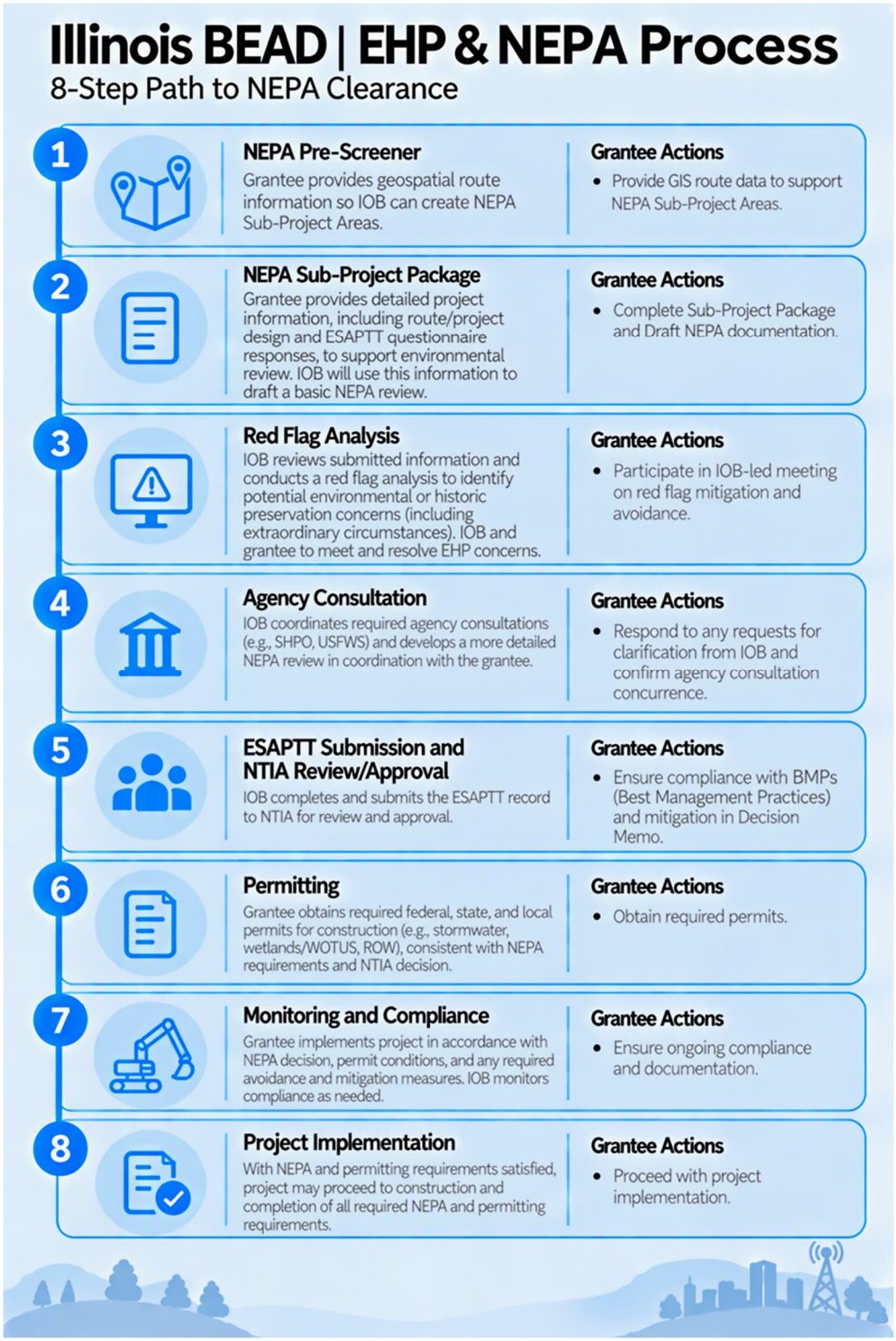


Figure 1. IOB EHP Process for BEAD Grantees: Eight Steps

1. NEPA Pre-Screener

Purpose

When the grantee has a high level of confidence in their route map, technology type, and service locations, they submit this information via the Illinois BEAD portal. IOB will then use this information to establish NEPA Sub-Project Areas and will send to the grantee for review. The desired outcome is a mutually agreed upon set of NEPA Sub-Project Areas between IOB and grantee for efficient environmental review.

Grantee actions

- Submit geospatial data showing the proposed network design/technology and project location.
- Identify the Broadband Serviceable Locations (BSLs) and Community Anchor Institutions (CAIs) served.
- Review proposed NEPA Sub-Project Area determinations and provide feedback before finalization.
- Follow Appendix D submission instructions.

IOB actions

- Review submitted geospatial and service-location information.
- Recommend whether the project should be divided into multiple NEPA Sub-Project Areas.
- Notify the grantee, collect feedback, and collaboratively finalize the NEPA Sub-Project Areas.

Best practices

- Provide complete, internally consistent route and service-location data.
- Use clear file names and version control for revised geospatial files.
- Resolve route or BSL/CAI discrepancies before boundaries are finalized.

2. NEPA Sub-Project Package

Purpose

After NEPA Sub-Projects are created, the grantee will submit more detailed project information on the NEPA Sub-Project level to define what will be built, where construction will occur, how work will be completed, and the physical limits of NEPA project activities within the Illinois BEAD portal. This information will be the package of information used to support documentation for NEPA milestone scheduling, ESAPTT records, tribal consultation, and Red Flag Analysis.

Grantee actions

- Provide the Project Description Summary, Project Map, Detailed Project Description, geospatial design files, selected design-related ESAPTT Questionnaire data, and a Draft NEPA Milestone Schedule by following Appendix D preparation instructions.
- Include available prior EHP documentation (if applicable).

IOB actions

- Review and finalize the information submitted by the grantee for accuracy and completeness.
- Create an ESAPTT Grant Project Record for each NEPA Sub-Project.
- Use the package to support tribal consultation and Red Flag Analysis.

Best practices

- Keep narratives, maps, and geospatial files aligned to the same design version.
- Clearly distinguish BEAD funded activities from related work outside the funded scope.
- Submit any prior EHP studies to aid IOB in their own review.

Tribal Notification	Consultation with federally recognized tribes for feedback on each project is an important part of the NEPA and NHPA process. Tribal consultation for the grantee starts with the NTIA ESAPTT Grant Project Record. After IOB creates each NEPA Sub-Project Grant Record, a specific list of tribes is contacted by NTIA. Those tribes have 30 days to respond and request any additional information. If additional information is requested, IOB will coordinate that information for the tribe on behalf of the grantee.

3. Red Flag Analysis

Purpose

IOB will use the information from the NEPA Sub-Project Package step to identify potential EHP concerns. Once identified, IOB will work with the grantee to determine how the EHP concerns can be avoided, minimized, mitigated, or studied before agency consultations and final NEPA processing. The appendix of this EHP Guide includes an EHP Red Flag Avoidance Guide, which presents strategies for the grantee to design with red flag avoidance in mind.

Grantee actions

- Consult the EHP Red Flag Avoidance Guide for strategies to avoid red flags.
- Participate in the red flag findings meeting with IOB.
- Review every concern in the findings memo and provided maps before and during the meeting.
- Work with IOB to select avoidance, minimization, mitigation, Best Management Practice (BMP), or additional-study measures.
- If design changes are required for mitigation, revise and resubmit the NEPA Sub-Project Package with the design changes incorporated.

IOB actions

- Review wetlands and waters, cultural resources, threatened and endangered species, and other NTIA NEPA items of concern.
- Provide a findings memo and maps showing the areas of potential concern (red flags).
- Lead the review meeting and collaborate on resolutions for each red flag.
- Repeat analysis when revised design requires package reinitiation.

Best practices

- Use the memo and maps as an action list and document each concern’s determination.
- Evaluate design avoidance as early as possible because later changes can restart the review process.
- Synchronize all revised narratives, maps, and geospatial files.

4. Agency Consultation and NEPA Milestone Schedule

Purpose

IOB will prepare consultation materials and update the draft NEPA milestone schedule with detailed consultation agency information and permitting steps. IOB will submit information to the agencies based on the projects that impact them and will receive a response on next steps. Based on the agency consultation responses received, the consultations will either be closed out with the project ready for ESAPTT submission (full agency concurrence) or the consultations will require resolution of a specific agency concern.

Agency concerns may be resolved through such actions as mitigation, BMPs, monitoring, or additional survey work. In the case that additional work or commitments are required, the results of the agency consultation responses will be provided to the grantee and a meeting will be held to resolve the next steps. Any survey work or fieldwork required for agency consultation should be provided by the grantee through their designated EHP vendor. IOB will perform a sufficiency review of those submissions before providing them to the agency for their review. Agency consultation will be considered close once the agency has concurred on the project or the appropriate review timeout has expired.

Any additional BMPs or mitigation measures determined to be required through agency consultation must be confirmed by the grantee before any commitments are made back to the agency requiring them. All mitigation measures, BMPs, or other related commitments will be memorialized in the final NEPA Decision Memo as grantee requirements.

Grantee actions

- Provide feedback on any IOB modifications to the existing NEPA Milestone Schedule.
- No other routine submittal is expected unless IOB requests additional information or mitigation input.
- Respond to requests for clarification, information, and concurrence with mitigation commitments.

IOB actions

- Assist the grantee in updating the existing NEPA Milestone Schedule with detailed permitting steps and durations.
- Prepare agency consultation packages and submit them to agencies for review.
- Use Secretary of the Interior-qualified staff to review materials and determine potential effects on historic properties.
- Coordinate with SHPO and relevant federally recognized Tribes, as determined necessary.
- Determine whether an applicable no-effect pathway applies or Section 7 review is required.
- Coordinate with USFWS, as determined necessary.
- Prepare determinations and consultation materials and notify the grantee of additional requirements.

Best practices

- Confirm that the most recent design plans are utilized in consultation and match the red flag analysis outcome design.
- Keep design and ground-disturbance information current.
- Notify IOB before changing routes, access, staging, or construction methods.
- Confirm adherence to any BMPs or mitigation measures identified by agency consultation.

5. ESAPTT Submission and NTIA Review

Purpose

IOB will complete the ESAPTT Questionnaire for each NEPA Sub-Project and upload supporting documentation obtained from the Red Flag Analysis and Agency Consultation steps. IOB will submit the ESAPTT Questionnaire to NTIA for review and approval. NTIA will respond with the decision memo with the findings of the environmental review.

Grantee actions

- No routine submittal is expected unless IOB requests additional information or input.
- Respond promptly to any request.

IOB actions

- Complete the ESAPTT Questionnaire for each NEPA Sub-Project.
- Upload Red Flag and consultation documentation.
- Submit to NTIA, coordinate responses, and provide the issued decision memo.

Best practices

- Check consistency across the questionnaire, maps, descriptions, consultation documents, and commitments.
- Maintain one authoritative record per sub-project.
- Convert decision-memo conditions into trackable requirements for grantee.

When an Environmental Assessment (EA) Applies

- In the case that a project exceeds a threshold required to meet the NTIA Categorical Exclusion level of review, an EA will be required. Before proceeding with the EA process, a meeting will be held with the grantee to discuss the project-specific items that are causing the threshold exceedance. IOB will work with the grantee to determine if there is any possible way to avoid the need for an EA through project design changes or other mitigation measures.
- If avoidance is not possible, the project will be escalated to the NTIA Environmental Review team to coordinate with IOB and the grantee on the EA process. The EA process will consist of determining a mitigation strategy to reduce the environmental concern to less than significant levels, development of an EA report that follows NTIA's guidelines, an EA public review and comment period, additional layers of NTIA review, and the publication of a Finding of No Significant Impact (FONSI). Similar to the Decision Memo, all mitigation measures, BMPs, or other related commitments will be memorialized in the final FONSI as grantee requirements.
- This process would fall outside of a typical CatEx NEPA Milestone Schedule. A new NEPA Milestone Schedule would be created for the project that follows the EA process. The development of a draft and final EA report and FONSI would be the responsibility of the grantee's EHP vendor. IOB and Terracon would coordinate closely with the vendor to develop those documents and provide any supporting documentation developed during the EHP process up until the need for an EA was determined.
- The project will move forward with construction following the requirements of the FONSI in a similar manner as a CatEx would move forward following the requirements of the Decision Memo.

6. Permitting

Purpose

The grantee will obtain necessary local, state, and federal permits and document permit requirements associated with the NEPA decision memo.

Grantee actions

- Identify and obtain required permits.
- Track and complete permits that cannot be issued until after the NEPA decision.
- Document decision-memo permits and track conditions, status, and renewals.

IOB actions

- Coordinate with grantee on permit requirements reflected in the schedule or decision memo.
- Track grantee permitting in READY platform.

Best practices

- Follow the NEPA permitting milestone schedule, grantee permitting tracking tool, and the NEPA decision memo for guidance.
- Use the approved project scope and design in applications.
- Do not begin permit-dependent work before authorization.
- Notify IOB of any design changes that could impact NEPA.

7. Monitoring and Compliance

Purpose

The grantee will carry BMPs, mitigation, and monitoring requirements into construction and document compliance.

Grantee actions

- Include requirements in construction plans and contractor direction.
- Construct only under applicable approvals and conditions.
- Facilitate monitoring, retain evidence, and document corrective actions.

IOB actions

- Provide clarification or coordination as needed.
- Review compliance information when requested for an approved measures or monitoring.

Best practices

- Maintain a commitment register with requirement, owner, timing, evidence, and status.
- Brief field teams and contractors before work begins.
- Keep dated records, inspection results, photographs, and corrective-action documentation.
- Notify IOB of any design changes that could impact NEPA.

8. Project Implementation

Purpose

The grantee will proceed with construction after NEPA and permitting are complete while preserving the validity of the approved review.

Grantee actions

- Confirm NEPA completion before construction.
- Build to the approved design and conditions.
- Immediately communicate any post-NEPA design change to IOB before implementation.

IOB actions

- Evaluate reported changes for potential NEPA consideration.
- Advise whether additional review or documentation is required.

Best practices

- Notify IOB of any design changes that could impact NEPA.
- Retain the approved design, permits, decision memo, commitments, and compliance records together upon completion.

Appendix A: Definitions

ACHP – Advisory Council on Historic Preservation

APE – Area of Potential Effect

APPEIT – ArcGIS Pro Permitting and Environmental information Tool

ARPA – Archaeological Resources Protection Act

BEAD – Broadband Equity Access and Deployment

BEP – Business Enterprise Program

BGEPA – Bald and Gold Eagle Protection Act

BIA - Bureau of Indian Affairs

BLM – Bureau of Land Management

BMP – Best Management Practice

BOTB – Benefit of the Bargain

BSL – Broadband Serviceable Locations

CAA – Clean Air Act

CAI – Community Anchor Institution

CE or CatEx – Categorical Exclusion

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CFR – Code of Federal Regulations

COI – Certificate of Insurance

CWA – Clean Water Act

CZM – Coastal Zone Management

DCEO – Illinois Department of Commerce and Economic Opportunity

DIT – Department of Intelligence and Technology

DOT – Department of Transportation

EA – Environmental Assessment

EC – Extraordinary Circumstances

EcoCAT - Ecological Compliance Assessment Tool

EE – Eligible Entity

EHP – Environmental and Historic Preservation

EIS – Environmental Impact Statement

EJ – Environmental Justice

ESA – Endangered Species Act

ESAPTT – Environmental Screening and Permitting Tracking Tool

FAA – Federal Aviation Administration

FCC – Federal Communications Commission

FirstNet – First Responder Network Authority

FONSI – Finding of No Significant Impact

FPPA – Farmland Protection Policy Act

FRA – Federal Railroad Administration

GIS – Geographic Information System

IBC – International Building Code

ICC – Illinois Commerce Commission

IDOT – Illinois Department of Transportation

IDNR – Illinois Department of Natural Resources

IIJA – Infrastructure Investment and Jobs Act

IOB – Illinois Office of Broadband

IPaC – Information for Planning and Consultation

IPUA – Illinois Public Utilities Act

IROADS – Illinois Roadway Analysis Database System

IRU – Indefeasible Right of Use

ISP – Internet Service Provider

ISTHA – Illinois State Toll Highway Authority

JULIE – Joint Utility Locating Information for Excavators

JUA – Joint Use Agreement

LEO – Low Earth Orbit

LOC – Letter of Consent

LOS – Line-of-Sight

MBTA – Migratory Bird Treaty Act

NAGPRA – Native American Graves Protection and Repatriation Act

NEPA – National Environmental Policy Act of 1969

NHPA – National Historic Preservation Act of 1966

NIST – National Institute of Standards and Technology

NOA – Notice of Award

NOFA - Notice of Funding Availability

NOFO – Notice of Funding Opportunity

NPS – National Parks Service

NRHP – National Register of Historic Places

NTIA – National Telecommunications and Information Administration

NWR – National Wildlife Refuge

PAA – Pole Attachment Agreement

PEIS – Programmatic Environmental Impact Statement

PIVVOT – Not an acronym; a spatial analytics intelligence software

RCRA – Resource Conservation and Recovery Act

ROC – Resolution of Consent

ROW – Right-of-Way

SAC – Specific Award Conditions

SAR – Semi-Annual Report

SBO – State Broadband Office (see also IOB)

SDWA – Safe Drinking Water Act

Section 10 – refers to part of the Rivers and Harbors Appropriation Act of 1899

Section 106 – refers to part of the NHPA

Section 7 – refers to part of the Endangered Species Act

SHPO – State Historic Preservation Office

SOI – Secretary of Interior (NPS)

T&E – Threatened and Endangered species

TA – Technical Assistance

TDAT – Tribal Directory Assessment Tool

THPO – Tribal Historic Preservation Office

TSCA – Toxic Substances Control Act

USACE – United States Army Corps of Engineers

USC – United States Code

USDA – United States Department of Agriculture

USFS – United State Forestry Service

USFWS – United States Fish and Wildlife Service

Appendix B: ESAPTT Questionnaire

For grantee reference and context of the completed list of ESAPTT questions, the current NTIA ESAPTT Questionnaire can be found here:

Open the NTIA ESAPTT Environmental Screening Questionnaire

The ESAPTT Questionnaire questions that the grantee will be responsible for completing are also included as part of the NEPA Sub-Project Package step. Guidance for the NEPA Sub-Project Package, including the full list of ESAPTT questions required for the grantee to complete, are included in Appendix D.

Appendix C: NTIA Resources and Guidance Documents

To assist grantees in navigating federal environmental requirements, NTIA offers specialized guidance and tools to support NEPA compliance and streamlined processes for Endangered Species Act consultation and Section 106 consultation under the NHPA. This guidance can be found here:

Open the NTIA BEAD Program Guidance Page

These resources include standardized templates designed to improve application quality and accelerate the overall approval process.

Appendix D: Grantee Guidance Documents and Instructions for Individual Steps

Related grantee instructions	Step-specific grantee instructions will be inserted or linked here as individual guidance documents are finalized.

NEPA Pre-Screener Review Instructions

BEAD Environmental and Historic Preservation | Grantee Guidance

The National Telecommunications and Information Administration (NTIA) requires all Broadband Equity Access and Deployment (BEAD)-funded projects to complete the National Environmental Policy Act (NEPA) review process before construction activities may proceed. To improve the efficiency of that review, a single BEAD subgrant project may be divided into one or more NEPA Sub-Project Areas. Grantees are required to submit the geospatial information identified in these instructions, including proposed service locations, infrastructure routes, fixed wireless facilities, and fixed wireless coverage boundaries. The Illinois Office of Broadband (IOB) will review the submitted information and may recommend dividing a project into multiple NEPA Sub-Project Areas to facilitate a more efficient environmental review process.

Grantees are responsible for ensuring that any proposed NEPA Sub-Project Areas demonstrate independent utility, meaning each area can function as a viable project on its own and is not dependent on the completion of another area to achieve its intended purpose. Following IOB review and approval, the finalized NEPA Sub-Project Areas will serve as the official project areas used for NEPA screening, environmental review, permitting coordination, and all subsequent NTIA environmental compliance activities.

Background: How IOB Will Develop NEPA Sub-Project Areas

The Grantee will upload the following Geographic Information System (GIS) data to ARC so that the IOB can evaluate network route maps associated with each BEAD Benefit of the Bargain round (BOTB) project. Based on this analysis, BOTB projects may be further sub-divided into distinct NEPA Sub-Project Areas according to geography and shared characteristics that could require specialized environmental and historic preservation (EHP) review.

The primary factors to be considered when developing NEPA Sub-Project Areas are included below. Most of these factors are typically identified through available GIS datasets and environmental screening tools.

1. Geographic Separation and Independent Utility
   Geographically distinct portions of a project that can operate independently may be established as separate NEPA Sub-Project Areas. Separating projects in this manner can improve review efficiency and allow the less complex portions of a project to advance while other sections undergo additional environmental evaluation.
2. Land Ownership
   Routes and projects located on federally owned lands, state-owned lands, or Tribal lands may be grouped together due to the unique environmental review and permitting requirements associated with these jurisdictions.
3. Historic Resources and Historic Districts
   Routes and projects located within or adjacent to designated historic districts, historic properties, or areas with known cultural resource sensitivities may be separated into dedicated NEPA Sub-Project Areas to facilitate focused review and consultation activities. These will be screened using the National Register of Historic Places (NRHP) and IL State Historic Preservation Office (SHPO) Historic and Architectural Resources Geographic Information System (HARGIS) database.

To qualify as a separate NEPA Sub-Project Area, a project segment must also demonstrate independent utility, meaning it can provide a meaningful telecommunications function and achieve a measurable project purpose without relying on the completion of other project segments. Independent Utility requires validation by the grantee from a network design and construction perspective.

Project Route Information to Upload

Please upload the following information into the required ARC platform fields:

All file extensions contained in a single .zip file are preferred. Shapefiles may be comprised of six separate file extensions (.CPG, .dfb, .prj, .sbn, .spx, and .shp). While a shapefile is preferred, a .kmz file may be submitted should providing a shapefile be difficult.

Broadband Serviceable Location (BSLs):

- Description: All unserved or underserved BSLs to be served by the project as point features, indicated as circles, and identified by their BSL location ID. Reference the fp_locations.csv for the final list of approved BSLs.
- File name: This layer must be named "BOTBXXXX_BSLs"

Community Anchor Institutions (CAIs):

- Description: All CAIs to be served by the project as point features, indicated as triangles, and identified by CAI ID. Reference the fp_CAIs.csv for the final list of approved CAIs.
- File name: This layer must be named "BOTBXXXX_CAIs"

Other BSLs:

- Description: If the applicant proposes to serve any BSL not officially classified as either unserved or underserved, they must submit all locations separately as point features and identified by location ID, as listed in the final project information.
- File name: This layer must be named "BOTBXXXX_Other_BSLs"

Network Route Map:

Description: The proposed infrastructure route for fiber and fixed wireless, to be depicted as line and point features.

- File name: This layer must be named "BOTBXXXX_Network_Infrastructure"
- Additional Specifications:
    - Only include feature layers that are components of your BOTB Project.
    - Proposed fiber lines should be depicted as line features.
    - Proposed fixed wireless facilities should be shown as point or polygon features, with clear distinction from the CAI and BSL data layers.
    - The location of all proposed fiber routes and/or fixed wireless facilities should be depicted in the shapefiles.

Once the above data has been provided by the grantee to the ARC platform, IOB will perform their NEPA Sub-Project Area evaluation. The grantee will be notified of their BOTB NEPA Sub-Project Area Determinations via the ARC platform. It is possible that no changes will be proposed and the original BOTB NEPA Sub-Project Area will remain the same. All route determination information will be communicated via the ARC platform in the form of a PDF map of the proposed changes and individual .csv files depicting the BSLs and CAIs associated with each NEPA Sub-Project Area.

Review and Validate NEPA Sub-Project Area(s)

After grantees upload their project route information, the IOB will review the files to confirm that they are sufficient to review. Once confirmed the files are sufficient, the IOB will determine whether the project should be divided into separate NEPA Sub-Projects. All grantees will be notified when their NEPA Sub-Projects are ready for review and will be responsible for reviewing and verifying that each proposed NEPA Sub-Project Area demonstrates *Independent Utility.*

As previously discussed, Independent Utility means that a NEPA Sub-Project Area can be constructed, operated, and provide broadband service as a standalone component of the network, even if no other portion of the overall project is completed. Each NEPA Sub-Project Area must serve a meaningful project purpose and function independently without relying on the construction of another project segment.

For each NEPA Sub-Project Area provided, the grantee must select one of the following options:

Option 1: Confirm Proposed NEPA Sub-Project Areas

If the grantee determines that all proposed NEPA Sub-Project Areas possess Independent Utility, the grantee shall provide confirmation to IOB indicating acceptance of the proposed revisions.

Option 2: Request Revisions to NEPA Sub-Project Areas

If the grantee determines that a proposed NEPA Sub-Project Area cannot function independently, the grantee shall propose revised NEPA Sub-Project Area boundaries.

To request a revision, the grantee must:

1. Upload a csv with the same format as the original provided by the IOB with depicting the BSLs and CAIs associated with each NEPA Sub-Project Area
2. Upload a pdf or docx file providing a clear and concise justification for each proposed revision.

Justifications should explain why the original revisions do not meet the Independent Utility requirement. IOB will review all proposed revisions and may coordinate with the grantee to clarify network assumptions, project phasing, or environmental review considerations. This collaborative review process will continue until mutually acceptable NEPA Sub-Project Areas are established that satisfy both federal environmental review requirements and project construction needs.

> *Example Justification: "Proposed NEPA Sub-Project Areas N1 and N2 have been combined because N1 relies on backbone infrastructure located within N2 and therefore cannot independently provide broadband service. As configured, N1 does not demonstrate Independent Utility."*

Option 3: Decline Subdivision of NEPA Sub-Project Areas

A grantee may determine that dividing the project into multiple NEPA Sub-Project Areas does not provide a practical benefit for project delivery or environmental review. In such cases, the grantee may elect to maintain the entire BEAD-funded project as a single NEPA Sub-Project Area.

Grantees choosing this option shall provide written notification to IOB explaining the basis for the decision. Upon acceptance by IOB, the entire BOTB project will proceed through environmental review as one NEPA Sub-Project Area.

Example Response: "The grantee has reviewed the proposed NEPA Sub-Project Areas and declines the proposed subdivision. The original proposed BOTB Project Area should reflect the overall NEPA Sub-Project Area".

Response Timeline

> Grantees must submit their response to IOB within seven (7) calendar days of receiving the NEPA Sub-Project Area Review Determination unless otherwise specified by IOB.

If a response is not received by the established deadline, IOB may consider the proposed NEPA Sub-Project Areas accepted and proceed with environmental review based on the information provided to the grantee.

NEPA Sub-Project Package Instructions

BEAD Environmental and Historic Preservation | Grantee Guidance

NTIA requires all BEAD-funded projects to complete the NEPA review process before construction activities may proceed. The NEPA Pre-Screener process was used to establish NEPA Sub-Project Areas for each grantee. NEPA Sub-Project Areas now allow for more information to be collected to create NEPA Sub-Project Packages.

The NEPA Sub-Project Package will be utilized to support a Red Flag Analysis review for potential Environmental and Historic Preservation (EHP) concerns. To support this review, the NEPA Sub-Project Package must contain updated geospatial files (shapefiles or KMZ) including sufficient details that support the provided project description. These details include what the grantee proposes to build, where construction will occur, how the work will be completed, and any physical limits of all federally funded activities.

If a grantee has obtained EHP support for their project and already performed any EHP reviews independently of the program, the grantee is encouraged to submit that documentation as part of the NEPA Sub-Project Package to aid in the Red Flag Analysis step.

The NEPA Sub-Project Package will also be used to enter information into the NTIA Environmental Screening and Permitting Tracking Tool (ESAPTT) tool as part of the Grants Project Record. In accordance with NTIA Guidance, the Grants Project Record must include a ESAPTT Project Description Summary, a Project Map, and a Detailed Project Description. Additionally, the NEPA Sub-Project Package requests specific portions of the ESAPTT Questionnaire, including design-specific ESAPTT questions, to be provided and for a NEPA Milestone Schedule to be developed. Based on the responses provided for all other items, IOB will assist the grantee in developing a NEPA Milestone Schedule (an NTIA requirement) and provide it to the grantee for review and completion as part of this process. This document includes guidance for development of all the individual categories.

NEPA Sub-Project Package Process

The Grantee will develop the NEPA Sub-Project Package following the guidance outlined in this document. The package will then be uploaded into the IL BEAD Portal for a sufficiency review by IOB. The IL BEAD Portal will contain eight categories under the NEPA Sub-Project Package section. These fields will be used to exchange documents with IOB and for IOB to perform sufficiency reviews, provide feedback, and grant task approvals. Any deficiencies identified in the IOB review process will be communicated back to the grantee via the IL BEAD Portal under the category to which it applies. Once a grantee gains approval of all eight categories, the NEPA Sub-Project Package will be considered final and routed to the next phase of the NEPA process, which is the EHP Red Flag Analysis.

NEPA Sub-Project Package Guidance by Category

The NEPA Sub-Project Package requires information from the below eight categories. Each category details what should be uploaded, relevant formatting, and examples where applicable. IOB will review all uploaded information for sufficiency using the checklists at the end of this section to ensure it meets the required standards.

If any of the uploaded information is insufficient, comments will be returned to the grantee outlining the deficiencies and areas in need of correction. Following the guidance below will help grantees move through the sufficiency stage more quickly.

1. ESAPTT Project Description Summary
2. Project Map
3. Detailed Project Description
4. Geospatial files (shapefiles or KMZ)
5. Independently Developed EHP Supporting Documentation
6. Design Related ESAPTT Questions
7. Department of Agriculture Form
8. NEPA Milestone Schedule

1. ESAPTT Project Description Summary

Description:

The grantee will provide a Project Description Summary to IOB via the IL BEAD Portal. According to NTIA Guidance, the Project Description Summary (text box) will be uploaded via ESAPTT and incorporated into the NEPA final NEPA decision memo.

What should be included:

According to NTIA, the ESAPTT Project Description Summary should include the following items:

- A description of the infrastructure elements and activities subject to environmental review in 1,000 characters or less
- BEAD and NEPA Sub-Project IDs
- Number of locations (BSLs and CAIs) being served
- The technology type
- The deployment method, including distance of construction and/or deployment activities (i.e., how long is the fiber, how many poles are being added and/or replaced).
- Any relevant contextual information to support the summary

How it will be provided to IOB:

Grantee will enter the ESAPTT Project Description Summary components into the designated fields of the IL BEAD Portal.

Examples:

Buried Fiber: Installation of 58 miles of buried fiber optic cable in a previously disturbed, existing road right-of-way along Route 42 from Dalton to Marysville to serve 35 BSLs in Whitefield and Murray Counties, Example State.

Tower Project: Construction of two monopole and two lattice communication towers to serve 240 BSLs and 3 CAIs between Willows City and Copper City, Example State.

2. Project Map

Description:

The grantee will provide a Project Map to IOB via the IL BEAD Portal. The Project Map will be uploaded into the ESAPTT tool by IOB to unlock the Environmental Screening for a Grant Project. According to NTIA, the Project Map should provide significant context on the surrounding environment of NEPA Sub-Project area. This should include, at a minimum, a project overview map that sufficiently displays the NEPA Sub-Project area, as outlined below.

What should be included:

The project map overview uploaded to ESAPTT must be provided as a flattened PDF and named in accordance with overall IOB NEPA file naming conventions. The Project Map is the only files that should be uploaded in this section. The Project Map must:

- Be appropriately scaled to display the entire NEPA Sub-Project area, as submitted to NTIA in the Final Proposal. Include the BEAD Project ID and NEPA Sub-Project ID(s) as labeled elements in the map and include all BSLs and CAIs in the BEAD Project Area and NEPA Sub-Project Area(s).
- Display surrounding topography and environment in the NEPA Sub-Project Area to provide context of project area (e.g., web-based GIS image, aerial photo, or topographic map).
- Illustrate all routes, locations (BSLs and any applicable CAIs), and footprints of federally funded project infrastructure (i.e., fixed wireless project maps must also show the limit and extent of all ground disturbance, not just locations served).
- Provide construction method by route segment or facility.
- Contain a key that clearly labels technology types, existing versus new infrastructure, and other important data points shown in the map.
- Provide a clear legend identifying symbols, technology types, construction methods by route, and existing vs. new infrastructure.
- Provide a north arrow, scale bar, map date or version, and coordinate reference information.
- Provided as a flattened but legible PDF file.

If you have a larger project area, an overview map of the project area should be provided along with more appropriately scaled detail supporting maps to illustrate project details. These should be incorporated in the same project map PDF file.

How it will be provided to IOB:

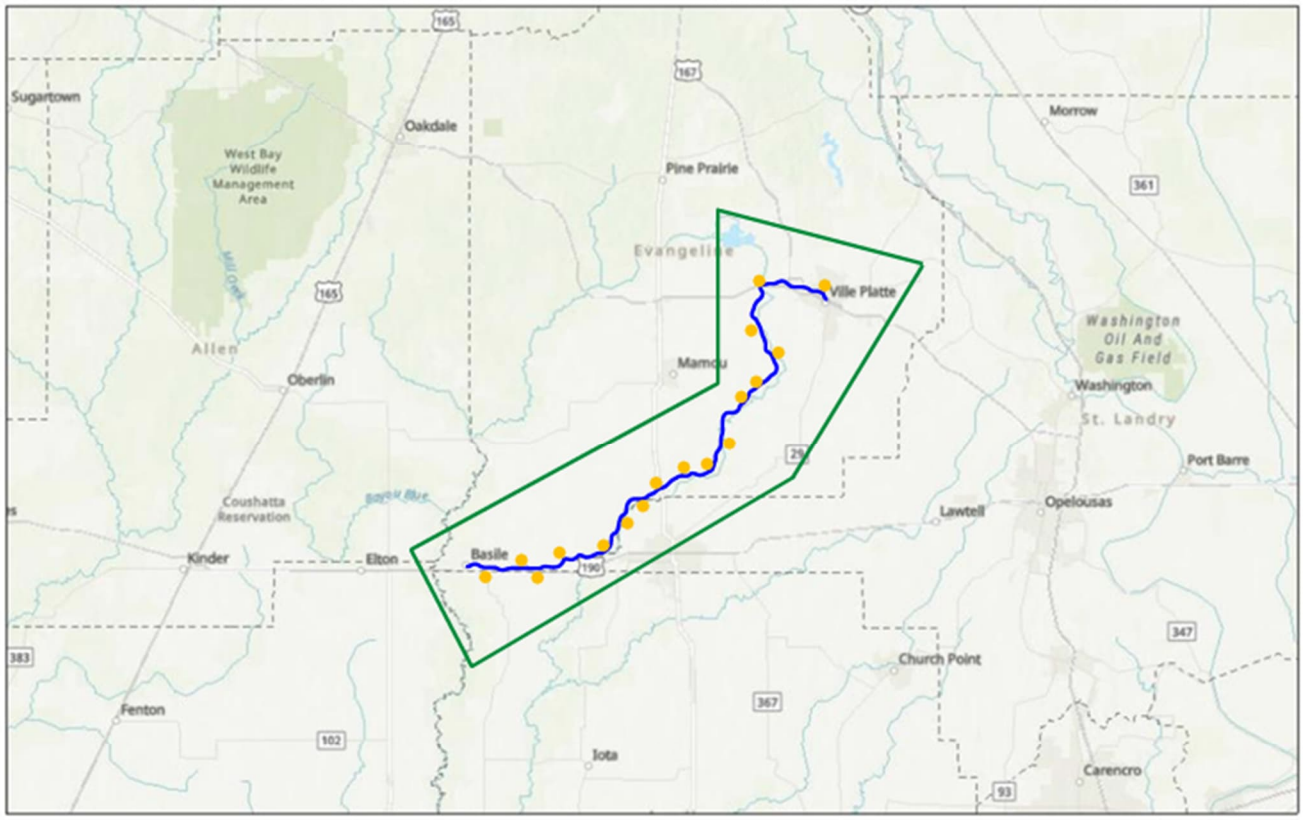
Grantee will upload the Project Map into the designated field of the IL BEAD Portal. Please be consistent with the NEPA Project Name provided as part of the NEPA Pre-Screener process. Example Naming convention: BOTBXXXX-NEPAX_Project Map.

Examples:

The following examples are included in NTIA Guidance Documents.

Sample Project Map | Fiber Project

EXAMPLE PROJECT DEPLOYMENT MAP



Alignment

Basile to Ville Platte (Vibratory Plow)

Key

NEPA Project Area Boundary

County Borders

Broadband Serviceable Location (BSL)

BEAD Project ID

CM##-BEAD-LA-###-###

NEPA ID

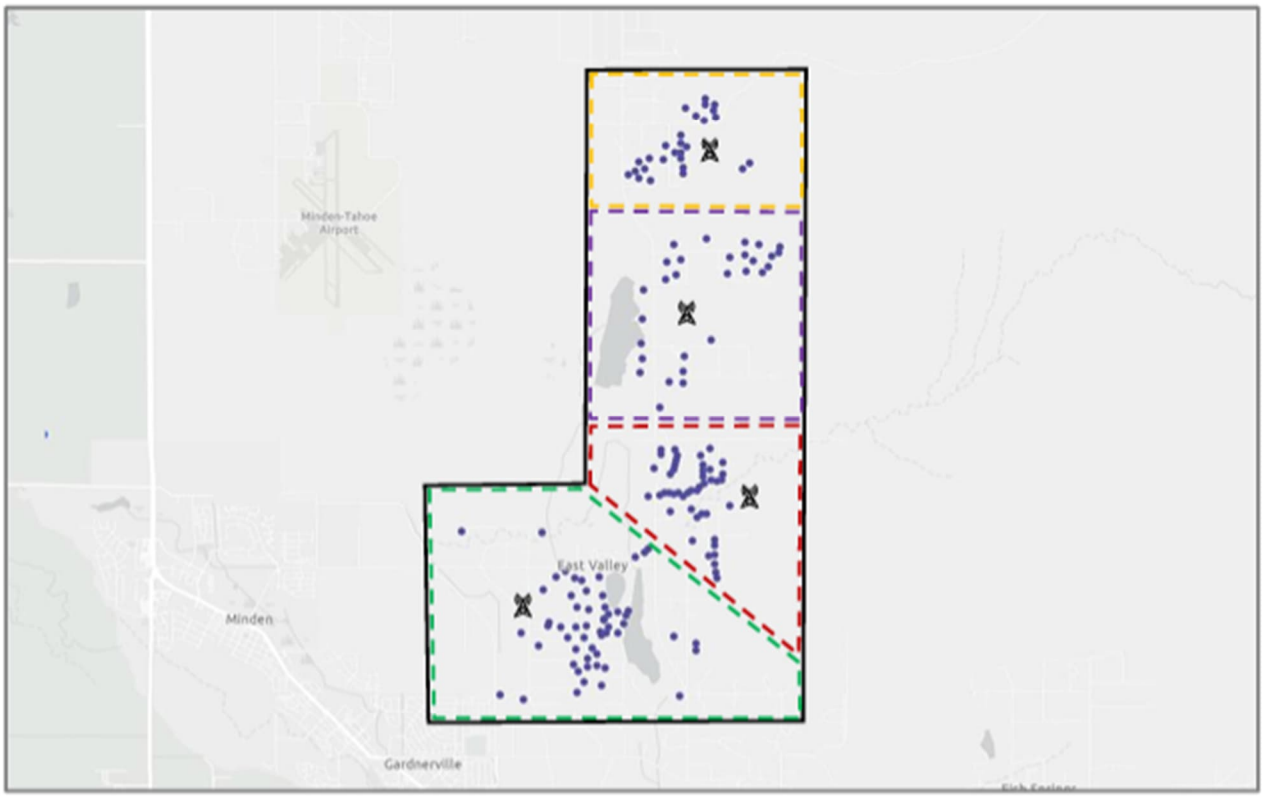
CM##-BEAD-LA-###-###-N#



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community, Esri, CGIAR, USGS

Sample Project Map | Fixed Wireless Project

EXAMPLE PROJECT DEPLOYMENT MAP



Key

- Licensed Fixed Wireless Tower
- Broadband Serviceable Location (BSL)
- Body of Water
- Stream/River

BEAD Project Area

- CM##-BEAD-NV-###-###

NEPA Project Areas

- CM##-BEAD-NV-###-###-N1
- CM##-BEAD-NV-###-###-N2
- CM##-BEAD-NV-###-###-N3
- CM##-BEAD-NV-###-###-N4



3. Detailed Project Description

Description:

The grantee will provide a Detailed Project Description to IOB via the IL BEAD Portal. The Detailed Project Description will be uploaded into the ESAPTT tool by IOB to unlock the Environmental Screening for a Grant Project.

What should be included:

The Detailed Project Description must describe:

- The BEAD Project ID, NEPA Sub-Project ID, the number of Broadband Serviceable Locations (BSLs) and, if applicable, Community Anchor Institutions (CAIs) to be served by the project
- Where work will occur including the address (e.g., 123 Main Street), latitude/longitude, or extent of project limits (e.g., the route the project will follow with access roads and staging areas used)
- The site and surrounding area (e.g., developed land vs. open space; adjacent natural resources, such as rivers, wetlands, or forests; and any protected lands), with maps and photographs as appropriate
- What will be constructed, including quantities, mileage, dimensions, acreage, and height (e.g., one 150' monopole communication tower).
- The extent of construction, which includes the maximum width, length, area of disturbance, and depth of ground disturbance and the installation method (e.g., a generator with a 400-gallon above-ground fuel storage tank requiring 1-acre of disturbance no deeper than 5 feet).
- Fiber projects must describe installation methods (e.g., aerial, trenching, horizontal directional drilling) for each route section. Fixed wireless projects must note if towers are new or existing.

How it will be provided to IOB:

Grantee will enter the Detailed Project Description information into the designated fields of the IL BEAD Portal.

Examples:

The following examples are included in NTIA Guidance Documents:

Sample Detailed Project Description (Buried Fiber) The Marysville Fiber Optic Network (BEAD Project ID: CM22-BEAD-OH-871209, NEPA Sub-Project ID: CM22-BEAD-OH-871-209-N2) would install 58 miles of buried fiber optic cable in a previously disturbed, existing road right-of-way along Route 42 from Dalton to Marysville in Whitefield and Murray Counties, Example State. This project will serve 35 Broadband Serviceable Locations (BSLs). The project would install new conduit for the cable using primarily a vibratory plow; ground disturbance from plowing is estimated to be 6" wide and up to 36" deep, with the trench being immediately filled in and covered. Handholes, level with the ground and measuring approximately 17" × 30" × 36", would be installed every 5 miles. For the Marysville River crossing, the conduit would be mounted to the underside of the Marysville Bridge, a historic bridge originally constructed in 1927.

There are 2 drainage culverts along the proposed route, for which directional boring would be used to go underneath the culverts. The proposed route is in a previously disturbed area within the road shoulder, surrounded by woods and open fields from mile 19 to mile 37. The beginning and end of the proposed route are within developed areas with residential and commercial development on either side of the road shoulder.

There are no federal, state, or local public lands or protected/restricted uses within the proposed route. The Marysville River crossing would not require any activities to occur on or in the water.

Sample Detailed Project Description (Tower Project) The NewConnect project (BEAD Project ID: CM58-BEAD-CA-555-827, NEPA Sub-Project ID: CM58-BEAD-CA-555-827-N7) would construct 4 communication towers across 28.8 miles between Willows City and Copper City, in New County, Example State. This project will enhance connectivity for 240 Broadband Serviceable Locations (BSLs) and 3 Community Anchor Institutions (CAIs) including a public middle school, a health clinic, and a library. Each tower would be a self-supporting structure, with two monopoles at 95' and 120' tall, and two lattice structures at 190' and 210' tall, with the latter including required safety marking and lighting.

The two monopole tower sites (Towers 1 and 2) would be newly constructed within a 20'x20' compound and would contain equipment sheds and 1,000 gallon above-ground diesel fuel storage tanks. The two lattice structure tower sites (Towers 3 and 4) are proposed in the vicinity of existing communications sites within the Mendocino National Forest. Depth of ground disturbance for each tower will vary but will not be greater than 20" in any location. Site design is being finalized and once the total estimate ground disturbance is known but is estimated at less than two acres total.

There are no other protected lands in the proposed project area. The non-Forest Service tower sites are proposed in areas characterized by agriculture uses and open space. Tower site locations are provided below.

Tower	Location	Type
Tower 1 – Willows City	39°31'27.0"N 122°16'38.4"W	Monopole, 95’
Tower 2 – Elm Creek	39°36'45.2"N 122°31'48.2"W	Monopole, 120’
Tower 3 – Elder Springs	39°40'45.5"N 122°42'30.1"W	Lattice, 190’
Tower 4 – Copper City	39°43'02.9"N 122°48'47.5"W	Lattice, 210’

4. Geospatial files (shapefiles or KMZ)

Description

Updated Shapefiles of the NEPA Sub-Project Area (as defined in the NEPA Pre-Screener step) should be provided. The files should include the same information provided for the NEPA Pre-Screener step but additionally include detailed project components.

What should be included:

The following information should be provided in a GIS shapefile format. All file extensions contained in a single .zip file are preferred. Shapefiles may be comprised of six separate file extensions (.CPG, .dfb, .prj, .sbn, .spx, and .shp). While a shapefile is preferred, a kmz file may be submitted should providing a shapefile be difficult.

BSLs:

- Description: All unserved or underserved BSLs to be served by the project as point features, indicated as circles, and identified by their BSL location ID. Reference the fp_locations.csv for the final list of approved BSLs.
- File name: This layer must be named “BOTBXXXX-NEPAX_BSLs”

CAIs:

- Description: All CAIs to be served by the project as point features, indicated as triangles, and identified by CAI ID. Reference the fp_CAIs.csv for the final list of approved CAIs.
- File name: This layer must be named “BOTBXXXX-NEPAX_CAIs”

Other BSLs:

- Description: If the applicant proposes to serve any BSL not officially classified as either unserved or underserved, they must submit all locations separately as point features and identified by location ID, as listed in the final project information.
- File name: This layer must be named “BOTBXXXX-NEPAX_Other_BSLs”

The following Project Specific Map Components provided for the NEPA Pre-Screener should remain depicted:

- Only include those feature layers that are components of your BOTB Project.
- Network Route: The proposed infrastructure route for fiber and fixed wireless as line and point features. This layer must be named “BOTBXXXX-NEPAX_Network_Infrastructure”
- Proposed fiber lines should be depicted as line features.
- Proposed fixed wireless facilities should be shown as point or polygon features.
- The location of all proposed fiber routes and/or fixed wireless facilities should be depicted in the shapefiles.

The following Project Specific Map Components should be added to the provided geospatial files:

- Network Route: The proposed infrastructure route for fiber and fixed wireless as line and point features. This layer must be named “BOTBXXXX-NEPAX_Network_Infrastructure,” and segmented by the following fields, captured in the attribute table:
    - A layer of the route color coded by new versus existing infrastructure
    - A layer of the route color-coded by construction method. Routes may include fiber routes and/or conduit paths.
        - Aerial – new poles
        - Aerial – replacement poles
        - Aerial – existing poles, new attachments/lines or overlash
        - Underground – buried fiber
        - Other construction methods not listed here
    - The limit and extent of all anticipated ground disturbance
- New Towers: The sites of new tower bases as polygon features with fiber or utility routes as associated lines. The full extent of ground disturbance must be illustrated.
- Files should include the tower center as a point and proposed equipment, compound, access road, and utility easements depicted as polygons.

- File Name: This layer must be named “BOTBXXXX-NEPAX_New Towers”

- Tower Replacements: The polygon should include the existing tower and compound and the proposed tower base and associated equipment compound, access roads, and utility easements. The full extent of ground disturbance must be illustrated.
    - Files should include the existing and proposed tower centers as a points, as well as the existing and proposed equipment compounds, access road, and utility easements depicted as polygons.
- File Name: This layer must be named “BOTBXXXX-NEPAX_Tower Replacement”

- Existing-Tower Collocations: The polygon should include the existing tower and existing compound; if the collocation adds ground disturbance, that should also be included in this data layer. The full extent of ground disturbance must be illustrated.
    - Files should include the tower center as a point and existing equipment compound, access road, and utility easements depicted as polygons. Proposed ground disturbance, such as a compound expansion or new access road/utility easement, should be depicted as a separate polygon.
- File Name: This layer must be named “BOTBXXXX-NEPAX_Tower Collocations”

- Non-Tower Collocations: Collocation activities should be depicted as polygon features with any fiber or utility routes as associated lines. The full extent of ground disturbance must be illustrated.
    - Files should include the fixed wireless location. Proposed ground disturbance, such as a compound expansion or new access road/utility easement, should be depicted as a separate polygon.
- File Name: This layer must be named “BOTBXXXX-NEPAX_Non Tower Collocations”

How it will be provided to IOB:

Grantee will upload the geospatial files into the designated field of the IL BEAD Portal.

5. Independently Developed EHP Supporting Documentation

Description:

If a grantee has obtained EHP support for their project and already performed any EHP reviews, the grantee is encouraged to submit that documentation as part of the NEPA Sub-Project Package to aid in the Red Flag Analysis step. There is no specific format or data type being requested, only that the grantee provide any EHP documentation for the project that has already been developed. Providing these documents could streamline and accelerate the overall NEPA process.

Examples of what should be included:

Examples of potential EHP documentation may include

- Wetland delineations and/or wetland maps
- Maps of environmental hazards
- US Fish and Wildlife Service (USFWS) species data and reports
- State species data and reports
- Determination keys
- Biological reports of any kind
- Cultural Resource Records Reviews
- Cultural Resource Surveys
- Any federal/state agency consultation efforts
- Phase I Environmental Site Assessments
- Environmental database reports
- any other related type of documentation

Maps, reports, memos, and supporting documentation are all relevant documents if they provide EHP information related to the project.

How it will be provided to IOB:

Grantee will upload these files into the designated field of the IL BEAD Portal. This will not be a mandatory field. If no prior EHP information is available, the grantee will simply select “Not Applicable” for this field. Please be consistent with the NEPA Project Name provided as part of the NEPA Pre-Screener process. Example Naming convention: BOTBXXXX-NEPAX_EHP Report XXX.

6. Design Related ESAPTT Questions

Description:

The IL BEAD Portal will include selected questions related to project design from NTIA's ESAPTT Questionnaire. IOB will be required to complete a full ESAPTT Questionnaire for every NEPA Sub-Project Area. The intent of providing these specific questions at this stage is for the grantee to directly provide responses that pertain to project design. Explanatory texts will be provided within each category to assist grantees in developing their response. Please note the questions below are for reference and some may not populate on your view in the IL BEAD PORTAL depending upon your prior responses.

How it will be provided to IOB:

Grantee will upload the answers into the designated field of the IL BEAD Portal.

Questions provided in the IL BEAD PORTAL

No.	ESAPTT Question	Choice	Clarification Text for Grantees in IL BEAD Portal
1	Does the proposed project include the construction of buried and/or aerial telecommunications lines, cables, and related facilities?	Y/N	Answer "Yes" if your project includes the installation of any buried or aerial communications lines/fiber/cable and related equipment. This specifically pertains to fiber projects.
1.1	Will fiber be added to transmission structures and/or buried in existing Rights of Way?	Y/N	Answer "Yes" if any of the proposed broadband facilities will be installed within or immediately adjacent to an existing roadway, highway, utility, railroad, or similar established infrastructure corridor where transportation or utility facilities already exist.
2	Will new or existing communications systems be acquired, installed, operated, or removed for the proposed project?	Y/N	Answer "Yes" if the project involves new communications systems or modifications to existing communications systems. This specifically pertains to tower/fixed wireless projects.
2.1	Will system instruments be retrofitted, upgraded, repaired, or replaced?	Y/N	Answer "Yes" if the project involves modifications to system instruments.
3	Select all infrastructure elements and related activities that are included in the proposed project scope and answer associated questions: - 3.1 Towers and directly related structures - 3.2 New construction upon or improvement of and/or non-tower structures (including new utility and communication systems) - 3.3 Modification of existing fiber optic cable 3.4 Existing buildings, roads, airfields, grounds, equipment, and other facility modifications	Y/N	Select ALL answers that apply to your project. Answer 3.1 applies to towers and related structures. Answer 3.2 applies to non-tower structures and new utility and communication systems (new fiber projects). Answer 3.3 applies to modifications to existing fiber projects. Answer 3.4 applies to modifications to existing buildings, roads, airfields, grounds, equipment, or other facility modifications. This pertains to collocations on buildings and existing lines.
3.1.1	Select all actions applicable to the proposed project: - Siting - Construction/installation - Operation/Maintenance - Retrofitting	Check boxes for selections	Select ALL answers that apply to your tower project. The term 'siting' applies to the location identification of a communications project. Construction/installation applies to the actual construction activities related to the project. Operations/maintenance refers to on-going operations required over time. Retrofitting involves modifications to existing infrastructure.

No.	ESAPTT Question	Choice	Clarification Text for Grantees in IL BEAD Portal
3.1.2	Will the proposed tower actions require new ground disturbance?	Y/N	Answer "Yes" if any new ground disturbance is proposed. New ground disturbance is any project activity that disturbs soil or subsurface materials. This includes activities such as trenching, plowing, excavation, drilling, boring, grading, tower foundations, equipment pads, access roads, staging areas, and other construction activities.
3.1.2.1	What is the area of ground disturbance?	≤1 acre ≥1 acre	Evaluate the area of ground disturbance based on your tower project plans. New ground disturbance is any project activity that disturbs soil or subsurface materials. This includes activities such as trenching, plowing, excavation, drilling, boring, grading, tower foundations, equipment pads, access roads, staging areas, and other construction activities.
3.1.3	Will the proposed action cause the total height of any tower to exceed 199 feet?	Y/N	Towers 200 feet and taller will require extra environmental procedures and time. Therefore, it is in the grantee's best interest to keep all towers at 199 feet or less. Answer "Yes" if tower heights will exceed 199 feet.
3.1.4	Will any tower structure require guy wires?	Y/N	Towers requiring guy wires will also require extra environmental procedures and time. Therefore, it is in the grantee's best interest to eliminate the use of guy wires if possible.
3.2.1	Select all actions applicable with the proposed project scope: - Construction or modification of aerial or buried utility, or communication systems that use existing ROW, easements, grants of license, distribution systems, facilities, or similar arrangements - New construction in developed area or on previously disturbed site - Land improvement in developed area or on previously disturbed site - Construction or improvement of operations or support facilities, switching stations, maintenance facilities, other non-tower structures on previously disturbed ground - Construction or improvement of new temporary buildings or experimental equipment on previously disturbed ground - Construction, land improvement, or modification of structures in an undeveloped area or on a pristine (undisturbed) site	Check boxes for selections	Select ALL answers that apply to your project. New ground disturbance is any project activity that disturbs soil or subsurface materials. This includes activities such as trenching, plowing, excavation, drilling, boring, grading, tower foundations, equipment pads, access roads, staging areas, and other construction activities. ROW refers to existing roadway, highway, utility, railroad, or similar established infrastructure corridors where transportation or utility facilities already exist. A pristine (undisturbed) area would include unimproved land with no history of prior development.
3.2.2	Will any of the actions listed in 3.2.1 require new ground disturbance?	Y/N	Answer "Yes" if any ground disturbance is proposed. New ground disturbance is any project activity that disturbs soil or subsurface materials. This includes activities such as trenching, plowing, excavation, drilling, boring, grading, tower foundations, equipment pads, access roads, staging areas, and other construction activities.
3.2.2.1	What is the area of ground disturbance for land improvements and non-tower structures	≤1 acre ≥1 acre	Evaluate the area of ground disturbance based on your tower project plans. New ground disturbance is any project activity that disturbs soil or subsurface materials. This includes activities such as trenching, plowing, excavation, drilling, boring, grading, tower foundations, equipment pads, access roads, staging areas, and other construction activities.

No.	ESAPTT Question	Choice	Clarification Text for Grantees in IL BEAD Portal
3.2.2.2	Will the ground disturbance be located in a previously disturbed area?	Y/N	Is the disturbance planned for an area that has previously been developed (such as an existing utility corridor, right of way, paved parking lot, etc.) or is the disturbance going to take place in a pristine (undisturbed) area with no history of prior development? Answer 'Yes' if the areas of ground disturbance are previously disturbed.
3.2.3	Will any of the actions listed in 3.2.1 require ground disturbance in an undeveloped area or on a pristine (undisturbed) site?	Y/N	Is the disturbance planned for an area that has previously been developed or is the disturbance going to take place in a pristine (undisturbed) area with no history of prior development? Answer 'No' if the areas of ground disturbance are previously disturbed.
3.2.5	Will the site and scale of construction or improvement be consistent with the scale of existing, adjacent, or nearby buildings?	Y/N	This question is seeking to understand if the proposed development will include any structures that are larger or out of character with the surrounding built environment. The majority of telecommunications equipment (fiber boxes, equipment shelters, etc.) are not typically larger than surrounding structures. Answer 'No' if the construction is consistent with surrounding development.
3.3.1	Select all actions applicable with the proposed project scope: - Modifications, changes, or upgrades of existing telecommunication lines, transmission lines, or aerial or buried utility or communication systems - Pole replacement - Rebuilding existing power or telecommunication lines	Check boxes for selections	Select ALL that apply.
3.3.2.1	For proposed fiber line poles, will the poles exceed 20% of the original pole quantity?	Y/N	Projects that include pole replacements that exceed 20% of original pole quantities will require extra environmental procedures and time. Therefore, it is in the grantee's best interest to keep pole replacements under 20%. This can be calculated by evaluating the total number of poles in project, the number of poles anticipated for replacement, and ensuring that less than 20% of the poles will be replaced. Answer 'No' if the project will not exceed 20%.
3.3.2.2	For proposed fiber line poles, will the poles be of similar appearance to the original pole structure(s)?	Y/N	Be of similar appearance to the original pole structure(s)' means the replacement pole should generally look like the existing pole it is replacing, including similar: Material (e.g., wood replaced with wood); Size and dimensions (where practical); Visual character and design; and Location within the same utility corridor'
3.3.2.3	For proposed fiber line poles, will the poles be in or near the original pole location(s)?	Y/N	Be in or near the original pole location(s)' means that replacement poles should be installed at, or very close to, the location of the existing pole being replaced rather than creating a substantially new alignment or route. It should be noted that certain Program Comment exemptions require the pole replacement to occur within 10' of the original poles.
3.3.2.4	For proposed fiber line poles, will the poles occur within the existing ROW?	Y/N	Answer "Yes" if any of the proposed broadband facilities will be installed within or immediately adjacent to an existing roadway, highway, utility, railroad, or similar established infrastructure corridor where transportation or utility facilities already exist.
3.3.3	For proposed fiber line poles, will any of the actions listed in 3.3.1 take place outside ROWs?	Y/N	Answer "No" if any of the proposed broadband facilities will be NOT installed within or immediately adjacent to an existing roadway, highway, utility, railroad, or similar established infrastructure corridor where transportation or utility facilities already exist.
3.3.3.1	For proposed fiber line poles, if outside ROWs, will action(s) be adjacent to ROW, new road, or easement?	Y/N	Answer "Yes" if any of the proposed broadband facilities will be adjacent to an existing roadway, highway, utility, railroad, or similar established infrastructure corridor where transportation or utility facilities already exist.

No.	ESAPTT Question	Choice	Clarification Text for Grantees in IL BEAD Portal
3.4.1	Select all actions applicable with the proposed project scope: - Exterior renovation, addition, repair, alteration, or demolition - Internal renovations or additions - General minor renovations and/or additions - Purchase, lease, or use of existing facilities (or in a portion thereof) - Conducting new activities or operations in existing structures - Installing, operating, maintaining, retrofitting, upgrading, repairing, removing, and/or replacing instruments - Collocating equipment on instruments, structures, or buildings - Changes to existing telecommunication facilities (including upgrades, changes, or additions) - Acquisition, installation, operation, and/or removal of communication systems - Close facilities, decommission equipment - Phase or voltage conversions, reconductoring, or upgrading of existing electric distribution lines or telecommunications facilities	Check boxes for selections	Select ALL that apply.
3.4.2	Will the actions listed in 3.4.1 result in a change in the functional use or operations of real property?	Y/N	A change in the functional use or operations of real property' means the project would change what a property is used for or how it functions, rather than simply maintaining, repairing, or modestly upgrading its existing use. Examples of changes in functional use: converting agricultural land into a communications facility, establishing a new tower on a pristine undeveloped site; etc.)
3.4.3	Will changes to telecommunications sites and structures require new physical disturbance or fencing of less than an acre?	Y/N	Projects requiring total land disturbance greater than one acre may require extra environmental procedures and time. Therefore, it is in the grantee's best interest to keep ground disturbance under one acre.
2.b	Does the proposed project require the deployment of submarine or underwater cable?	Y/N	Installation of sealed cables in limited near-shore or inland bodies of water, along with new onshore landings and facilities to accept cable, which are typically buried close to shore.
2.b.1	Information on underwater deployments: (Optional)	Free response	Explain the type of underwater deployment proposed the length and width of potential disturbance, construction methods, and mitigation measures.
6.b.3	Provide any additional information needed to explain or support your answer. (Optional)	Free response	Explain deployment type here.
9	For fixed wireless/tower deployment, will the proposed action involve human exposure to ionizing or non-ionizing radiation or use of any radiation in excess of the Federal Communications Commission's established Maximum Permissible Exposure limits for human exposure to Radiofrequency Electromagnetic Energy fields.	Y/N	For any fixed wireless facilities, confirm here that the proposed project would NOT involve human exposure to ionizing or non-ionizing radiation or use of any radiation in excess of the Federal Communications Commission's established Maximum Permissible Exposure limits for human exposure to Radiofrequency Electromagnetic Energy fields. Meeting this requirement is a condition of environmental approval. Select 'No' to confirm the project would NOT involve this exposure.

No.	ESAPTT Question	Choice	Clarification Text for Grantees in IL BEAD Portal
9.a	Attach any relevant documents, including equipment specifications, if applicable. (Optional)	File upload	Provide supporting documentation only if the answer to question 9 is selected as yes.
9.b	Provide any additional information needed to explain or support your answer. (Optional)	Free response	Provide supporting documentation only if the answer to question 9 is selected as yes.
12	Proposed size or scope of action is greater than is normal for an action of its type.	Y/N	Select Yes only if the project is unusually large, extensive, or complex compared to similar broadband deployment projects.
12.a	Attach any relevant documents (Optional)	File upload	Provide supporting documentation only if the answer to question 12 is selected as yes.
12.b	Provide any additional information needed to explain or support your answer. (Optional)	Free response	Provide supporting documentation only if the answer to question 12 is selected as yes.

7. Department of Agriculture Form

Description:

The Illinois Department of Agriculture review is required on all broadband projects. Download the form in the Illinois BEAD Portal, fill it out with your project information, and send it to the Department of Agriculture. When completed, the grantee will enter the date it was submitted into the Illinois BEAD Portal.

8. NEPA Milestone Schedule

Description:

After their initial NEPA Sub-Project Package has been reviewed by IOB, a partially completed NEPA Milestone Schedule will be provided for the grantee via the IL BEAD Portal. The grantee will review the partially completed NEPA Milestones Schedule and complete their own portions (other state and federal permitting) and upload the completed schedule via the IL BEAD PORTAL.

IOB's partial completion of the NEPA Milestone Schedule will be based on the following information, to be provided as part of the NEPA Sub-Project Package:

- Each milestone schedule will start assuming the project has reached 75% design completion. For the purposes of this schedule, 75% design means the project design has advanced sufficiently to identify the proposed route, construction methods, limits of disturbance, major project components, and anticipated permits with enough certainty to support meaningful NEPA, Section 106, ESA, and other environmental reviews.
- The potential for involvement of other federal agencies and permits (federal and tribal land).
- Determination whether that the project is anticipated to meet NTIA CE requirements at this time, based on the responses provided and design.

A template is provided below. Based on the date of the NEPA Sub-Project Package Submission, IOB will complete dates for categories 1-5. The grantee will be responsible for populating any required dates associated with categories 6 and 7. The anticipated NEPA process and schedule assumes a typical NTIA CE can be met. If a CE cannot be met, the milestone schedule portion of the review will be put on hold and a meeting will be held with the grantee to discuss potential revision options to meet CE requirements and attempt to avoid the need for an EA.

Grantee Name: Name NEPA Project ID: BOTB-xxx					Columns provided as a tool for Grantee's internal tracking, completion not required for submission to IOB		
Milestone	Responsibility	Deliverable/Evidence	Review Agency Name	Estimated Submission Date (Month/Year)	Actual Submission Date (XX/XX/20XX)	Review Agency Approval Date (Est.)	Review Status Notes
1. Project Design							
Finalize approximately 75% project design	Grantee	Route map / design set / milestone schedule	IOB				
Submit Route and Location files for NEPA Pre-Screener Step	Grantee	Geospatial files uploaded to ARC for NEPA Pre-Screener	IOB				
Prepare and submit NEPA Sub-Project Package Information	Grantee	Documents uploaded to ARC for NEPA Sub-Project Package step	IOB				
2. NEPA Screening Steps							
ESAPTT Project Creation	IOB	ESAPTT Record	NTIA				
NEPA level determined (CATEX / EA / EIS)	IOB	Red Flag Analysis Screening Result	NTIA				
ESAPTT Submission and NEPA Decision Memo	NTIA/IOB	NEPA Decision Memo	NTIA				
3. NTIA and Tribal coordination Steps							
Initial Tribal notification	NTIA	Project description, map, supporting files	THPO				
Respond to interested Tribes	IOB	Correspondence log / consultation record	THPO				
4. Section 106 NHPA (SHPO) Steps							
Program Comment Form and Records Check	IOB	Initiation letter / package	SHPO				
SHPO consultation	IOB	As applicable: reports, concurrence, closure documentation	SHPO				
5. Endangered Species Act (ESA) Section 7 Steps							
Conduct Species Analysis using the USFWS Tools (IPaC and DKEYs)	IOB	IPaC output, DKEYs (as applicable)	USFWS				
USFWS Consultation (if required)	Grantee	As applicable: reports, concurrence, closure documentation	USFWS				
IDNR Ecological Compliance Assessment Tool (EcoCAT) Consultation	IOB	Included as part of the IOB NEPA process/red flag analysis	IL DNR				
6. Federal Agency Permiting							
Pre-application meetings with permitting agencies	Grantee	Meeting notes	Agencies				
National Park Service (NPS)	Grantee	As applicable: reports, permit, closure documentation	NPS				
US Army Corps of Engineers (USACE) lands	Grantee	As applicable: reports, permit, closure documentation	USACE				
Department of Defense (DOD) lands	Grantee	As applicable: reports, permit, closure documentation	DOD				
United States Forest Service (USFS)	Grantee	As applicable: reports, permit, closure documentation	USFS				
US Fish and Wildlife (USFWS) lands	Grantee	As applicable: reports, permit, closure documentation	USFWS				
Army Corps of Engineers (USACE) Clean Water Act Section 404	Grantee	As applicable: reports, permit, closure documentation	USACE				
US General Services Administration (GSA) Real Property	Grantee	As applicable: reports, permit, closure documentation	GSA				
USACE Rivers and Harbors Act (RHA) Section 10 - General Permit	Grantee	As applicable: reports, permit, closure documentation	USACE				
USACE Clean Water Act Section 401	Grantee	As applicable: reports, permit, closure documentation	USACE				
USACE Section 408	Grantee	As applicable: reports, permit, closure documentation	USACE				
Bureau of Indian Affairs (BIA) Authorization	Grantee	As applicable: reports, permit, closure documentation	BIA				
7. State Agency Permits							
IL Department of Agriculture state-protected farmland	Grantee	As applicable: reports, permit, closure documentation	IL Dept. of Agriculture				
National Pollution Discharge Elimination System (NPDES) Permit (storm water)	Grantee	As applicable: reports, permit, closure documentation	IL EPA				
8. Local or Private Authorization - Local Permits Are Tracked Elsewhere by Grantees							

How it will be provided to IOB:

Once the Grantee has reviewed and updated the partially completed NEPA Milestone Schedule, the Grantee will upload their updated schedule via the IL BEAD Portal. The NEPA Milestone Schedule provided at this stage is considered a working file and will be updated after the Red Flag Analysis process with any new information. On-going NEPA Milestone schedules will be discussed in grantee/IOB meetings for each project.

Appendix E: EHP Avoidance Guide

Illinois Office of Broadband

Illinois Department of Commerce & Economic Opportunity
OFFICE OF BROADBAND
JB Pritzker, Governor

BEAD ENVIRONMENTAL & HISTORIC PRESERVATION

Environmental and Historic Preservation (EHP) Red Flag Avoidance Guide

A practical design guidance for BEAD Grantees

Screen early Map the full footprint and check for environmental, cultural, land, and permit constraints.	**Design with EHP in Mind** Utilize existing infrastructure and disturbed corridors, keep disturbance low	**Avoid Issues** Avoid sensitive resources whenever possible	**Minimize and Mitigate** Select construction methods to reduce effects. Apply Best Management Practices to reduce impacts

1.0 Purpose and Use

This guidance is intended to help Illinois BEAD grantees identify common Environmental and Historic Preservation (EHP) red flags during route planning and design. It is designed to help grantees identify and avoid or minimize potential issues early, including those related to the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA) Section 106, Endangered Species Act (ESA) Section 7, Clean Water Act (CWA), floodplains, rights-of-way, and permitting.

This document, also incorporated as an attachment in the EHP Guidebook, is a decision-first companion for route planning and project description development. While the IOB will be performing their own NEPA Red Flag Analysis as part of the EHP process, the grantee is encouraged to use this Guide to assist with developing an initial route package that has already considered potential NEPA red flags. Using this Guide is not a mandatory part of the IOB EHP process but is instead intended to help grantees stay ahead of the process by developing initial designs with avoidance in mind.

What is a red flag?

RED FLAG
A location, resource, permit trigger, design feature, or project detail that may require avoidance, added analysis, consultation, permitting, mitigation, or a different level of review.

NOT AUTOMATICALLY A FATAL FLAW
A red flag is a potential indicator of a concern. It may require minimization, mitigation, or avoidance depending on the concern identified. Most red flags can be resolved through permit or mitigation efforts.

This document does not replace NTIA, IOB, agency, permit, or grant requirements. It is a planning tool for project design and route review prior to the preparation of the EHP project documents.

2.0 EHP Sources to Consider During Design

The IOB BEAD process, as outlined in the EHP Guidebook, is designed to consider potential environmental, historic preservation, and permitting constraints and red flags both early and throughout the process. While IOB will be responsible for performing a Red Flag Analysis of each proposed NEPA Sub-Project Package area, that doesn't mean a grantee needs to wait to consider potential impacts in their design. There are many readily available tools and resources to assist grantees with the screening process, many of which are outlined below.

Route Planning

Use readily available desktop resources to consider known environmental constraints during the design phase. It is ideal, but not required, for grantees to initiate this on their own as a first step. We suggest you engage with an EHP Vendor that has NEPA expertise to assist if you do not have in-house subject matter experts.

NTIA ArcGIS Pro Permitting and Environmental Information Tool (APPEIT)

Provides an initial view of permit requirements and environmental constraints in proposed service areas. APPEITT includes FEMA, USFWS critical habitats, NWI data, and some land ownership resources. The source data locations are provided if you wish to access them directly.

USFWS IPaC

Review listed species, critical habitat, and Section 7 information relevant to the project area.
https://ipac.ecosphere.fws.gov/

Illinois EcoCAT

Review Illinois protected-resource and species considerations.
https://dnr.illinois.gov/programs/ecocat.html

FEMA flood maps

Identify floodplains and floodways associated with the project footprint.
https://msc.fema.gov/portal/home

National Wetlands Inventory (NW)

Identify mapped wetlands and waters for routing and method decisions.
https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper

Historic and cultural resource records

Screen historic districts, National Register properties, archaeological sensitivity, cemeteries, and other cultural resources. Engage with an SOI-qualified cultural resource specialist to assist in obtaining and interpreting this information.

Land ownership and permits

Identify whether federal, Tribal, or state-owned lands; conservation easements; railroads; and/or local ROW intersect with your project.

3.0 Design with EHP in Mind

Recommended Design Approaches by Technology Type

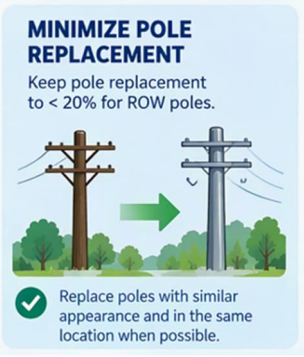
Design to stay within the parameters of established categorical exclusions and avoid extraordinary circumstances that might delay the project at later stages. The following outlines design approaches by technology type. Below is a list for fiber projects and fixed wireless projects with examples of deployment modalities that would require minimal or no additional EHP review. If these apply to your project, there is a higher likelihood you can reduce your EHP risk and project timelines.

Fiber routes

- **Use existing infrastructure** where feasible, including ROW poles, conduit, cabinets/huts, and access routes.
- **Limit ground disturbance to previously disturbed areas**. Keep new ground disturbance/ underground construction within existing ROWs, utility corridors, easements, shoulders, or other previously disturbed areas. Greenfield construction of previously undeveloped areas should be avoided, if possible.
- **Keep new ground disturbance to less than one acre**. Disturbance greater than one acre may require additional state and local permitting for stormwater protection.
- **Consider less invasive construction methods**: if fiber must be buried, choose horizontal directional drilling (HDD) beneath sensitive areas vs. direct impacts/trenching. This method can be used to avoid or reduce impacts to wetlands; streams; drainage features; sensitive vegetation; and cultural resources, where practical.
- **Avoid Submarine Cables:** Keep fiber lines in terrestrial areas and avoid placement of cables directly within water features.
- **Minimize pole replacement** by targeting less than 20% pole replacement for ROW poles. Pole replacements should be similar in appearance to, and near same location as, existing poles within the same corridor. The 20% threshold and replacement criteria are tied to multiple categorical exclusions.
- **Avoid additional lengthy permitting processes** related to construction on federal, state, tribal, or other publicly managed lands by avoiding impacts to those areas.
- **Consider and evaluate all route changes**. If a redesign shift moves the project into a new resource area, adds significant project areas, or uses a new construction method, it should be treated as a design change requiring re-screening.

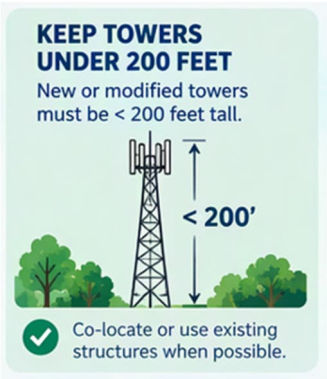






Fixed wireless, towers, and antenna collocations

- **Pursue antenna collocations** on existing towers, buildings, water tanks, or other structures where feasible before proposing a new greenfield tower.
- **Consider tower replacements** in addition to tower collocations; tower replacements are also considered desirable vs. a new tower and tied to potential EHP exclusions.
- **Consider tower height and design**. If a new tower is needed, design towers under 199' tall that are either monopole or lattice design (no guyed towers or towers over 200').
- **Consider tower location**. If a new tower is needed, avoid historic districts, visually sensitive areas, airports/airfields, wetlands/floodplains, protected species habitat, and previously undisturbed land.
- **Keep new ground disturbance to less than one acre**. Categorical exclusions are tied to this threshold.
- **Avoid additional lengthy permitting processes** related to construction on federal, state, tribal, or other publicly managed lands by avoiding impacts to those areas.
- **Consider and evaluate all route changes**. If a redesign shift moves the project into a new resource area, adds significant project areas, or uses a new construction method, it should be treated as a design change requiring re-screening.







4.0 Identify Red Flags and Avoid/Minimize/Mitigate

Below is a practical guide for identification of red flags, tips for avoidance and minimization, and mitigation measures when total avoidance of potential resource impacts is not possible.

Mitigation measures can be utilized to offset and reduce impacts to less than significant threshold and avoid extraordinary circumstances. Typical documentation associated with these red flags is also provided as a reference.

CATEGORY	IDENTIFY	AVOID/MINIMIZE/MITIGATE
WETLANDS, WATERS & FLOODPLAINS	Use NWI and FEMA maps to identify previously mapped wetlands, waters of the US, and floodplains. If wetlands or waters of the US impacts are anticipated, coordinate with a wetland specialist to assist with delineation and permitting efforts. These permitting efforts will become a mitigation requirement of the ESAPTT Questionnaire.	Re-route to existing crossings; use HDD beneath wetlands and water resources; keep facilities out of mapped floodplains; elevate vulnerable equipment above base flood elevation when required; keep staging and construction laydown areas out of wetlands and waterways. If direct impacts to wetlands or waters of the US are unavoidable, keep them within the threshold for a US Army Corps of Engineers Nationwide Permit (less than 0.5 acres of wetland impact and less than 300 feet of stream impact).
PROTECTED SPECIES & HABITAT	IPaC and EcoCAT screening results; listed species, critical habitat, migratory birds, eagles, aquatic habitat, tree clearing, and seasonal construction limitations. Coordinate with an EHP specialist to help you understand what the listed species mean for the project.	Use existing infrastructure where possible; move work away from habitat; minimize tree clearing; schedule work outside restricted periods; avoid active nests; apply species-specific measures and preconstruction surveys where required. Use existing infrastructure; avoid protected species habitat; apply seasonal restrictions and other BMPs; minimize vegetation clearing; avoid clearing during nesting periods; avoid active nests and mature riparian/wooded habitat.
HISTORIC, CULTURAL & TRIBAL	Historic districts and properties, areas of archaeological sensitivity, cemeteries, Tribal resources, sacred sites, and potential visual effects. While previously disturbed corridors can reduce risk, they do not wholly eliminate the need for review. Coordinate with an EHP specialist to identify cultural resources and help you evaluate impacts.	Shift alignment away from known cultural resources; use disturbed ROW; collocate fiber on existing overhead lines; reduce ground disturbance and visual aesthetic changes; avoid antenna and pole placements within historic districts.

CATEGORY	IDENTIFY	AVOID/MINIMIZE/MITIGATE
LANDS, RIGHTS & PERMISSIONS	Identify whether federal, Tribal, or state-owned lands; conservation easements; railroads; and/or local ROW intersect with your project.	Use existing public ROW or utility corridors; move off protected or restricted land where feasible; begin ownership, easement, and permit coordination early.
CONTAMINATION & HAZARDOUS MATERIALS	Known or suspected contaminated properties, hazardous waste sites, and work that may encounter affected soil or groundwater. Environmental database resource tools, such as the hazardous material spills database, can be used to identify potential concerns.	Move excavation, equipment, staging, and access away from affected areas; use approved plans and controls if work cannot avoid the site, such as adherence to a soil and groundwater management plan.