



Final Proposal

Connect Illinois Round 4
Broadband Equity, Access, and
Deployment Program
Approved by NTIA, August 2026

Message from the Director

Dear Illinois Broadband Stakeholders,

The Illinois Office of Broadband is proud to present the Broadband Equity, Access, and Deployment (BEAD) Final Proposal. As you'll see, Illinois is on track to achieve universal BEAD coverage through a combination of technologies that reflects our technology-neutral approach (68% wired, 8% low-earth orbit satellite, and 24% wireless terrestrial), a federal investment of over \$831 million, and more than 40% private match, totaling more than \$500 million.

The Benefit of the Bargain Round brought great success – Illinois received 66% more applications than previous grant rounds and is reaching 100% of BEAD-eligible locations at an average of just over \$5,830 per location, representing a 21%+ reduction at the per location level from the previous round. Additionally, more than 60% of awarded entities are based right here in Illinois. Both factors are a testament to the commitment of Illinois' internet service provider community to bringing high-quality, cost-effective, high-speed internet to every corner of our great state.

The Illinois Office of Broadband is grateful for the robust ecosystem of partners across the state who played a critical role in making Connect Illinois Round 4 a reality, and we look forward to working in partnership to achieve universal connectivity.

A handwritten signature in black ink that reads "Devon Braunstein". The script is fluid and cursive, with the first letters of each word being capitalized and prominent.

Devon Braunstein
Director, Illinois Office of Broadband

About the Final Proposal

The Final Proposal describes the results of the Eligible Entity's (State of Illinois') deployment Subgrantee Selection Process. The Final Proposal should demonstrate that the Eligible Entity has adequately planned for, and will, implement a program that meets BEAD program objectives.

Note: All contents are subject to change as Illinois moves through the 90-day NTIA review and curing process from October 1 – December 29, 2025.

Section 1: Subgrantee Selection (Requirement 1)

1.1 Describe how the Eligible Entity's deployment Subgrantee Selection Process undertaken is consistent with that approved by NTIA in Volume II of the Initial Proposal as modified by the BEAD Restructuring Policy Notice.

To provide an adequate response, the Eligible Entity must consider its deployment subgrantee selection timelines, phases, project area definitions, evaluation procedures, and strategies to ensure universal coverage among other elements of its deployment Subgrantee Selection Process.

The Eligible Entity must describe how the Subgrantee Selection Process undertaken was consistent with that approved in the Initial Proposal, as modified by the BEAD Restructuring Policy Notice. If the Eligible Entity has completed or is in the process of completing its Subgrantee Selection Process at the time of the release of the BEAD Restructuring Policy Notice, the Eligible Entity must use this section to describe how it conducted at least one additional "Benefit of the Bargain Round" for every BEAD-eligible location. The Eligible Entity must detail how it conducted the "Benefit of the Bargain" round, including how it addressed prequalification (if applicable) and resubmission of applications.

The Illinois Office of Broadband (IOB) undertook the subgrantee selection process consistent with Illinois' approved Initial Proposal, as modified by the BEAD Restructuring Policy Notice.

Prior to the BEAD Restructuring Policy Notice (RPN), the IOB completed one application round, known as Wave 1, had notified applicants about the outcomes of their application(s) and preliminary awards, and had launched a second application round, Wave 2. Upon publication of the RPN, the IOB ended the Wave 2 application round, updated its website to archive outdated guidance, and rescinded Wave 1 preliminary awards. All preliminary subaward selections were rescinded and applicants were notified that a further round of applications will be considered before final awards are made. To adhere to the timeline established by the RPN, the IOB swiftly reviewed and revised its previous Notice of Funding Opportunity (NOFO), application questions, application guidebook, scoring rubric, and procedures, conducting 24 hours of re-training for IOB team members involved in the subgrantee selection process.

Simultaneously, in line with the RPN, the IOB initiated the seven-day window for unlicensed fixed wireless (ULFW) providers to express interest in submitting evidence of qualifying broadband service, per BEAD guidelines, to BEAD-eligible locations. ULFW providers had the

opportunity to express interest using a form open to the public June 11-17, 2025. Five unique providers expressed interest through the form. On June 18, 2025, the IOB emailed instructions to the five providers for how to submit evidence of ULFW service at the BEAD-eligible locations with Technology Code 70 available at the location, based on the FCC's National Broadband Map. IOB used a submission template to streamline the evaluation process and ensure comprehensiveness of submissions. The template requested information required to evaluate the provider's ability to reach BEAD-required speeds and latency at the location level. At the close of the seven-day window, one provider responded with evidence. After evaluating this provider's response, the IOB concluded that the provider successfully provided evidence to validate that 1,604 locations could already receive qualifying service and thus would no longer be eligible for inclusion in a BEAD project. The IOB notified the provider of this outcome on June 30, 2025.

To prepare for the Benefit of the Bargain Round, the IOB also revised its list of eligible community anchor institutions (CAIs) to align with the definition provided in the RPN. Further details are available in Question 1.4 of this document.

The RPN also required Eligible Entities to re-open pre-qualification opportunities. Upon opening the Benefit of the Bargain Round application window, the IOB made "prequalification submissions part of the application package"¹, allowing any interested applicant to submit entity-level qualification documentation, regardless of past participation. Additionally, "existing qualified applicants [did] not need to resubmit prequalification documentation."²

The IOB published an updated NOFO complying with the RPN on July 1, 2025, which initiated the application window for the Benefit of the Bargain Round.

The IOB accepted applications for project area units (PAUs) defined by the Hex-8 spatial indexing overlay to create a standardized mapping, as outlined in the original Initial Proposal Volume II and using the same underlying PAU definitions employed during Wave 1 with minor changes to facilitate a successful Benefit of the Bargain Round. Where an applicant elected to stand on an existing subgrantee application received prior to the publication of the RPN, the application was rescored under the updated rubric. During the Benefit of the Bargain Round, prior applicants were able to update parts of their application to better align with the new requirements and scoring criteria as laid out by the RPN. The IOB also allowed applicants to propose to exclude select BSLs that the applicant determined to be excessively high-cost locations from the project area (or would otherwise make the project economically unviable for the technology being used). If an applicant did not take action on using a previously submitted application, the IOB did not consider the application. Unchanged and resubmitted applications were re-evaluated using the updated RPN scoring rubric.

The IOB, supported by an experienced team of technical advisors and merit reviewers, evaluated applicants for their ability to meet the financial and managerial capacity, technical and operational capability, and other requirements in 47 U.S.C. § 1702(g)(2)(A). The IOB scored

¹ BEAD Restructuring Policy Notice, Page 10

² BEAD Restructuring Policy Notice, Page 10

projects using the RPN's updated scoring criteria and prioritized Priority Broadband Projects over non-Priority Broadband Projects. If the IOB determined that selecting a Priority Broadband Project would incur excessive costs, the IOB selected a lower cost non-Priority Broadband Project. Excessive cost was determined by evaluating the cost curve and identifying the point where connecting each additional location would require excessively more funding. Any applicant had the opportunity to request that the IOB treat its application as a Priority Broadband Project regardless of the technology used. The applicant's project was then evaluated using the methodology described in Section 12 below to confirm it met "the required speed and latency standards set forth in the statute and the NOFO and demonstrate that it meets the additional statutory criteria, including that the project can easily scale speeds over time to support evolving connectivity needs and the deployment of 5G and successor wireless technologies."³

To ensure universal coverage, the IOB elected to secure service commitments through direct negotiation, as well as a flash bid. All providers had an opportunity to competitively apply to serve the BSLs in question before the IOB engaged in direct negotiation. In addition, when directly negotiating, the IOB ensured that the providers with which the IOB engaged met all BEAD eligibility criteria. To conduct direct negotiations, the IOB identified the preliminarily selected project closest to each unclaimed location and offered this applicant 24 hours to submit a bid to claim any or all of these locations. For locations more than 2 miles from any project or those that received no bids during direct negotiations, the IOB sent a list of all remaining locations to all qualified applicants and offered them 24 hours to submit a bid at the location level.

1.2 Describe the steps that the Eligible Entity took to ensure a fair, open, and competitive process, including processes in place to ensure training, qualifications, and objectiveness of reviewers.

The Illinois Office of Broadband (IOB) facilitated a fair, open, and competitive process, with processes in place to ensure training, qualification, and objectiveness of reviewers.

Fair: The IOB established several processes to ensure a fair process, from application acceptance to qualifications, merit review, and preliminary selection. All merit reviewers, IOB, and Illinois Broadband Lab participants signed DCEO's standard conflict of interest form. The IOB established standard processes for each stage in the review and evaluation process, documented through a standard operating procedure and application review guide. Standard processes were formalized through 24 hours of trainings for team members and merit reviewers, plus practice sessions to test skills and ensure consistency across reviews.

The Benefit of the Bargain Round adhered to DCEO's standard Notice of Funding Opportunity (NOFO) policies and procedures. This involved presenting the grant program to DCEO senior leadership and securing approval from the Director's Office. The IOB used DCEO's standard NOFO Template, Checklist, and Guide to prepare the NOFO for review. The NOFO was reviewed and approved by the Office of Accountability, Office of General Counsel, Office of Financial Management, and the DCEO Director. Once ready for posting, the Office of

³ BEAD Restructuring Policy Notice, Page 9

Accountability posted the NOFO on the Catalog of State Financial Assistance and on the DCEO website.

Throughout the pre-processing and merit review process, the IOB had multiple reviewers evaluating each application, daily meetings to address questions, and a consistency check process facilitated by the Compliance Team to ensure reviews were comprehensive and complete. Merit reviewers made determinations on each application by using the application review guide aligned to the BEAD NOFO and BEAD Restructuring Policy Notice, which had guidelines for each application question, and followed a standard operating procedure. The IOB also utilized standard templates and instructions that both helped applicants clearly understand requirements and enabled fairness during the review process.

Open: On June 30, 2025, the IOB hosted a webinar promoting the Benefit of the Bargain Round with instructions on how to apply. More than 220 prospective applicants attended. The webinar was publicized via email to all 447 internet service providers and infrastructure contacts registered on the IOB's contact list. The IOB also publicized the webinar on LinkedIn on June 6, 2025, reaching 421 viewers, and through the Illinois Broadband Connections newsletter on July 2, 2025, which reached 3,227 email addresses. The IOB published Frequently Asked Questions (FAQs) online to ensure equal access to information [https://ilgov-my.sharepoint.com/:w:/g/personal/devon_braunstein_illinois_gov/EQj7yvIaX8BlIo2u8fjIl-IBgyaJ7GRpUQWFz7Xh5up4-w?e=94uTYz]. The NOFO was published on the IOB's website and Department of Commerce and Economic Opportunity grants portal on July 1, 2025. The NOFO was publicized in the newsletter on July 2, 2025, reaching 3,227 email addresses and on LinkedIn on July 2, 2025, reaching 373 users. The NOFO, which serves as the formal rules for the program, provided guidance for consortia participants to prevent collusion: "Applicants and any representatives thereof, shall not enter into any other combination, collusion, or agreement in regard to participation in the BEAD program. To this end, an entity cannot apply for PAU(s) simultaneously as an individual entity and as part of a consortium." The application window was open for three weeks to encourage broad participation and closed on July 18, 2025, at 11:59 pm CT. Three weeks was selected as this was the maximum possible time the IOB could offer applicants while still operating within the limited timeframe presented by the RPN. Previous applications rounds were open for a minimum of 5 weeks, so the IOB prioritized maximizing the window to facilitate quality and not rushed application materials. Per DCEO policy, any applications received after this date were not considered.

Competitive: The IOB used an application review guide developed to evaluate applications for their ability to meet the speed and performance specifications outlined in the BEAD NOFO and BEAD Restructuring Policy Notice. This was competitively neutral evaluation criteria that did not favor one type of provider over another. All BEAD qualifications, scoring criteria, and program rules were published in advance through the NOFO.

Processes in place to ensure reviewers were trained, qualified, and objective: The IOB implemented several measures to ensure merit reviewers were trained, qualified, and objective, across (a) hiring and procurement practices (including conflict of interest processes), (b) training and assignments, and (c) application review and consistency check. The merit reviewers who contributed to the Benefit of the Bargain Round were procured through DCEO contracts and the

Illinois Broadband Lab. A subset of the merit reviewers conducted merit review and technical assistance for previous rounds of the Connect Illinois grant program, thus have proven technical and financial skills, all with several years of experience working for an internet service provider, operating a broadband network, or leading a state broadband office. When recruiting new merit reviewers, the IOB assessed qualifications by evaluating the candidates' technical, financial, managerial, and operational experience working for an internet service provider, leading a state broadband office, or otherwise playing a role in the development or execution of a broadband grant program. The IOB reviewed resumes and conducted interviews. The IOB also subcontracted with a Professional Engineer-led broadband consulting firm to provide additional technical analysis.

The IOB requested information on any conflicts of interest, following the policy that any merit reviewer with an actual or perceived conflict of interest is prohibited from reviewing or evaluating application(s) associated with the conflict of interest, and recuses themselves from participating in any discussion where this applicant was discussed.

Merit reviewers were assigned to qualification categories that aligned with their expertise and background. To ensure quality and consistency, the IOB crafted a Merit Reviewer Application Review Guide, which provided guidelines for evaluating each question to ensure consistency of reviews, as well as a Standard Operating Procedure, which ensured consistency of process and documentation. Applications each were reviewed by multiple merit reviewers, and applications from the same entity were reviewed by multiple different merit reviewers.

After applications were pre-processed by the IOB Grants and Compliance Team to ensure all merit reviewers were reviewing complete and consistent application documents, each qualification was assigned to a merit reviewer in the application management portal. The merit reviewer then evaluated the qualification using the information provided in the application and Review Guide. The IOB also produced a summary document highlighting key statistics from each application to increase efficiency in merit review. During this time, the IOB hosted daily Committee Review Meetings and Workshopping Time. In Committee Review Meetings, the IOB ran through the list of questions flagged by merit reviewers for group input. The results of each committee item were then documented. Workshopping Time was a space where merit reviewers could share observations, discuss questions as a group, and lean on each other's expertise.

Once a merit reviewer completed their review, they mark the qualification as "complete", and it moved into Consistency Check. During this time, the IOB reviewed any external feedback, documented in the application management portal, for completion and consistency, emailed this to the applicant, and documented the date of the feedback in the application management portal. Once curing feedback came in via email within 24 hours, the assigned Consistency Check team member reviewed it for completion, uploaded it to the respective application management portal qualification, marked that the submission includes curing feedback, reflected that the submission was ready for review again, and documented the response. All applicants were given equal opportunities for curing. The IOB reviewed all merit reviewer determinations and discussed any questions or concerns during meetings. Ultimately, there

were four layers of review: pre-processing, qualification merit review, consistency check, and final determinations made by the IOB.

1.3 Affirm that, when no application was initially received, the Eligible Entity followed a procedure consistent with the process approved in the Initial Proposal.

When there were initially no applications to serve a location or group of locations that are unserved and underserved, the Eligible Entity must affirm that it followed a procedure consistent with the process approved in the Initial Proposal, as modified by the BEAD Restructuring Policy Notice.

The IOB affirms that when no application was initially received, it followed the procedure consistent with the process approved in Initial Proposal Volume II, as modified by the RPN.

1.4 If applicable, describe the Eligible Entity's methodology for revising its eligible CAI list to conform with Section 4 of the BEAD Restructuring Policy Notice.

According to the Infrastructure Investment and Jobs Act (IIJA) the definition of a Community Anchor Institution (CAI) is "an entity such as a school, library, health clinic, health center, hospital or other medical provider, public safety entity, institution of higher education, public housing organization, or community support organization that facilitates greater use of broadband service by vulnerable populations, including low income individuals, unemployed individuals, and aged individuals." As was previously permitted through the approval of Illinois' Initial Proposal Volume I, the IOB had expanded the definition of CAIs to include such organizations as parks, childcare centers, and community-based organizations.

To align with the RPN requirement to return to the statutory definition of CAIs, the IOB revisited its list of CAIs approved in its Initial Proposal Volume I to scale back those that do not meet the statutory definition.

To do so, the IOB removed all parks and recreation areas, categorized as "K" in the `post_challenge_cai_final` csv that was previously submitted as a part of the Initial Proposal Volume I. The IOB also evaluated Community Support Organizations (CSO) marked "C". Some of those CAIs were childcare centers, which were removed, and the remaining locations were individually researched to ensure that the organization facilitates greater use of broadband service by low income, unemployed, or aged individuals, per the statutory definition. Those that were identified as meeting those requirements remained on the list of CAIs, and those that did not were removed. The IOB then marked all removed CAIs as "No-BEAD locations" and published the final list of CAIs before opening its Benefit of the Bargain Round on July 1, 2025.

On August 13, 2025 NTIA shared a list of 771 CAIs generated from Illinois' `post_challenge_cai_final` csv that NTIA preliminarily determined to not meet the statutory definition of CAIs. The IOB cross-referenced this list with the list of CAIs posted before its Benefit of the Bargain Round and identified 104 locations that NTIA had marked for removal but the IOB had evaluated did indeed meet the statutory definition. Of those 104 CAIs, the IOB is provisionally awarding 16 CAIs based on programming and services documented online

demonstrating that the organization meets the statutory definition. This documentation can be found as an attachment to the Final Proposal submission.

1.5 Certify that the Eligible Entity will retain all subgrantee records in accordance with 2 C.F.R. § 200.334 at all times, including retaining subgrantee records for a period of at least 3 years from the date of submission of the subgrant's final expenditure report. This should include all subgrantee network designs, diagrams, project costs, build-out timelines and milestones for project implementation, and capital investment schedules submitted as a part of the application process.

The IOB certifies that it will retain all subgrantee records in accordance with 2 C.F.R. § 200.334 at all times, including retaining subgrantee records for a period of at least 3 years from the date of submission of the subgrant's final expenditure report. These records will include all subgrantee network designs, diagrams, project costs, build-out timelines and milestones for project implementation, and capital investment schedules submitted as a part of the application process.

Section 3: Timeline for Implementation (Requirement 3)

3.1 Has the Eligible Entity taken measures to: (a) ensure that each subgrantee will begin providing services to each customer that desires broadband service within the project area not later than four years after the date on which the subgrantee receives the subgrant; (b) ensure that all BEAD subgrant activities are completed at least 120 days prior to the end of the Eligible Entity's period of performance, in accordance with 2 C.F.R. 200.344; and (c) ensure that all programmatic BEAD grant activities undertaken by the Eligible Entity are completed by the end of the period of performance for its award, in accordance with 2 C.F.R. 200.344.

Yes. The IOB will execute a grant agreement with each grantee, which will contain provisions requiring each subgrantee to begin providing services to each customer that desires broadband service within the project area within ten business days of request, completes the project not later than four years after the date on which the subgrantee receives the subgrant, and adheres to all requirements in the grant agreement. The grant agreement will also ensure that all BEAD subgrant activities are completed at least 120 days prior to the end of Illinois' period of performance, in accordance with 2 C.F.R. 200.344.

The IOB will ensure that all programmatic BEAD grant activities undertaken by Illinois are completed by the end of the period of performance for its award, in accordance with 2 C.F.R. 200.344.

The IOB will monitor the grantees performance through the Semi-Annual Report (SAR) with additional reviews on a quarterly basis, examining expenses, location data and buildout milestones. The IOB will also perform site visits and field validation throughout the period of performance and prior to the project closeout. Payment to the subgrantee will be based on these performance measures through the use of fixed amount subawards, parsing out payments in accordance with the completion of the project. In the event the subgrantee is not

executing services to the terms and conditions of the grant agreement, the IOB will implement corrective actions, up to and including the recoupment of funding.

Section 4: Oversight and Accountability Processes (Requirement 4)

4.1 Does the Eligible Entity have a public waste, fraud, and abuse hotline, and a plan to publicize the contact information for this hotline?

Yes, the IOB has the following published on its BEAD webpage: *To report fraud, waste, or abuse, contact the Office of the Inspector General at (866) 814-1113 or [file a complaint](https://dceo.illinois.gov/broadband/bead.html)*. The webpage is available at <https://dceo.illinois.gov/broadband/bead.html>.

4.2 Upload the following two required documents:

(1) BEAD program monitoring plan;

(2) Agency policy documentation which includes the following practices:

Please see Attachment I.

4.3 A series of requirements for the subgrant agreements. Illinois must certify that agreements will include all of these conditions, at a minimum:

- **Compliance with Section VII.E of the BEAD NOFO, as modified by the BEAD Restructuring Policy Notice, including timely subgrantee reporting mandates, including at least semiannual reporting, for the duration of the subgrant to track the effectiveness of the use of funds provided;**
- **Compliance with obligations set forth in 2 C.F.R. Part 200 and the Department of Commerce Financial Assistance Standard Terms and Conditions;**
- **Compliance with all relevant obligations in the Eligible Entity's approved Initial and Final Proposals, including the BEAD General Terms and Conditions and the Specific Award Conditions incorporated into the Eligible Entity's BEAD award;**
- **Subgrantee accountability practices that include distribution of funding to subgrantees for, at a minimum, all deployment projects on a reimbursable basis;**
- **Subgrantee accountability practices that include the use of clawback provisions between the Eligible Entity and any subgrantee (i.e., provisions allowing recoupment of funds previously disbursed);**
- **Mandate for subgrantees to publicize telephone numbers and email addresses for the Eligible Entity's Office of Inspector General (or comparable entity) and/or subgrantees' internal ethics office (or comparable entity) for the purpose of reporting waste, fraud or abuse in the Program. This includes an acknowledge of the responsibility to produce copies of materials used for such purposes upon request of the Federal Program Officer; and**
- **Mechanisms to provide effective oversight, such as subgrantee accountability procedures and practices in use during subgrantee performance, financial management, compliance, and program performance at regular intervals to ensure that subgrantee performance is consistently assessed and tracked over time.**

The IOB certifies that it will be in compliance with all of the conditions listed above.

Section 5: Local Coordination (Requirement 5)

5.1 Describe the public comment period and provide a high-level summary of the comments received by the Eligible Entity during the public comment period, including how the Eligible Entity addressed the comments.

The IOB held a seven-day public comment period between September 23-29, 2025. The Final Proposal, along with draft grant agreements and an interactive provisional award map, was posted on the IOB's website (<https://dceo.illinois.gov/broadband/bead/sub-grantee-selection-process.html>) for seven calendar days with a form available for the public to submit comments. It was publicized through the Illinois Broadband Connections newsletter and emailed to political subdivisions to afford them the opportunity to participate.

The IOB received comments from individuals, nonprofit organizations, labor unions, and internet service providers. Feedback included suggested changes to the draft grant agreement, a recommendation to invest more funds in fiber-optic technology to create local jobs, encouragement to use unallocated funds to support other broadband infrastructure projects and broadband adoption programs, critique of the unlicensed fixed wireless evidence submission process (*see section 1.1 for details on how IOB conducted this process in accordance with the RPN*), support for the program from Illinois residents, emphasis on the importance of digital skill building, and indication of existing service at BEAD-eligible locations.

Changes to grant agreements will be evaluated over the coming months and feedback may be incorporated.

To address public comment around locations served by non-subsidized service, the IOB made adjustments wherever possible in line with NTIA requirements.

Section 6: Challenge Process Results (Requirement 6)

6.1 Certify that the Eligible Entity has successfully completed the BEAD Challenge Process and received approval of the results from NTIA.

The IOB certifies that it successfully completed the BEAD Challenge Process and received approval of the results from NTIA on November 26, 2024.

6.2 Provide a link to the website where the Eligible Entity has publicly posted the final location classifications (unserved/underserved/CAIs) and note the date that it was publicly posted.

The final locations classifications (unserved/underserved/CAIs) are publicly posted on the IOB's [website](#). The classifications were publicly posted on December 3, 2024. Location classifications are posted under the second bullet point under Additional Resources. Benefit of the Bargain final location classifications were posted at this location on July 1, 2025.

Section 7: Unserved and Underserved Locations (Requirement 7)

7.1 Certify whether the Eligible Entity will ensure coverage of broadband service to all unserved locations within its jurisdiction, as identified upon conclusion of the Challenge Process required under 47 U.S.C. § 1702(h)(2).

If the Eligible Entity is financially incapable (reason code 7, sub-code F) of serving any unserved locations by a BEAD project, it must select ‘No.’

The IOB certifies that it will ensure coverage of broadband service to all unserved locations.

7.2 If the Eligible Entity does not serve an unserved location because it is either financially incapable or has determined that costs to serve the location would be unreasonably excessive, explain and include a strong showing of how the Eligible Entity made that determination.

Not applicable.

7.3 If applicable to support the Eligible Entity’s response to Question 7.2 Provide relevant files supporting the Eligible Entity’s determination.

Not applicable.

7.4 Certify whether the Eligible Entity will ensure coverage of broadband service to all underserved locations within its jurisdiction, as identified upon conclusion of the Challenge Process required under 47 U.S.C. § 1702(h)(2).

If the Eligible Entity is financially incapable (reason code 7, sub-code F) of serving any underserved location by a BEAD project, it must select ‘No.’

The IOB certifies that it will ensure coverage of broadband service to all underserved locations.

7.5 If the Eligible Entity does not serve an underserved location because it is either financially incapable or has determined that costs to serve the location would be unreasonable excessive, explain and include a strong showing of how the Eligible Entity made that determination.

Not applicable.

7.6 If applicable to support the Eligible Entity’s response to Question 7.5, provide relevant files supporting the Eligible Entity’s determination.

Not applicable.

7.7 Certify that the Eligible Entity has utilized the provided reason codes to investigate and account for locations that do not require BEAD funding, that the Eligible Entity will utilize reason codes 1, 2, and 3 for the entire period of performance, and that the Eligible Entity will maintain documentation, following the guidelines provided by NTIA, to justify its determination if there is a reason to not serve any unserved or underserved location on the NTIA-approved Challenge Process list through a BEAD project. The documentation for each location must be relevant for the specific reason indicated by the Eligible Entity in the fp_no_BEAD_locations.csv file. The Eligible Entity shall provide the

documentation for any such location for NTIA review, as requested during Final Proposal review or after the Final Proposal has been approved.

The IOB certifies that it has utilized the provided reason codes to investigate and account for locations that do not require BEAD funding, that the IOB will utilize reason codes 1, 2, and 3 for the entire period of performance, and that the IOB will maintain documentation, following the guidelines provided by NTIA, to justify its determination if there is a reason to not serve any unserved or underserved location on the NTIA-approved Challenge Process list through a BEAD project.

7.8 Certify that the Eligible Entity has accounted for all enforceable commitments after the submission of its challenge results, including state enforceable commitments and federal enforceable commitments that the Eligible Entity was notified of and did not object to, and/or federally-funded awards for which the Eligible Entity has discretion over where they are spent (e.g., regional commission funding or NTIA | 54 Capital Projects Fund/State and Local Fiscal Recovery Funds), in its list of proposed projects.

The IOB certifies that it has accounted for all enforceable commitments after the submission of its challenge results, including state enforceable commitments and federal enforceable commitments that the IOB was notified of and did not object to, and/or federally-funded awards for which the IOB has discretion over where they are spent (e.g., regional commission funding or NTIA | 54 Capital Projects Fund/State and Local Fiscal Recovery Funds), in its list of proposed projects.

Section 11: Implementation Status of Plans (Requirement 11)

11.1 Provide the implementation status (Complete, In Progress, or Not Started) of plans described in the approved Initial Proposal Requirement 14 related to reducing costs and barriers to deployment.

The implementation status of plans described in Initial Proposal Requirement 14 related to reducing costs and barriers to deployment are as follows:

Promoting and adopting “dig-once” policies: In Progress

The Illinois Dig Once Act (Public Act 103-0378), effective January 2024, reduces repeated excavations in public rights-of-way by coordinating broadband and utility installations with road construction. This approach lowers costs, minimizes disruptions, and streamlines broadband deployment.

The Act tasks the Department of Commerce and Economic Opportunity (DCEO) with appointing a Dig Once Coordinator and developing rules in partnership with the Illinois Department of Transportation (IDOT), Illinois Tollway Authority (ITA), and Illinois Commerce Commission (ICC). These rules will guide the design and construction of roadway projects to minimize utility relocations and support broadband deployment in a fair and efficient manner.

The IOB researched Dig Once best practices and convened meetings with state agencies, utilities, internet service providers (ISPs), and Joint Utility Locating Information for Excavators (JULIE) to gather input. IOB then developed draft policy methods and held four targeted focus groups with ISPs, utilities, co-ops, and permitting entities. Based on this input, IOB released a first draft of the rules to external stakeholders. Feedback is currently under review, and a second draft is in development.

Streamlining rights of way and access to easements: In Progress

In addition to the resources shared in the Initial Proposal Volume II, such as the County/Municipal template, the IOB has engaged in significant efforts to gather stakeholder feedback on current easements issues in Illinois. The IOB surveyed current grantees, spoke with stakeholders across the state, and used that information to contribute to the development of the Electrical Service Broadband Deployment and Access Law, which passed in May 2025. The law allows electric cooperatives who have received broadband grant funding to use existing electric easements for the installation and maintenance of broadband. The IOB will continue discussions with providers to further understand the challenges and opportunities for right-of-way (ROW) and easement acquisition.

Additionally, the IOB has researched and catalogued the current landscape for ROW and easement acquisition in Illinois and will share this information with grantees through written documents, presentations, and meetings throughout the State.

Promote the use of existing infrastructure: In Progress

On July 2, 2025, the IOB hosted a webinar with the Illinois Century Network, promoting opportunities for prospective BEAD applicants to tap into the existing middle mile network, sharing instructions, and inviting questions and feedback. The IOB also meets with the team operating the ICN monthly to remain updated on progress and identify synergies with Connect Illinois initiatives.

Additionally, providers may take advantage of licensing other dark fiber from utilities across the state such as ComEd. The IOB will meet regularly with grantees to support in identifying economic efficiencies and sharing information on known middle mile networks.

Streamline the permitting process: In Progress

The IOB has made significant progress in addressing permitting and deployment challenges that delay broadband expansion. To address these issues, the IOB hired two Broadband Permitting and Policy Coordinators focused on streamlining permitting processes and resolving pole attachment barriers, both of which are major obstacles to timely broadband deployment. The office has begun meeting with Internet Service Providers (ISPs) and permitting entities across the state to learn about the current permitting process and challenges.

Initial findings have revealed several common challenges: applicants often struggle to identify the correct permitting jurisdiction, resulting in misdirected applications; permit requirements are frequently unclear, leading to multiple revisions; and pole owners can be difficult to identify or

contact, further complicating infrastructure planning. To address these issues, IOB will host a series of formal roundtables with ISPs and permitting entities at the federal, state, county, municipal, and township levels. Using the feedback from the round tables, IOB will develop a comprehensive Permitting How-To Guide. The guide will help applicants identify the appropriate permitting authority, provide agency contacts, outline general permitting requirements by jurisdiction, and offer best practices for successful submissions. This effort will provide clarity, improve coordination, and support faster, more efficient broadband deployment statewide.

Additionally, the IOB engages in quarterly meetings with all grantees where the Office can troubleshoot and offer direct help in any permitting issues or other barriers that are hampering broadband deployment projects. This ensures that grantees are able to efficiently and effectively build out projects – a main priority of IOB and the BEAD program.

11.2 Affirm that the Eligible Entity required subgrantees to certify compliance with existing federal labor and employment laws.

The IOB certifies that it required grantees to certify compliance with existing federal labor and employment laws.

11.3 (If “No” to 11.2) If the Eligible Entity does not affirm that subgrantees were required to certify compliance with federal labor and employment laws, explain why the Eligible Entity was unable to do so.

Not applicable.

11.4 Certify that all subgrantees selected by the Eligible Entity will be required to offer a low-cost broadband service option for the duration of the 10-year Federal interest period.

The IOB certifies that grantees selected by the Eligible Entity will be required to offer a low-cost broadband service option for the duration of the 10-year Federal interest period.

11.5 (If “No” to 11.4) If the Eligible Entity does not certify that all subgrantees selected by the Eligible Entity will be required to offer a low-cost broadband service option for the duration of the 10- year Federal interest period, explain why the Eligible Entity was unable to do so

Not applicable.

11.6 Certify that all subgrantees have planned for the reliability and resilience of BEAD-funded networks.

The IOB certifies that all grantees have planned for the reliability and resilience of BEAD-funded networks.

11.7 (If “No” to 11.6) If the Eligible Entity does not certify that subgrantees have ensured planned for the reliability and resilience of BEAD-funded networks in their network designs, explain why the Eligible Entity was unable to do so.

Not applicable.

Section 12: Substantiation of Priority Broadband Projects (Requirement 12)

12.1 Describe how the Eligible Entity applied the definition of Priority Project as defined in the Infrastructure Act and the BEAD Restructuring Policy Notice.

The term “Priority Broadband Project” means a project that provides broadband service at speeds of no less than 100 megabits per second for downloads and 20 megabits per second for uploads, has a latency less than or equal to 100 milliseconds, and can easily scale speeds over time to meet the evolving connectivity needs of households and businesses and support the deployment of 5G, successor wireless technologies, and other advanced services. No technologies were categorically excluded.

The IOB applied this definition by developing technology neutral guidelines to conduct a project-by-project analysis, as required in the Policy Notice. The IOB’s team of merit reviewers and professional engineers evaluated the network designs, technical narratives, and template responses provided by applicants to determine if applicants could meet the Priority Broadband Project criteria.

All applicants had an opportunity to indicate that they wished for their projects to be considered Priority Broadband Projects and completed standard templates providing technical information for the IOB to make the assessment. Templates collected information on backhaul, equipment models, towers, sectors, density, and other pertinent data points. The IOB reviewed all projects for Priority Broadband consideration utilizing the methodology laid out below. In line with the RPN and IJJA, the review of each project resulted in the designation of each project as either a Priority Broadband Project or a non-Priority Broadband Project.

All projects were evaluated for ability to meet BEAD qualifications of 100/20 Mbps and no more than 100 milliseconds latency. Then, the IOB evaluated whether the design could accommodate capacity increases and has backhaul scalable to support evolving connectivity needs, 5G, and successor wireless technologies. To assess the ability to easily scale speeds over time to meet the evolving connectivity needs of households and businesses, the IOB applied 25% growth per year, on the conservative end of industry predictions. This equates to a speed increase to 240% above the baseline in five years after the period of performance, which translates to 240/48 Mbps and 12 Mbps downstream simultaneous speed. The IOB also established a “no forklift” requirement, meaning the project should be able to scale up without material new construction outside of standard maintenance. Scaling of speeds was not a deployment requirement. Only the hypothetical capability to scale speeds was assessed.

Finally, to assess whether projects can support the deployment of 5G, successor wireless technologies, and other advanced services, the IOB evaluated whether projects could provide the backhaul necessary to support 5G deployment. Based on conservative industry standards, a 300/30 Mbps backhaul connection is required per each 5G provider per tower (source: [Ericsson Research](#), pg 3). Most towers host equipment from three major providers, requiring 900/90 Mbps. The IOB evaluated whether projects could facilitate such connection.

For fiber projects, the IOB evaluated whether the project is reliant on additional construction to reach scalability claims (i.e., doesn't require a forklift update of electronics), has the ability to accommodate scaled up speeds and tower backhaul (i.e., fiber split ratio can accommodate all BSLs are peak usage), and the location-specific network design supports Priority Broadband Project claims.

For HFC projects, the IOB evaluated whether the project is reliant on additional construction to reach scalability claims (i.e., fiber expansion, mass replacement of amplifiers), has the ability to accommodate scaled up speeds and tower backhaul (i.e., node capacity can support proposed BSLs in project), and the location-specific network design supports Priority Broadband Project claims.

For terrestrial fixed wireless projects, the IOB evaluated whether the project is reliant on additional construction to verify scalability claims (i.e., additional towers), has sufficient backhaul capacity available through tower sites (i.e., when the technology is scaled to meet future needs during periods of very high demand, such as public safety emergencies, no more than two tower sites are using more than 100% of their backhaul capacity), and has sufficient capacity per sector (i.e., when providing 100/20 Mbps service to all proposed locations, nearly all sectors have sufficient capacity to serve them all at 100/20 Mbps; if there are bottlenecks at the baseline BEAD speed, this is an indicator there will be bottle necks upon scaling up to meet Priority Broadband Project speeds).

For Low-Earth Orbit satellite projects, the IOB evaluated applicant responses to technical questions which examined the three LEO network components: the backbone fiber optics connecting the earth stations, the connections from the earth stations to the satellites (often including satellite-to-satellite connections), and the access network from the satellites to the subscribers. Technical questions examined a range of critical needs including cutover of signal from satellite to satellite, and installation of the antenna at the customer premises. The IOB conducted a capacity analysis of the proposed project area, indicating how there would be sufficient capacity after accounting for potential needs of the BSLs and other LEO users in the beam area. Like the area served by a particular sector of a wireless network, the capacity in the beam area is shared by all the users in the area. LEO applicants were therefore required to describe, specifically for each project area, how the network would allocate and share the capacity and guarantee the minimum required amount of capacity per user.

The IOB's technology neutral evaluation is particularly evident where, after applying the same benchmarks, projects using the same general technology or even submitted by the same applicant resulted in different evaluation outcomes, as evaluations were conducted for each individual project area, per the RPN.

Section 13: Subgrantee Selection Certification (Requirement 13)

13.1 Provide a narrative summary of how the Eligible Entity applied the BEAD Restructuring Policy Notice's scoring criteria to each competitive project application and describe the weight assigned to each Secondary Criteria by the Eligible Entity. Scoring

criteria must be applied consistent with the prioritization framework laid out in Section 3.4 of the BEAD Restructuring Policy Notice.

After the release of the BEAD Restructuring Policy Notice (RPN) on June 6, 2025, the IOB revised its scoring criteria to remove consideration of labor, local coordination, climate change, open access, and affordability. To align with the RPN, the IOB then reconfigured its scoring rubric as outlined below:

1. **Primary Scoring — Minimal BEAD Program Outlay:** In evaluating competing applications covering the same general project area, the IOB selected the proposal with the lowest grant funding request, calculated by the total BEAD funding that will be required to complete the project (i.e., the total project cost minus the applicant's proposed match) and the cost to the Program per location (i.e., the total BEAD funding that will be required to complete the project divided by the number of BSLs the project will serve).
2. **Secondary Scoring:** In situations in which another application's Minimal BEAD Program Outlay fell within 15% of the lowest cost proposal, the IOB considered the following Secondary Scoring criteria:
 - a. Speed to Deployment (5%) – Applicants who made a binding commitment to complete their project within 2 years of grant agreement execution received 5 points.
 - b. Speed of Network and Technical Capabilities (45%) – Applications could earn up to 45 points based on demonstrated speeds and technical capabilities.
 - c. Preliminary/Provisional grantees (50%) – Applications that were preliminarily awarded in Illinois previous BEAD subgrantee selection rounds received 50 points.

Section 14: Environmental and Historic Preservation Documentation (Requirement 14)

14.1 Submit a document which includes the following:

Description of how the Eligible Entity will comply with applicable EHP requirements, including a brief description of the methodology used to evaluate the Eligible Entity's Subgrantee projects and project activities against NTIA's NEPA guidance. The methodology must reference how the Eligible Entity will use NTIA's ESAPTT to create NEPA project records, evaluate the applicability of CEs, consider and document the presence (or absence) of ECs, and transmit information and draft NEPA documents to NTIA for review and approval.

In addition to the BEAD General Terms and Conditions, Notice of Funding Opportunity (NOFO), BEAD Restructuring Policy Notice (RPN), and relevant NTIA National Environmental Policy Act (NEPA) Guidance documents, IOB intends to follow NTIA's Guidance Document, *Smart Start: How to Plan and Prepare for National Environmental Policy Act (NEPA) Compliance for BEAD*. In response to that Guidance, IOB will obtain specialized Environmental and Historic Preservation (EHP) expertise by hiring a qualified outside consultant (NEPA Contractor) to

manage the EHP process and assist IOB in fulfilling their role as a Joint Lead Agency (JLA) under NEPA. The NEPA Contractor will be thoroughly vetted for both qualifications and capacity to manage the work through a Request for Proposal (RFP) process utilizing NTIA's proposal template for Third Party Environmental Contractor Requests as an example. The IOB will work closely in partnership with the NEPA Contractor on developing program guidance specific to the state of IL and creating a process flow in accordance with NTIA's procedures and ESAPTT system. In addition to the NEPA Contractor, IOB has also hired an internal Permitting Coordinator to assist all parties with state and federal permitting required as part of individual BEAD projects.

The NEPA Contractor will be responsible for reviewing project design plans provided by each Subgrantee and ensuring sufficient design information has been provided to initiate the NEPA process and determine Categorical Exclusions (CEs); coordinating with Subgrantees on EHP review documentation to comply with Section 106 of the National Historic Preservation Act (NHPA), Section 7 of the Endangered Species Act (ESA), Section 404 of the Clean Water Act, and other relevant state and federal regulations; inputting Subgrantee project information into ESAPTT system and coordinating with NTIA via the Tower Construction Notification System (TCNS) process; reviewing special studies and NEPA documentation provided by the Subgrantees for sufficiency; determining whether a project qualifies for a CE or exceeds an EC thereby requiring an Environmental Assessment (EA) by completing the questions in the ESAPTT system; coordinating with IOB on the certification and transmittal of draft decision memos to NTIA; and communication of SACs to the Subgrantees for their projects. The qualified NEPA Contractor will have a thorough knowledge of NEPA compliance, *NTIA's NEPA Procedures*, NTIA's CEs (both internal and those adopted by FirstNet), the *ACHP Program Comment*, and the *NTIA Non-Federal Designation Memos* with the State Historic Preservation Offices (SHPOs), Tribes, and the United States Fish and Wildlife Service (USFWS). The NEPA Contractor will also utilize qualified subject matter experts (SMEs) for ESA species reviews, wetland evaluations, and historic preservation reviews, with oversight by secretary of the interior (SOI)-qualified archaeologists and architectural historians.

The process will begin through education of the Subgrantees regarding the NEPA/EHP process for BEAD in the State of Illinois. Subgrantees will be provided with clear guidance and expectations regarding the portions of the BEAD process that fall in their area of responsibility. Subgrantees will be encouraged to engage with their own EHP experts and SMEs regarding their project responsibilities, including resource identification and impact analysis under NEPA. The general anticipated process flow for BEAD Subgrantees is outlined below but is subject to change based on the evolving nature of NTIA's new systems.

1. IOB holds an overall kick-off meeting to educate Subgrantees on EHP requirements and set program expectations. In addition to IOB leadership and the Subgrantees, the meeting will include the NEPA Contractor, the IOB Compliance Manager, and IOB Permitting Coordinator.
2. Subgrantee obtains their own individual consultant or expertise to assist with EHP procedures and reviews.
3. Subgrantee or their individual consultant performs a project review for resource identification and impact analysis. The resource identification can utilize NTIA's ArcGIS Pro Permitting and Environmental Information Tool (APPEIT), which NTIA provided to

aid Subgrantees in identifying potential permitting and environmental impact considerations. It should also utilize maps, agency file review, and other methods of identifying sensitive resources potentially impacted by the proposed Subgrantee project(s).

4. Subgrantee provides updated network designs, project design plans, and a project description to support IOB and NEPA Contractor as part of their grant agreement with the IOB. Applicable maps, studies, and underlying resource identification and impact analysis data are also provided by Subgrantee.
5. IOB hosts a project-specific kick-off meeting with Subgrantees to ensure process and procedures are understood regarding scope and individual roles in the project.
6. The NEPA Contractor inputs the Subgrantees provided project information into the ESAPTT tool.
7. NEPA Contractor initiates tribal consultation through the TCNS via ESAPTTs communication to the NTIA team.
8. The NEPA Contractor completes the CE and EC questions in ESAPTT to confirm the appropriate level of NEPA review (CE or EA). It should be noted that resource identification (maps, data) and special studies (cultural resources review, natural resources review) should be provided by the Subgrantee prior to submission to determine the presence or absence of ECs, as indicated in Step 3.
9. Subgrantee and NEPA contractor coordinate regarding the need for applicable agency letters (SHPO, USFWS, Tribal follow-ups, etc.) and determine responsibility. Environmental permits and coordination with other agencies will be managed and documented within the ESAPTT system by the NEPA contractor in coordination with the Subgrantee.
10. In the case that the project meets CE requirements and no ECs apply, the project will continue via the ESAPTT tool for processing, documentation, and eventual SACs. The NEPA Contractor will generate NEPA documentation in ESAPTT and IOB will review and approve decision documents for this process prior to transmitting to NTIA.
11. In the case that the project does not meet a CE or an EC is identified, the project will escalate to an EA. A kick-off meeting, schedule alignment, and document processing toward a potential Finding of No Significant Impact (FONSI) will occur outside of ESAPTT. This process may change or become clarified within the ESAPTT system in the future.
12. EAs will be performed by Subgrantees and under the supervision and guidance of the NEPA Contractor using the PEIS tiering process established by NTIA to streamline the environmental review process.
13. In the cases where other Federal agencies become involved in the NEPA process, through Federal land, management, or other permits, the Grantee NEPA team and IOB Permitting Coordinator will communicate with those agencies to attempt to establish NTIA as the lead agency and work with the agencies regarding NTIA's procedures and NEPA documents. The State of IL Permitting Coordinator will assist Subgrantees, IOB, and the NEPA Contractor in this process.
14. SACs will be communicated to the Subgrantees via the ESAPTT for a CE or via the EA and FONSI, as determined by the level of NEPA review for the project.

Under this process, the NEPA Contractor will be responsible for confirming the appropriate level of NEPA review (CE or EA) and documenting via ESAPTT, review of Subgrantee EHP

documents, surveys, and data, confirming the applicability and process flow of the program comment, and coordinating with Subgrantees during the Section 106 process. All NEPA documentation will be reviewed and confirmed via the IOB and their NEPA Contractor, fulfilling IOB's obligations as a joint lead agency to implement NEPA requirements under 42 U.S.C. 4336a.

In the case that a project does not meet a CE and an EA is required, the PEIS will be utilized to minimize NEPA scoping for the EA document, as applicable. The Subgrantees will be directed to utilize the portions of the PEIS that cover their applicable EA reviews, and the EA document will be reviewed by the NEPA Contractor for sufficiency prior to providing to NTIA for potential FONSI.

Description of the Eligible Entity's plan to fulfill its obligations as a joint lead agency for NEPA under 42 U.S.C. 4336a, including its obligation to prepare or to supervise the preparation of all required environmental analyses and review documents.

As discussed above, the qualified consultant will assist IOB in fulfilling their obligations as JLA under NEPA under 42 U.S.C. 4336a, including its obligation to prepare or supervise the preparation of all required environmental analyses and review documents. The consultant will be responsible for reviewing project design documents for sufficiency in NEPA evaluation, special studies and associated mapping data, documentation provided by the Subgrantees demonstrating qualification of CEs or program comment requirements, as well as any NEPA documents prepared (CE documentation or EAs, as appropriate). If determined necessary for certain projects, the consultant may also be responsible for preparing NEPA documents in case a particular Subgrantee is not tasked with completing them. Utilizing qualified EHP consultants for document and process review will ensure that NEPA requirements are met at the state level.

Evaluation of the sufficiency of the environmental analysis for your state or territory that is contained in the relevant chapter of the FirstNet Regional PEIS. Evaluation of whether all deployment related activities anticipated for projects within your state or territory are covered by the actions described in the relevant FirstNet Regional PEIS.

IOB has contracted an EHP consultant to perform a sufficiency review of the PEIS prepared for the state of IL. The EHP consultant has developed a PEIS Sufficiency Memorandum under separate cover, which confirms the areas where the PEIS will be sufficient for EA tiering and the areas where it will not be applicable or that EAs will require updating. The PEIS was overall determined by the EHP consultant to be sufficient for EA tiering on the majority of IL BEAD projects. Refer to the PEIS Sufficiency Memo for details, included in Attachment 2.

Description of the Eligible Entity's plan for applying SACs or other strategies to ensure proper procedures and approvals are in place for disbursement of funds while projects await EHP clearances. Within a document (file type to be decided by Eligible Entity) the Eligible Entity must provide the following:

- **Environmental and Historic Preservation Requirements: A description of how the Eligible Entity will comply with applicable EHP requirements, including a brief**

description of the methodology used to evaluate the Eligible Entity's Subgrantees projects and project activities against NTIA's NEPA guidance. The methodology must reference how the Eligible Entity will use NTIA's ESAPTT to create NEPA project records, evaluate the applicability of CEs, consider and document the presence (or absence) of ECs, and transmit information and draft NEPA documents to NTIA for review and approval.

- **Joint Lead Agency Responsibility Summary: A statement of the Eligible Entity's understanding of its obligations as a joint lead agency to implement NEPA requirements under 42 U.S.C. 4336a and a description of the Eligible Entity's plan to prepare and/or supervise the preparation of all required environmental analyses and review documents.**
- **Description of FirstNet Regional PEIS Evaluation: Identification of the relevant FirstNet PEIS chapter pertinent to the Eligible Entity, and a concise evaluation of the sufficiency of the environmental analysis contained in the relevant FirstNet Regional PEIS (see Sample evaluation memo), updating any information necessary for the NEPA analysis contained in the FirstNet Regional PEIS to apply to the Eligible Entity's subgrant broadband deployment projects.**
- **SACs Description: A description of the Eligible Entity's current or planned use of SACs and/or other strategies to ensure proper procedures and approvals are in place for disbursement of funds while projects are awaiting final NEPA approval. For example, this may include utilizing an EHP-focused SAC attached to Subgrantee awards that are anticipated to require ground-disturbing activities.**

The IOB will not initiate or allow a Subgrantee to initiate any grant funded implementation activities, except for limited permissible activities identified in Section 13.E of the BEAD General Terms & Conditions, and will not disburse any BEAD funds to a Subgrantee prior to the following:

- The completion of any review required under the NEPA of 1969 (42 U.S.C. 4321, et seq.), and issuance by NTIA and the Grantee, as required, of a CE determination, Record of Environmental Consideration (REC), FONSI, or Record of Decision (ROD) (hereinafter "decision documents") that meets the requirements of NEPA;
- The completion of reviews required under Section 106 of the NHPA of 1966 (54 U.S.C. 300101, et seq.), including any consultations required by Federal law, to include consultations with the SHPO, and Federally recognized Native American tribes;
- The completion of consultations with the USFWS or the National Marine Fisheries Service (NMFS), as applicable, under Section 7 of the ESA (16 U.S.C. 1531, et seq.), and/or consultations with the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (33 U.S.C. 1251, et seq.), as applicable; and
- Demonstration of compliance with all other applicable Federal, state, and local environmental laws and regulations.

The IOB will include in all awards to Subgrantees conditions stating that:

- The Subgrantee will not commence implementation and funds will not be disbursed until any necessary environmental review is complete and NTIA has approved any necessary decision document, except for the limited permissible activities identified in Section 13.E of the BEAD General Terms & Conditions.
- The Subgrantee must timely prepare any required NEPA documents and obtain any required permits, and must adhere to any applicable statutory deadlines as described in 42 U.S.C.4336a(g).
- The Subgrantee must provide a milestone schedule identifying specific deadlines and describing how the Subgrantee proposes to meet these timing requirements including, as required, the completion of consultations, the completion of NEPA and Section 106 reviews, and the submission of EAs or Environmental Impact Statements (EISs).

Additional SACs will be developed in two mechanisms: programmatically (i.e. SACs that apply to all ground disturbing activities) and project-specific (SACs that apply to specific projects due to unique circumstances or specific resources present). SACs will be an early topic of education to Subgrantee awardees in the initial kick-off meetings to ensure they are understood and will be strictly adhered to during construction. SACs will additionally be documented in award documents, within ESAPTT, and via decision memos and FONSIIs.

The above process, combined with educational outreach from IOB, their NEPA Contractor, and the Subgrantees, will create a clearer process flow for Subgrantees and ensure the adequate completion of the EHP review process for BEAD projects in the state of IL. Additional state-level guidance and best management practices will also be provided by the IOB NEPA team. Overall, the strategy of IOB is to communicate clearly, frequently, and effectively with Subgrantees to ensure all parties are working together to adequately and accurately complete the EHP process.

Please see Attachment 2 for the complete memo.

Section 15: Consent from Tribal Entities (Requirement 15)

15.1 Upload a Resolution of Consent from each Tribal Government (in PDF format) from which consent was obtained to deploy broadband on its Tribal Land.

Please see Attachment 3.

Section 16: Prohibition on Excluding Provider Types (Requirement 16)

16.2 Does the Eligible Entity certify that it did not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local governments from eligibility for a BEAD subgrant, consistent with the requirement at 47 U.S.C. § 1702(h)(1)(A)(iii)?

The IOB certifies that it did not exclude cooperatives, nonprofit organizations, public-private partnerships, private companies, public or private utilities, public utility districts, or local

governments from eligibility for a BEAD subgrant, consistent with the requirement at 47 U.S.C. § 1702(h)(1)(A)(iii).

Waivers

17.1 If any waivers are in process and/or approved as part of the BEAD Initial Proposal or at any point prior to the submission of the Final Proposal, list the applicable requirement(s) addressed by the waiver(s) and date(s) of submission. Changes to conform to the BEAD Restructuring Policy Notice should be excluded. If not applicable to the Eligible Entity, note 'Not applicable.'

NTIA approved a timeline extension request, shifting the Final Proposal submission deadline from September 4, 2025 to September 30, 2025. NTIA granted this approval via email on August 22, 2025. If NTIA determines that a match waiver is required, Illinois will be prepared to submit a match waiver upon the completion of data validation.

Illinois intends to utilize NTIA's programmatic waiver for an extension for the Tribal Consent requirement. Evidence that Location ID 1117667329 is within federally recognized tribal land of the Prairie Band Potawatomie Tribe is below.

To comply with the RPN, Illinois refined the list of eligible CAIs prior to Final Proposal submission. Illinois submits a waiver in demonstration that all 16 CAIs listed in the CAI Rationale document comply with the definition in the IIJA and RPN. Per NTIA feedback on 11/20/25 in response to evidence shared by IOB on 11/19/2025, 9 of these CAIs meet BEAD requirements and the remaining 7 will be descoped from BEAD provisional awards. IOB has withdrawn this waiver request.

As part of curing due 11/28/2025, IOB requests to waive the requirement that "qualifying broadband" to a CAI is "service with (i) a speed of not less than 1 Gbps for downloads and uploads alike and (ii) latency less than or equal to 100 milliseconds." After following the BEAD subgrantee selection process, there is no applicant who can provide gigabit symmetrical service to a subset of CAIs. To fulfill the BEAD mission to connect all eligible locations to broadband, the IOB requests to waive the 1 Gbps symmetrical speed requirement for these 37 CAIs, because the only available connection to these CAIs is 1000/500 Mbps.

In response to curing feedback from NTIA, IOB requests to include an additional 57 CAIs in the waiver which was submitted on 11/28/2025 and accepted by NTIA on 12/16/2025. The additional waiver is uploaded as part of 17.2 below.

In response to curing feedback from NTIA, IOB requests to include additional CAIs in the waiver which was submitted on 11/28/2025 and accepted by NTIA on 12/16/2025. The additional waiver is uploaded as part of 17.2 below.

17.2 If not already submitted to NTIA, and the Eligible Entity needs to request a waiver for a BEAD program requirement, upload a completed Waiver Request Form here. If

documentation is already in process or has been approved by NTIA, the Eligible Entity does NOT have to upload waiver documentation again.

Not applicable.

List of CSVs

The IOB has populated CSV file templates provided by NTIA, as specified by NTIA. These are available on the IOB's [website](#).

- grantees (fp_subgrantees.csv)
- Deployment Projects (fp_deployment_projects.csv)
- Locations (fp_locations.csv)
- No BEAD Locations (fp_no_BEAD_locations.csv)
- Community Anchor Institutions (fp_cai.csv)

Attachments

Attachment 1: Accountability Documents

(1) BEAD Program Monitoring Plan

Describe a robust and timely monitoring plan, detailing how it will ensure subgrantee accountability for the BEAD funding subgrantees receive through at least semiannual reporting for the duration of the subgrant.

The Illinois Office of Broadband (IOB) will ensure subgrantee accountability for the BEAD funding subgrantees receive through grant management, quarterly reporting, and field validation (performed separately by both the subgrantee and the IOB) to verify milestone progress and project completion.

Grant Management and Quarterly Reporting

Once a subgrantee is awarded a grant for a BEAD project, a subgrantee will be required to 1) move through the grants process to ensure proper documentation is obtained from the subgrantee by the IOB and 2) to ensure compliance with the grant award and its applicable terms and conditions stated in the Notice of Funding Opportunity (NOFO) and grant agreement.

Grant management and quarterly reporting procedure:

The IOB assigns grantees an Assistant Grant Manager to monitor the grantee, their work, and their required documentation. This team member has oversight over the grant award to ensure compliance. To monitor each grant, the IOB adheres to the following procedure:

- 1) A project is assigned to the Assistant Grant Manager by the Grant Manager and then the individual assigned will log subgrantee / project on the internal grant tracker.
- 2) The Assistant Grant Manager will review saved application files to ensure all are present and named in the correct format, subgrantee name, Project number, document name (i.e., "ISPX 3 Budget Certification"). Review risk assessment status of the Internal Control Questionnaire (ICQ) and the Programmatic Risk Assessment (PRA) and check if the budget matches the award amount. Review Conflict of Interest and Mandatory

Disclosure documents, if marked yes notify Legal office. Complete within one week from receipt of assignment.

- 3) The Grant Manager will reach out to the subgrantee to introduce the Assistant Grant Manager and notify them what is needed to create the Notice of Solicitation of Applications (NOSA). The Assistant Grant Manager will follow up to help resolve any questions or issues for the following:
 - A) A subgrantee must complete an ICQ on the Grant Accountability and Transparency Act (GATA) portal. Normal expected completion within two weeks
 - B) A subgrantee must send the PRA questionnaire to get more detailed information on potential risks. Normal expected completion within two weeks.
 - C) Upon receipt of the PRA questionnaire, the Assistant Grant Manager will complete the PRA within three days.
 - D) Assistant Grant Manager does the initial review of the budget. Notifies subgrantee if budget changes are needed. Normal expected completion within two weeks.
 - E) Upon receipt of correct budget, the Assistant Grant Manager will submit to the Office of Financial Management (OFM) for agency approval. Expect this within one week. If issues are found, repeat previous step.
- 4) The Assistant Grant Manager will write scope of work. Submit to supervisor for review/edits. Once the budget is approved by OFM, scope should be completed within one week. Update further if budget changes necessitate updates to the scope.
- 5) The Assistant Grant Manager will draft NOSA once both risk assessments and OFM budget approval are complete. This should be completed within three days of having all items ready.
- 6) The Assistant Grant Manager will notify the grant manager to review and send out the NOSA. Monitor status daily for acceptance by grantee. When accepted, save a copy in the S: drive. Normal acceptance is within two weeks.
- 7) The Assistant Grant Manager will start the eGrants process. This can start any time after project is assigned but needs to be started no later than one week after NOSA acceptance.
 - A) Confirm subgrantee profile exists or create a new profile.
 - B) Update subgrantee contacts
 - C) Update subgrantee UEI
- 8) The Assistant Grant Manager will begin grant 'application' on eGrants within one week of NOSA acceptance.
 - A) Select correct grant program.
 - B) Enter basic subgrantee information and update Application Library with necessary files.
 - C) Approve application to send to supervisor.
- 9) The grant manager assigns the project to the Assistant Grant Manager and reassigns tasks within one day.
- 10) The Assistant Grant Manager will complete any remaining fields needed in eGrants, such as Financial Information, Additional Grant Information, and fill the Application Library

within three days. Select "Prepare to GRS" to send this through the Director Approval process.

- 11) The Assistant Grant Manager will send the Working Capital Advance information to grantee. For Connect Illinois projects, also send out information regarding BEP goals and Environmental reviews. Normal return of this information is two weeks.
- 12) The grant manager will receive notification that the Director has approved the application. Normal processing time is within two weeks.
- 13) The Assistant Grant Manager will prepare grant application to send to Legal for review within one week of Director's approval.
 - A) Certify application.
 - B) Update reporting schedule if necessary
 - C) Prepare Grant Agreement budget document.
 - D) Prepare Grant Agreement document.
 - E) Approve task to send to Legal.
- 14) The Assistant Grant Manager will receive notification of Legal approval. Normal processing time is within one week.
- 15) The Assistant Grant Manager will send grant agreement and budget to subgrantee within three days of Legal approval.
- 16) Grantee returns signed pages of the grant agreement. Normal processing times vary depending how much time is needed to review the contract. Check with subgrantee if this is not received within two weeks.
- 17) The Assistant Grant Manager will create grant agreement packet and submit to OFM within one day of receipt of signature pages.
- 18) The Assistant Grant Manager will receive notice grant agreement is complete and ready to send to the grantee. Normal processing time is within two to four weeks.
- 19) The Assistant Grant Manager will send final copy of the grant agreement within three days of notification.
- 20) The Assistant Grant Manager prepares reporting templates for the Periodic Financial Report (PFR) and Periodic Performance Report (PPR) within two weeks of sending out grant agreement.
- 21) Connect Illinois projects will need the Illinois Works Budget Supplement created within two weeks of sending out grant agreement. The Assistant Grant Manager sends to subgrantee to complete.
- 22) The Assistant Grant Manager sets up WebEx meeting (kick off call) with subgrantee to discuss reporting procedures within three days of sending reports.
- 23) The Assistant Grant Manager receives Budget Supplement and reviews for completeness. The Assistant Grant Manager submits to Illinois Works portal within three days of receipt.
- 24) On a quarterly basis, the Assistant Grant Manager receives progress reports. Updates eGrants reports are received within one day of receipt.
- 25) The Assistant Grant Manager reviews reports. Contacts subgrantee if additional documentation is needed or changes must be made. (Expect some back and forth on this process. All reports and documentation should be approved within two weeks). The Assistant Grant Manager then updates eGrants when approved.

- 26) The Grant Manager enters any reimbursement costs into GRS. Notify the Grant Manager by email; include a copy of the PFR and PPR as an attachment.
- 27) The Assistant Grant Manager will receive quarterly Illinois Works report. After an initial review for completeness, sends the report to the compliance manager to review and upload in the Illinois Works portal within five days of receipt.

*Steps 23-27 are repeated quarterly by IOB grants team

Procedure for grant modifications:

- 28) The Assistant Grant Manager may receive request for modification from grantee.
Discuss the details of the request within three days of request.
- 29) The Assistant Grant Manager and Grant Manager will determine what documentation will be needed. Send this to subgrantee within three days.
- 30) Upon receipt of documentation the Assistant Grant Manager:
 - A) Creates revised scope if needed
 - B) Sends revised budget to OFM for approval. (Normal processing time within one week)
 - C) Initiate modification in eGrants
- 31) The Assistant Grant Manager will complete needed updates in eGrants for the specific modification.
 - A) Some will require Director's approval. Normal processing time within two weeks.
 - B) Some will only require Legal approval. Normal processing time within one week.
- 32) The Assistant Grant Manager will send Legal approved modification agreement to subgrantee for signature within three days of notification.
- 33) The Assistant Grant Manager will receive signed modification agreement. Normally within two weeks. Prepare modification packet for OFM within one day of receipt.
- 34) The Assistant Grant Manager will receive notification modification is complete. Send copy to grantee within three days of notification.

**Steps 28-34 are repeated when there are further modifications

Procedure for closeout:

- 35) Upon completion of the project, the subgrantee will have the last regularly scheduled quarterly reports to submit. After that, there is the Final report due 30 days later (grantee can combine this with the last regular report if they chose to). Process Final report like all quarterly reports.
- 36) The Assistant Grant Manager will reconcile final PFR with the system. Confirm final amounts match. Normal processing time is within two weeks of approval of PFR.
- 37) Connect Illinois projects, receive final BEP waiver and Illinois Works Final approval.
Process within five days of receipt from grantee.
- 38) Once reports are reconciled and BEP & Illinois Works are approved, initiate closeout procedure in eGrants within three days.
- 39) The Assistant Grant Manager will respond to any issues discovered during the closeout process within three days.

Field Validation

In addition to the subgrantee's obligation to ensure the network performance standards are met through NTIA required testing, the IOB utilizes a contracted vendor to conduct field validation to verify project milestone progress and project completion. Successful field validation must be complete prior to closing out a grant and issuing the final payment. This process was implemented for previous rounds of Connect Illinois and will be refined in FY26 to provide assurance the subgrantee is in compliance with NTIA rules and regulations.

The IOB's field validation involves visiting various sites around the grant-funded broadband deployment, conducting on-site speed testing and visual checks (i.e., for vaults in the ground, cabinets, towers, etc.), and desk research. The IOB reviews the reports provided, asks questions, and may accompany the field validation team on site visits.

- **Field validation to monitor progress:** As the subgrantee initiates construction and seeks reimbursement for passes, the IOB will facilitate field validation audits to verify that the project is progressing in line with the grantee's reports and consistent with the grant agreement. The IOB will facilitate at least two field validation visits for each grantee's project prior to project completion and closeout.

Field validation procedure for milestone verification:

- A) Field validation will occur at least two times per subgrantee project.
 - B) The first field validation will occur after a subgrantee has started work on a project as reported in their PPR and PFR and between approximately 40–50 percent of locations are connected.
 - C) The second field validation will occur after a subgrantee has reported all locations are connected for a project to ensure project has been completed.
 - D) The closeout of a grant cannot be completed until field validation of final project completion has occurred (see below).
- **Field validation for closeout:** The IOB Assistant Grant Managers and contracted field validators verify completed work as part of the close-out process by completing the following:
 - A) Review the Periodic Performance Report (PPR) and compare it to the grant scope to confirm the project objectives are complete.
 - B) Review the Periodic Financial Report (PFR) and match against deliverables from the PPR and supporting documentation for expenditures to confirm that expenses are reasonable and necessary and support allowable grant activities.
 - i. During the last quarter of the project, the Grant Manager collects a map of completed locations and compiles grantee's technical documentation, along with a contact from the subgrantee to provide to the field validators.
 - ii. Grant manager notifies IOB Director the project is near an end; forwards map and contact information.
 - iii. IOB Director; forwards map and contact info.

- iv. The contracted field validators will coordinate a date with the subgrantee to perform the field validation and share with IOB.
 - v. On the date(s) of field validation the contracted field validator will through the use of sampling check for construction materials used, locations connected, speed of the network, pricing of broadband services, and other terms of the grant agreement. Pricing will be monitored for ten years upon completion of a project and to remain consistent with the scope of work proposed.
 - vi. The IOB will track grantees for ten years which includes annual subgrantee surveys of pricing, services, and other proposed measures from the scope of work to ensure subgrantee is complying with NTIA BEAD rules and regulations.
- C) Results of field tests will be shared with IOB.
- i. Projects that pass the field validation testing will:
 - 1. Be eligible to have any final remaining funds reimbursed in accordance with the terms of the grant agreement;
 - 2. Be closed out by the Grant Manager on the eGrants system once all requirements are met.
 - ii. Projects that fail the field validation testing will:
 - 1. If the grant has not expired, be given the remaining time to correct all issues;
 - 2. If the grant has expired, project will be referred to Accountability for further investigation (Accountability is responsible for 30 ILCS 705 of the Illinois Grant Funds Recovery Act);
 - 3. When applicable, close out the project and have any final remaining funds reimbursed.

(2) Agency Policy Documentation

Funds will be disbursed through fixed-amount subawards based on the milestones defined in the BEAD Grant Agreement and in compliance with the NTIA's guidance on the implementation of exceptions, adjustments, and clarifications to certain provisions of the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance), codified at 2 CFR Part 200, and the application of related provisions of the Uniform Guidance to the BEAD Program.

Disbursements will be aligned with the Grantee's approved project budget.

- Grantee match included in the budget must be spent proportionally to the awarded funds, in line with the project budget. As a part of quarterly reporting, subgrantees must submit receipts and other evidence of expenditures which will ultimately be compared against disbursements. The PFR is submitted to document costs incurred for the quarter. Along with this, the subgrantee must submit supporting documentation for costs both incurred and paid. The subgrantee completes a financial ledger with all expenses detailed (vendor, invoice, date, payment method, etc.). The subgrantee must also submit a copy of all the invoices listed and proof of payments. The Grant Manager will audit these costs to ensure the ledger, invoice, and payment match.

- Payments will be attributed to project milestones established in the grant agreement. Subgrantees must submit evidence that they have reached milestones to request reimbursement, subject to Office of Broadband review and approval. The Office of Broadband reserves the right to request additional documentation.
- Upon the completion of a project, pursuant to 2 CFR 200.201(b)(3), the subgrantees must certify in writing to the State at the end of the BEAD award that the broadband infrastructure project funded under the fixed-amount subaward was completed. Accordingly, a subgrantee receiving a fixed-amount subaward must certify to the State that the broadband infrastructure project was placed into service – as defined in 47 USC 1702(h)(4)(C) for last-mile broadband deployment projects or in the grant agreement for all other broadband infrastructure projects – by the end of the State's period of performance.
- The Office of Broadband conducts its own field validation (this is in addition to performance testing required of the subgrantee) throughout deployment and before closeout to ensure compliance and completion of milestones as communicated by Grantees. Field validation involves visiting the broadband deployment site and conducting on-site speed testing, visual checks (i.e., for vaults in the ground, cabinets, towers, etc.), and other verification methods. Field validation validates that the subgrantee's project meets speed, latency, and other performance requirements in this agreement. It will also include verification of connection to all units in a MDU, if the project includes BSLs that are MDUs.
- After a subgrantee has submitted its final expenses and certifies the project is complete and placed into service, the IOB will schedule its own final field validation. These site visits are to be completed in a timely manner, before the final closeout of each grant project within the eGrants system. In the case a field validation yields findings that a subgrantee has not executed services to the terms and conditions of their grant agreement; the IOB will implement corrective action measures up to and including recoupment of funding.
- The Grantor will not disburse the final payment until:
 - The IOB conducts its own field validation to verify that all work has been completed in line with the grant agreement; and
 - The IOB Grants Team reviews receipts and confirms that expenses align to the total funding disbursed.
 - The subgrantee has satisfied all BEAD requirements set forth by NTIA as well as all State of Illinois specific requirements included in the Grant Agreement.

For projects for which the total costs exceed the amount listed in the Budget, the subgrantee is still obligated to complete the full scope of the project. For projects for which the total costs fall below the amount listed in the Budget (underbudget), the savings must be allocated to reducing both the grant and match in proportion to the original grant and match percentages.

Attachment 2: Environmental and Historic Preservation (EHP) Documentation (Requirement 14) Regional Programmatic Environmental Impact Statement (PEIS) Review

Executive Summary

This Memorandum for the Record provides a review of the 2017 Programmatic Environmental Impact Statement (PEIS) for the deployment of the FirstNet Nationwide Public Safety Broadband Network and its alignment with the Broadband Equity and Deployment Fund (BEAD) program, focusing on the state of Illinois. It details changes in the environmental setting, regulatory framework, and environmental consequences with consideration to relevant future broadband projects under BEAD. Overall, the 2017 PEIS is considered sufficient for the future NEPA EA Tiering being proposed under BEAD. NTIA may still rely on it for purposes of subsequent environmental documents; however, updates to key impact areas will be required on individual projects. EAs completed for BEAD that Tier off of the 2017 PEIS should consider the findings of this memo in their development to ensure relevant portions of the NEPA analysis are updated, as determined appropriate for the individual project. Subgrantees should also follow the NTIA established process and templates for EIS Tiering. Baseline environmental information for the affected areas should be updated accordingly so impacts can be evaluated on a project-by-project basis.

Review of the Proposed Action and Alternatives

Section 3 of the Executive Summary – Central United States

ES-3.1 Preferred Alternatives

The 2017 PEIS considered the design, deployment, and operation of the FirstNet Nationwide Public Safety Broadband Network. Proposed types of infrastructure considered included installation of buried fiber optic cables, aerial fiber optic cables, lighting of unused (dark) fiber optic cables, submarine fiber optic cables, equipment and control huts, wireless communication towers, collocation on existing towers/structures/buildings, Cell on Wheels (COW), Cell on Light Truck (COLT), System on Wheels (SOW), deployable aerial communications architecture (DACA), and satellite-enabled devices and equipment.

In the 2017 PEIS, FirstNet did not anticipate launching satellites as part of the deployment; however, it could include equipment on satellites that are already being launched for other purposes. The scope considered by the PEIS is generally compatible with the scope of work considered by the BEAD program, except for dedicated satellite launch. Should a BEAD proposal include equipment on new low earth orbit satellites that are not being deployed for any other purpose, that scope would warrant further NEPA analysis beyond what was considered for the PEIS.

Changes in Environmental Setting (Affected Environment)

Section 4.1 of Volume 2 – Chapter 4 Illinois

4.1.1 Infrastructure

The PEIS referenced various statistics regarding the quantity of transportation road miles, aviation facilities, ports, interstates, National Scenic Byways, railway use (both cargo and passenger), harbor use, public safety services, utilities, and telecommunication resources. While the current statistics are expected to be similar, these numbers should be updated. It is anticipated that the commercial telecommunication resources would be most changed of these infrastructures, with an increase in carriers, coverage, and subscribers.

4.1.3 Geology

4.1.3.7 Fossil Fuel and Mineral Resources

The PEIS referenced production rates of oil and gas from 2016 and 2015. The current production rates are similar but can be updated. Illinois produced approximately 6.9M barrels of crude oil in 2024 according to the U.S. Energy Information Administration (EIA, 2025) and 2,554 million cubic feet of natural gas in 2023 (EIA, 2025).

Illinois total nonfuel mineral production valuation and ranking has been updated since the 2017 PEIS was written. According to the *USGS Mineral Commodity Summaries 2024* report Illinois', in 2023, nonfuel mineral production was valued at \$1,770M, ranking 20th nationally. Additional updates to mineral production are available and can be incorporated into the affected environment.

4.1.4 Water Resources

4.1.4.5 Impaired Waterbodies

The PEIS utilized impaired 303(d) waters list from 2010. A 2024 list has been published by Illinois Environmental Protection Division, and the table and figure should be updated to reflect the most current data. Minor updates to data referencing the type and quantity of surface waters are also relevant.

4.1.4.6 Floodplains

The PEIS contained statistics involving FEMA Community Rating Systems (CRS) from 2014 that can be updated. The document states that 57 communities were participating in CRS in May 2014; currently there are 71 communities participating per the Illinois Department of Natural Resources.

4.1.5 Wetlands

The PEIS documented the different types of wetlands and their acreages within the state of Illinois. Minor updates to reflect changes since the referenced 2014 data can be made. Negligible updates to the definition of hypersalinity based on the reference source can be made.

4.1.7 Land Use, Recreation, & Airspace

The PEIS referenced data regarding land use types, land use quantities, land ownership, land management, recreational uses, recreational areas, types of airspace, numbers and locations of airports, military training routes, and considerations regarding unmanned aerial systems and airspace obstructions. While the current data are expected to be similar, these numbers should be updated.

4.1.8 Visual Resources

The PEIS prepared a generally robust section on Visual Resources and acknowledged the State's Conservation law, Illinois Natural Areas Preservation Act. Some data presented in the section is outdated and would require research to update the numbers and applicable text.

4.1.8.4 Visually Important Historic Properties and Cultural Resources

The numbers for the National Register of Historic Places (NRHP) and National Heritage Areas should be updated. A new National Heritage Area was added in 2023, Bronzeville-Black Metropolis National Heritage Area. The State Historic Sites should be reviewed and updated.

4.1.8.5 Parks and Recreation Areas

The data for State Parks and Forests are from 2015 and should be updated. Two new National Parks have been created in Illinois, New Philadelphia National Historic Site and Springfield 1908 Race Riot National Monument. The National Forests and National Historic Trails remain the same since 2017. The State Trails, however, should also be updated.

4.1.8.6 Natural Areas

Federally managed National Wilderness Areas should be reviewed. There is still only one National Wild and Scenic River in Illinois. There are still nine National Wildlife Refuges in Illinois. The State Wildlife Management Areas, however, should be updated. There are still 18 National Natural Landmarks in Illinois.

4.1.9 Socioeconomics

Updated Census Bureau data would need to be reviewed and evaluated to include the years that have passed since the PEIS was published.

4.1.10 Environmental Justice

Updated Census Bureau data would need to be reviewed and evaluated to include the years that have passed since the PEIS was published. Two EO's from 2025 have revoked previous EO's which required consideration of environmental justice. At this time, environmental justice is no longer required for consideration under NEPA.

4.1.11 Cultural Resources

The PEIS presented an adequate section of the Affected Environment, however, data on the numbers of sites or those in the NRHP need to be updated more accurately by consulting with the State Historic Preservation Officer (SHPO) as National Park Services National Register data

is not current. The update should include both archaeological as well as historic-age resources as presented in this section.

4.1.11.4 Federally Recognized Tribes of Illinois

As of April 2024, the Prairie Band Potawatomi Nation has become a federally recognized tribe within the state of Illinois. Tribal consultation and coordination will be required. There are additional federally recognized tribes who have an interest in the projects with federal involvement that will take place in Illinois. In addition, it is recommended that Figure 4.1.11-2 be removed from future references to the PEIS. It does not add significant information to the document and its removal and reference will not detract from the document. Tribal consultation and coordination with tribes that hold ancestral ties to the land in IL for future BEAD projects will be provided by FCC's Tower Construction Notification System (TCNS) for both Categorical Exclusions and Environmental Assessments. As such, tribal coordination will occur in future NEPA documentation regardless of the findings of the PEIS.

4.1.11.5 Significant Archaeological Sites of Illinois

While archeological sites need to be updated, those archaeological resources determined by the SHPO as eligible for listing in the NRHP should also be considered. This is related to a best practice of conducting a desktop records review of SHPO data to evaluate the presence of archaeological resources that have been previously recorded and their eligibility for listing in the NRHP determined by the SHPO.

4.1.11.6 Historic Context

The data on the listed sites should be updated by consulting with SHPO as part of the established Program Comment process under BEAD.

4.1.12 Air Quality

Table 4.1.19.2 of the PEIS will need to be updated to reflect the *de minimis* levels for updated to reflect PM_{2.5} (direct emissions, SO₂, NO_x, VOC, Ammonia): Moderate: 100 tons/year, Serious: 70 tons/year. The table currently shows the nonattainment and maintenance level of 100 ton/year.

The website reference under State Implementation Plan Requirements should be updated to the following: "... All state environmental rules and regulations approved by USEPA to comply with the SIP can be found on the Illinois Environmental Protection Agency at [Title 35 Procedural and Environmental Rules](#)"

4.1.12.3 Environmental Setting: Ambient Air Quality

Table 4.1.12-3 and Figure 4.1.12-1 of the PEIS were developed based on USEPA data for nonattainment and maintenance areas through 2015. EPA has updated data for nonattainment and maintenance areas through 2025. As some areas have moved from moderate to extreme nonattainment, the figure and table in future documents should be updated to reflect these changes. Reference: https://www3.epa.gov/airquality/greenbook/anayo_il.html

The air quality monitoring and reporting section of PEIS are out of date, as Illinois has an updated Air Quality report dated 2023. These changes will affect Table 4.1.12-4. Reference:

<https://epa.illinois.gov/content/dam/soi/en/web/epa/topics/air-quality/air-quality-reports/documents/2023-Annual-Air-Quality-Report-Final.pdf>

Recent studies and increases in nonattainment indicate that sources in Illinois may have effects on Federal Class 1 areas in Arkansas, Michigan, and other nearby states. Table 4.1.12-5 will be affected and require updating in future documents.

4.1.13 Noise and Vibration

The noise and vibration affected environment would remain valid and revisions to the section would be minimal. Updates related to transportation statistics in Section 4.1.13.3 would be required for airports.

4.1.14 Climate change

The final NEPA Guidance on Climate Change has been withdrawn. This section will need updating to the most current accepted version, likely 2021, as well as any changes to the IL *Climate and Equitable Jobs Act*. Chicago has also updated its Climate Action Plan and Goals with a 2017 baseline published after release of the PEIS.

4.1.15 Human Health and Safety

Updates in this section will need to include primarily statistics and maps with the most recent available data.

Changes in Environmental Circumstances (Regulatory Changes):

Section 4.1 of Volume 2 – Chapter 4 Illinois

4.1.5 Wetlands

The 2017 PEIS incorrectly referenced USACE guidance regarding critical resource waters and USACE districts not relevant to Illinois. This will need to be updated in future documents to reflect the correct USACE district and the current regulatory statutes, including permitting.

4.1.6 Biological Resources

4.1.6.4 Terrestrial Wildlife

The PEIS noted under section 4.1.6.2 *Specific Regulatory Considerations* that the Illinois Endangered Species Protection Act (IESPA) (520 Illinois Compiled Statutes [ILCS] 10/1) was relevant to the biological resources of Illinois. Language regarding consideration and analysis of State of Illinois listed species was not included in the EIS. As authorized by Section 11(a) of the Illinois Endangered Species Protection Act [520 ILCS 10/11] and by Section 17 of the Illinois Natural Areas Preservation Act [525 ILCS 30/17], state and local units of government shall evaluate, through a consultation process with the Department, whether actions authorized,

funded, or carried out by them, as defined in Section 1075.30, are likely to jeopardize the continued existence or recovery of Illinois listed endangered or threatened species or are likely to result in the destruction or adverse modification of the essential habitat of such species or are likely to result in the adverse modification of a Natural Area. The proposed action shall not commence until the completion of the consultation process. The Checklist of Illinois Endangered and Threatened Animals and Plants reviewed and revised by the Illinois Endangered Species Protection Board was updated in May of 2020 and includes the following terrestrial species:

Amphibians (3 Endangered, 6 Threatened)

- Silvery salamander (*Ambystoma platineum*)
- Hellbender (*Cryptobranchus alleganiensis*)
- Spotted dusky salamander (*Desmognathus conanti*)
- Jefferson salamander (*Ambystoma jeffersonianum*)
- Four-toed salamander (*Hemidactylium scutatum*)
- Mudpuppy (*Necturus maculosus*)
- Eastern narrow-mouthed toad (*Gastrophryne carolinensis*)
- Bird-voiced treefrog (*Hyla avivoca*)
- Illinois chorus frog (*Pseudacris illinoensis*)

Reptiles (9 Endangered, 9 Threatened)

- Spotted Turtle (*Clemmys guttata*)
- Blanding's Turtle (*Emydoidea blandingii*)
- Yellow Mud Turtle (*Kinosternon flavescens*)
- Alligator Snapping Turtle (*Macrochelys temminckii*)
- River Cooter (*Pseudemys concinna*)
- Coachwhip (*Coluber flagellum*)
- Southern watersnake (*Nerodia fasciata*)
- Great plains Ratsnake (*Pantherophis emoryi*)
- Eastern massasauga (*Sistrurus catenatus*)
- Smooth softshell (*Apalone mutica*)
- Ornate box turtle (*Terrapene ornata*)
- Kirtland's snake (*Clonophis kirtlandii*)
- Timber rattlesnake (*Crotalus horridus*)

- Plains hog-nosed snake (*Heterodon nasicus*)
- Mississippi green watersnake (*Nerodia cyclopion*)
- Flatheaded snake (*Tantilla gracilis*)
- Eastern ribbonsnake (*Thamnophis saurita*)
- Lined snake (*Tropidoclonion lineatum*)

Birds (23 Endangered, 6 Threatened)

- Short-eared owl (*Asio flammeus*)
- Upland sandpiper (*Bartramia longicauda*)
- American bittern (*Botaurus lentiginosus*)
- Swainson's hawk (*Buteo swainsoni*)
- Piping plover (*Charadrius melodus*)
- Black tern (*Chlidonias niger*)
- Northern harrier (*Circus hudsonius*)
- Little blue heron (*Egretta caerulea*)
- Snowy egret (*Egretta thula*)
- Common Gallinule (*Gallinula galeata*)
- Loggerhead shrike (*Lanius ludovicianus*)
- Black rail (*Laterallus jamaicensis*)
- Swainson's warbler (*Limnothlypis swainsonii*)
- Yellow-crowned night heron (*Nyctanassa violacea*)
- Black-crowned night heron (*Nycticorax nycticorax*)
- Wilson's phalarope (*Phalaropus tricolor*)
- King rail (*Rallus elegans*)
- Forster's tern (*Sterna forsteri*)
- Common tern (*Sterna hirundo*)
- Least tern (*Sternula antillarum*)
- Bewick's wren (*Thryomanes bewickii*)
- Greater prairie-chicken (*Tympanuchus cupido*)

- Yellow-headed blackbird (*Xanthocephalus xanthocephalus*)
- Chuck-will's-widow (*Anstrostomus carolinensis*)
- Rufa red knot (*Calidris canutus rufa*)
- Black-billed cuckoo (*Coccyzus erythrophthalmus*)
- Least bittern (*Ixobrychus exilis*)
- Osprey (*Pandion haliaetus*)
- Cerulean warbler (*Steophaga cerulea*)

Mammals (5 Endangered, 3 Threatened)

- Gray/Timber Wolf (*Canis lupus*)
- Rafinesque's big-eared bat (*Corynorhinus rafinesquii*)
- Southeastern myotis (*Myotis austrooriparius*)
- Gray bat (*Myotis grisescens*)
- Indiana bat (*Myotis sodalist*)
- Eastern small-footed bat (*Myotis leibii*)
- Northern long-eared bat (*Myotis septentrionalis*)
- Franklin's ground squirrel (*Poliocitellus franklinii*)

Terrestrial Invertebrates (17 Endangered, 3 Threatened)

- Iowa Pleistocene snail (*Discus macclintocki*)
- Hydrobiid cave snail (*Fontigens antroecetes*)
- Onyx rocksnail (*Leptoxi praerosa*)
- Shawnee rocksnail (*Lithasia obovate*)
- Common striped scorpion (*Centruroides vittatus*)
- Rusty patched bumble bee (*Bombus affinis*)
- Hine's emerald dragonfly (*Somatochlora hineana*)
- Elfin Skimmer (*Nannothemis bella*)
- Madonna cave springtail (*Pygmarrhopalites madonnensis*)
- Robust springfly (*Diploperla robusta*)
- Central forestfly (*Prostoia ozarkensis*)

- Leafhopper (*Athysanella incongrua*)
- Swamp metalmark (*Calephelis muticum*)
- Cobweb skipper (*Hesperia metea*)
- Ottoe skipper (*Hesperia ottoe*)
- Horay elfin (*Incisalia polios*)
- Karner blue butterfly (*Lycaeides melissa samuelis*)
- Redveined prairie leafhopper (*Aflexia rubranura*)
- Eryngium stem borer (*Papaipema eryngii*)
- Regal fritillary (*Speyeria idalia*)

Plants (264 Endangered, 66 Threatened) – Refer to the 2020 Illinois List of Endangered and threatened Flora for the complete list of species.

The PEIS identified 20 mammals as SGNC. The Illinois SGNC list was updated in 2022 and removed the following species from the list:

- River otter (*Lontra canadensis*)
- Bobcat (*Lynx rufus*)
- Pygmy shrew (*Sorex hoyi*)
- Woodland vole (*Microtus pinetorum*)
- Least weasel (*Mustela nivalis*)
- Muskrat (*Ondatra zibethicus*)
- Cotton mouse (*Peromyscus gossypinus*)
- Swamp rabbit (*Sylvilagus aquaticus*)
- American badger (*Taxidea taxus*)
- Gray fox (*Urocyon cinereoagenteus*)

Further, two mammals were added to the 2022 SGNC list:

- Eastern small-footed myotis (*Myotis leibii*)
- Northern long-eared bat (*Myotis septentrionalis*)

The PEIS identified 83 birds as SGNC. The Illinois SGNC list was updated in 2022 and removed the following species from the list:

- Nelson's sharp-tailed sparrow (*Ammodramus nelsoni*)
- Great egret (*Ardea alba*)

- Ruffed grouse (*Bonasa umbellus*)
- Red-shouldered hawk (*Buteo lineatus*)
- Stilt sandpiper (*Calidris himantopus*)
- Brown creeper (*Certhia americana*)
- Sedge wren (*Cistothorus platensis*)
- Common moorhen (*Gallinula chloropus*)
- Worm-eating warbler (*Helmitheros vermiforma*)
- Hooded merganser (*Lophodytes cucullatus*)
- Savannah sparrow (*Passerculus sandwichensis*)
- Greater yellowlegs (*Tringa melanoleuca*)

The following species were added to the Illinois SGNC list:

- Rufa red knot (*Calidris canutus rufa*)
- Pectoral sandpiper (*Calidris melanotos*)
- Common gallinule (*Gallinula galeata*)
- Ring-necked pheasant (*Phasianus colchicus*)
- Eastern towhee (*Pipilo erythrophthalmus*)
- Bay-breasted warbler (*Setophaga castanea*)
- Least tern (*Sternula antillarum*)
- Eastern meadowlark (*Sturnella magna*)
- Lesser yellowlegs (*Tringa flavipes*)
- Golden-winged warbler (*Vermivora chrysoptera*)

Further, the following species were on the 2005 SGNC list and are on the Illinois SGNC list but require edits to their scientific names:

- Chuck-will's-widow (*Antrostomus carolinensis*)
- Eastern whip-poor-will (*Antrostomus vociferus*)
- Buff-breasted sandpiper (*Calidris subruficollis*)
- Henslow's sparrow (*Centronyx henslowii*)
- Kentucky warbler (*Geothlypis Formosa*)
- Cerulean warbler (*Setophaga cerulea*)

- Prairie warbler (*Setophaga discolor*)

The PEIS identified 37 reptiles and amphibians as SGNC. The Illinois SGNC list was updated in 2022 and removed the following species from the list:

- Mole salamander (*Ambystoma talpoideum*)
- Wood frog (*Rana sylvatica*)
- Copperbelly watersnake (*Nerodia erythrogaster neglecta*)

The following species were added to the Illinois SGNC list:

- Eastern newt (*Notophthalmus viridescens*)
- Lesser siren (*Siren intermedia*)
- Graham's crayfish snake (*Regina grahamii*)
- Queensnake (*Regina septemvittata*)
- Eastern box turtle (*Terrapene carolina*)

Further, the following species were on the 2005 SGNC list and are on the Illinois SGNC list but require edits to their scientific names:

- Crawfish frog (*Lithobates areolate*)
- Pickerel frog (*Lithobates palustris*)
- Smooth greensnake (*Opheodrys vernalis*)
- Great plains ratsnake (*Pantherophis emoryi*)

The PEIS identified 347 invertebrates as SGNC in total, crustaceans and mussels are addressed in the fisheries and aquatic habitat section (4.1.6.5). The Illinois SGNC list was updated in 2022 and removed several hundred species, there are now 150 invertebrates identified as SGNC (excluding crustaceans and mussels). To simplify the list for this memo we will include all species previously listed and identify those that are new to the list, those removed are not included in this memo to provide more concise information. Invertebrates previously identified as SGNC and are SGNC on the 2022 list include:

- Striped scorpion (*Centruroides vittatus*)
- A troglobitic pseudoscorpion (*Mundochthoni*)
- Variegated false water penny beetle (*Dicranopselaphus variegatus*)
- American burying beetle (*Nicrophorus americanus*)
- Illinois cave beetle (*Pseudanophthalmus illinoisensis*)
- Pecatonica river mayfly (*Acanthametropus Pecatonica*)

- Small minnow mayfly (*Camelobaetidius waltzi*)
- Large minnow mayfly (*Siphonurus marshalli*)
- Redveined prairie leafhopper (*Aflexia rubranura*)
- A leafhopper (*Cosmotettix delector*)
- A leafhopper (*Destria fumida*)
- A leafhopper (*Flexamia abbreviate*)
- A leafhopper (*Flexamia albida*)
- A leafhopper (*Flexamia grammica*)
- A leafhopper (*Limotettix parallelus*)
- A leafhopper (*Limotettix truncatus*)
- A leafhopper (*Lonatura catalina*)
- A leafhopper (*Paraphlepsius carolinus*)
- A leafhopper (*Paraphlepsius nebulosus*)
- A leafhopper (*Paraphlepsius umbellatus*)
- A leafhopper (*Polyamia dilata*)
- A leafhopper (*Polyamia herbida*)
- A leafhopper (*Polyamia interrupta*)
- A leafhopper (*Polyamia rossi*)
- A leafhopper (*Polyamia similaris*)
- A leafhopper (*Scaphytopius dorsalis*)
- Southern plains bumble bee (*Bombus fraternus*)
- Spotted dart moth (*Agrotis stigmosa*)
- Lace-winged roadside-skipper (*Amblyscirtes Aesculapius*)
- Carolina roadside skipper (*Amblyscirtes Carolina*)
- Linda's roadside-skipper (*Amblyscirtes linda*)
- Revered roadside-skipper (*Amblyscirtes reversa*)
- A torticid moth (*Ancylis semiovana*)
- An inch worm (*Apodrepanulatrix liberaria*)

- An owlet moth (*Bagisara gulfare*)
- Swamp metalmark (*Calephelis muticum*)
- Blazing star clearwing moth (*Carmenta anthracipennis*)
- Abbreviated underwing moth (*Catocala abbreviatella*)
- Whitney's underwing (*Catocala whitneyi*)
- Gorgone checkerspot (*Chlosyne gorgone carlota*)
- An inch worm moth (*Digrammia ordinate*)
- An inch worm moth (*Erastris coloraria*)
- Mottled duskywing (*Erynnis martialis*)
- a geometrid moth (*Euchlaena milnei*)
- Olympia marble (*Euchloe Olympia*)
- A tortricid moth (*Eucosma bipunctella*)
- Two-spotted skipper (*Euphyes bimacula*)
- Duke's skipper (*Euphyes dukesi*)
- Spirea leaftier moth (*Evora hemidesma*)
- A noctuid moth (*Hadena ectypa*)
- Buck moth (*Hemileuca maia*)
- Dakota skipper (*Hesperia dacotae*)
- Cobweb skipper (*Hesperia metea*)
- Ottoe skipper (*Hesperia ottoe*)
- Hoary elfin (*Incisalia polios*)
- Appalachian eyed brown (*Lethe Appalachia*)
- Karner blue butterfly (*Lycaeides melissa samuelis*)
- Gold-lined melanomma; eye-spot moth (*Melanomma auricinctaria*)
- Powershiek skipperling (*Oarisma Poweshiek*)
- Blazing star stem borer (*Papaipema beeriana*)
- Golden borer moth (*Papaipema cerina*)
- Ironweed borer moth (*Papaipema cerussata*)

- Rattlesnake-master borer moth or eryngium stem borer (*Papaipema eryngii*)
- A borer moth (*Papaipema limpida*)
- Sensitive fern borer moth (*Papaipema inquaesita*)
- Cluvers root borer (*Papaipema sciata*)
- Silphium borer moth (*Papaipema silphia*)
- Ernestine's moth (*Phytometra ernestinana*)
- Byssus skipper (*Problema byssus*)
- Sprague's pygarcic (*Pygarctia spraguei*)
- Orange mint moth (*Pyrausta orphisalis*)
- Orange sawfly moth (*Phrrhia aurantiago*)
- Slender flower moth or iva flower moth (*Schinia gracilenta*)
- Brown flower moth (*Schinia saturata*)
- Northern flower moth (*Schinia septentrionalis*)
- Pearly indigo borer (*Sitochroa dasconalis*)
- Regal fritillary (*Speyeria idalia*)
- Canadian sphinx moth; Clemens' hawkmoth (*Sphinx luscitiosa*)
- Marked noctuid moth (*Tricholita notata*)
- A millipede (*Semionellus placidus*)
- A cave obligate millipede (*Tingupa pallida*)
- A cave millipede (*Zosteractis interminata*)
- Iowa Pleistocene snail (*Discus macclintocki*)
- Missouri cave snail, hydrobiid cavesnail, enigmatic cavesnail (*Fontigens antroecetes*)
- Shawnee rocksnail (*Lithasia obovate*)
- Elfin skimmer (*Nannothemis bella*)
- Hine's emerald dragonfly (*Somatochlora hineana*)
- Elusive clubtail (*Stylurus notatus*)
- Velvet-striped grasshopper (*Eritettix simplex*)
- Prairie mole cricket (*Gryllotalpa major*)

- Low-ridged pygmy grasshopper (*Nomotettix parvus*)
- Broad-Winged Bush Katydid (*Scudderia pistillata*)
- Seaside grasshopper (*Trimerotropis maritima*)
- Lichen grasshopper (*Trimerotropis saxatilis*)
- A cave springtail (*Oncopodura iowae*)
- Illinois winter stonefly (*Allocaenia illinoensis*)
- Austin springfly (*Hydroperla fugitans*)
- Two-lined stone (*Perlesta golconda*)

The following species were added to the Illinois SGNC list:

- Appalachian cave spider (*Porrhomma cavenicola*)
- A mayfly (*Centroptilum album*)
- Spiny crawler mayfly (*Dannella lita*)
- Spiny crawler mayfly (*Dannella simplex*)
- Large minnow mayfly (*Isonychia arida*)
- Say's large minnow mayfly (*Isonychia sayi*)
- Fork gilled mayfly (*Paraleptophlebia ontario*)
- Clay burrowing mayfly (*Pentagenia vittigera*)
- White sand-river mayfly (*Pseudiron centralis*)
- Flatheaded mayfly (*Raptoheptagenia cruentata*)
- Minnetonka flatheaded mayfly (*Stenacron minnetondka*)
- A leafhopper (*Athysanella incongrua*)
- A leafhopper (*Cuerna alpina*)
- A leafhopper (*Draeculacephala inscripta*)
- A leafhopper (*Flexamia pectinata*)
- A leafhopper (*Memnonia panzer*)
- A leafhopper (*Pendarus magnus*)
- Giant cicada or bush cicada (*Tibicen dorsatus*)
- Rusty-patched bumble bee (*Bombus affinis*)

- American bumble bee (*Bombus pensylvanicus*)
- Half-black bumble bee (*Bombus vagans*)
- A moth (*Anacampsis wikeri*)
- Straight-lined argyria moth (*Argyria critica*)
- Monarch butterfly (*Danaus Plexippus*)
- Grote's black- tipped quaker (*Dichagyris grotei*)
- Yellow sedge borer (*Globia subflava*)
- Creole pearly-eye (*Lethe creola*)
- Prairie sedge moth (*Neodactria murellus*)
- Umbellifer borer moth (*Papaipema insulidens*)
- A noctuid moth (*Photedes enervate*)
- Spartina borer moth (*Photedes inops*)
- Leadplant leafwebber moth (*Sciota dammersi*)
- A torticid moth (*Sonia fulminana*)
- Mud Amnicola (*Amnicola limosa*)
- Onyx rocksnail (*Leptoxis praerosa*)
- Canada darner (*Aeshna canadensis*)
- Spatterdock darner (*Rhionaeschna mutata*)
- Madonna cave springtail (*Pygmarhopalites madonnensis*)
- A cave obligate planarian (*Sphalloplana hubrichti*)
- Common stone (*Acroneuria abnormis*)
- Central stone (*Acroneuria frisoni*)
- Robust springfly (*Diploperla robusta*)
- Central forestfly (*Prostoia ozarkensis*)
- Mottled willowfly (*Strophopteryx fasciata*)
- Small willowfly (*Taeniopteryx lita*)
- Net-spinning caddisfly (*Cheumatopsyche speciosa*)
- Net-spinning caddisfly (*Chimarra aterrima*)

- Seep inhabiting net-spinning caddisfly (*Diplectrona metequi*)
- Sandboil caddisfly (*Frenesia missa*)
- Large river net-spinning caddisfly (*Hydropsyche arinale*)
- Net-spinning caddisfly (*Hydropsyche cuanis*)

The PEIS referenced the injurious species list from 2015. Since the PEIS was written there has been an update to the injurious species list of Illinois as of December 2023. The list now includes 5 bird species, 8 mammal species, and 0 reptile species. and 58 fish or aquatic species.

4.1.6.5 Fisheries and Aquatic Habitat

(i) The PEIS notes under section 4.1.6.2 *Specific Regulatory Considerations* that the Illinois Endangered Species Protection Act (IESPA) (520 Illinois Compiled Statutes [ILCS] 10/1) was relevant to the biological resources of Illinois. Language regarding consideration and analysis of State of Illinois listed species was not included in the EIS. As authorized by Section 11(a) of the Illinois Endangered Species Protection Act [520 ILCS 10/11] and by Section 17 of the Illinois Natural Areas Preservation Act [525 ILCS 30/17], state and local units of government shall evaluate, through a consultation process with the Department, whether actions authorized, funded, or carried out by them, as defined in Section 1075.30, are likely to jeopardize the continued existence or recovery of Illinois listed endangered or threatened species or are likely to result in the destruction or adverse modification of the essential habitat of such species or are likely to result in the adverse modification of a Natural Area. The proposed action shall not commence until the completion of the consultation process. The Checklist of Illinois Endangered and Threatened Animals and Plants reviewed and revised by the Illinois Endangered Species Protection Board was updated in May of 2020 and includes the following aquatic species:

Fish (19 Endangered, 17 Threatened)

- Lake sturgeon (*Acipenser fulvescens*)
- Western sand darter (*Ammocrypta clara*)
- Cisco (*Coregonus artedii*)
- Crystal darter (*Crystallaria asperlla*)
- Bluebreast darter (*Etheostoma camurum*)
- Harlequin darter (*Etheostoma histrio*)
- Cypress minnow (*Hybognathus hayi*)
- Pallid shiner (*Hybopsis amnis*)
- Norther brook lamprey (*Ichthyomyzon fossor*)
- Sturgeon chub (*Macrhybopsis gelida*)

- Greater redhorse (*Mosostoma valenciennesi*)
- River chub (*Nocomis micropogon*)
- Bigeye shiner (*Notropis boops*)
- Blacknose shiner (*Notropis heterolepis*)
- Taillight shiner (*Notropis maculatus*)
- Weed shiner (*Notropis texanus*)
- Northern madtom (*Norturus stigmosus*)
- Pallid sturgeon (*Scaphirhynchus albus*)
- Eastern sand darter (*Ammocrypta pellucida*)
- Longnose sucker (*Catostomus Catostomus*)
- Mottled sculpin (*Cottus bairdii*)
- Gravel chub (*Erimystax x-punctatus*)
- Spring cavefish (*Forbesichthys agassizii*)
- Western banded killifish (*Fundulus diaphanous* subsp. *Menona*)
- Starhead topminnow (*Fundulus dispar*)
- Brassy minnow (*Hybognathus hankinsoni*)
- Bigeye chub (*Hybopsis amblops*)
- Least brook lamprey (*Lampetra aepyptera*)
- Redspotted sunfish (*Lepomis miniatus*)
- Bantam sunfish (*Lepomis symmetricus*)
- American brook lamprey (*Lethenteron appendix*)
- River redhorse (*Mosostoma carinatum*)
- Ironcolor shiner (*Notropis chalybaeus*)
- Blackchin shiner (*Notropis heterodon*)
- Ozark minnow (*Notropis nubilus*)

Mussels (21 Endangered, 3 Threatened)

- Fanshell (*Cyprogenia stegaria*)
- Elephant-ear (*Elliptio crassidens*)

- Northern riffleshell (*Epioblasma ranginana*)
- Snuffbox (*Epioblasma triquetra*)
- Spike (*Eurynia dilatata*)
- Pink mucket (*Lampsilis abrupta*)
- Wavy-rayed lampmussel (*Lampsilis fasciola*)
- Higgins eye (*Lampsilis higginsii*)
- Scaleshell (*Leptodea leptodon*)
- Spectaclecase (*Margaritifera monodonta*)
- Orangefoot pimpleback (*Plethobasus cooperianus*)
- Sheepnose (*Plethobasus cyphus*)
- Clubshell (*Pleurobema clava*)
- Ohio pigtoe (*Pleurobema cordatum*)
- Fat pocketbook (*Potamilus capax*)
- Kidneyshell (*Ptychobranhus fasciolaris*)
- Ebonyshell (*Reginaia ebenus*)
- Salamander Mussel (*Simpsonaias ambigua*)
- Rabbitsfoot (*Theliderma cylindrica*)
- Purple lilliput (*Toxolasma lividum*)
- Rainbow (*Villosa iris*)
- Purple wartyback (*Cyclonaias tuberculata*)
- Butterfly (*Ellipsaria lineolata*)
- Monkeyface (*Quadrula metanervra*)

Crustaceans (9 Endangered)

- Isopod (*Caecidotea lesliei*)
- Anomalous spring amphipod (*Crangonyx anomalus*)
- Packard's cave amphipod (*Crangonyx packardii*)
- Indiana crayfish (*Faxonius indianensis*)
- Kentucky crayfish (*Faxonius kentuckiensis*)

- Shrimp crayfish (*Faxonius lancifer*)
- Bigclaw crayfish (*Faxonius placidus*)
- Illinois cave amphipod (*Gammarus acherondytes*)
- Iowa amphipod (*Stygobromus iowae*)

(ii) The PEIS identified fish species of SGNC. The Illinois SGNC list was updated in 2022 and removed the following species from the list:

- Highfin carpsucker (*Carpoides velifer*)
- Mottled sculpin (*Cottus bairdi*)
- Banded sculpin (*Cottus carolinae*)
- Brook stickleback (*Culaea inconstans*)
- Blue sucker (*Cycleptus elongatus*)
- Lake chubsucker (*Erimyzon sucetta*)
- Bluntnose darter (*Ethoeostoma cholorsomum*)
- Small mouth bass (*Micropterus dolomieu*)
- Spotted bass (*Micropterus punctulatus*)
- Black redhorse (*Moxostoma dunquesnei*)
- Fourhorn sculpin (*Myoxocephalus quadricornis*)
- Rosyface shiner (*Notropis rubellus*)
- Slender madtom (*Norturus exilis*)
- Southern redbelly dace (*Phoxinus erythrogaster*)
- Blacknose dace (*Rhyinichthys atartulus*)
- Shovelnose sturgeon (*Scaphirhynchus platorhynchus*)
- Sauger (*Stizostedion canadense*)
- Walleye (*Stizostedion vitreum*)

The following species were added to the Illinois SGNC list:

- Alabama shad (*Alosa alabamae*)
- Alligator gar (*Atractosteus spatula*)
- Redside dace (*Clinostomus elongatus*)
- Bloaters (*Coregonus hoyi*)

- Slimy sculpin (*Cottus cognatus*)
- Stripetail darter (*Etheostoma kennicotti*)
- Least darter (*Etheostoma microperca*)
- Mooneye (*Hiodon tergisus*)
- Brassy minnow (*Hybognathus hankinsoni*)
- Plains minnow (*Hybognathus hankinsoni*)
- Chestnut lamprey (*Ichthyomyzon castaneus*)
- Burbot (*Lota lota*)
- Bleeding shiner (*Luxilus zonatus*)
- Shoal chub (*Macrhybopsis hyostoma*)
- Deepwater sculpin (*Myoxocephalus thompsonii*)
- River darter (*Percina shumardi*)
- Flathead chub (*Platygobio gracilis*)
- Round whitefish (*Prosopium cylindraceum*)
- Ninespine stickleback (*Pungitius pungitius*)

(iii) The PEIS identified 29 species of mussels and 22 species of crustaceans as SGNC. The Illinois SGNC list was updated in 2022 and removed the following species from the list:

Crustaceans:

- A crayfish (*Cambarus laevis*)
- A cave obligate isopod (*Caecidotea spatulate*)
- A cave obligate copepod (*Diacyclops clandestinus*)
- Order Anostraca

Mussels:

- Rock pocketbook (*Arcidens confragosus*)

The following species were added to the Illinois SGNC list:

Crustaceans:

- Cavespring crayfish (*Cambarus tenebrosus*)
- Yeatman's groundwater copepod (*Diacyclops yeatmani*)
- Great Lakes amphipod (*Diporeia hoyi*)

- Neglected fairy shrimp (*Eubbranchipus neglectus*)

Mussels:

- Elktoe (*Alasmidonta marginata*)
- Northern riffleshell (*Epioblasma torulosa rangiana*)
- Louisiana fatmucket (*Lampsilis hydiana*)
- Pocketbook (*Lampsilis ovata*)
- Scaleshell mussel (*Leptodea leptodon*)
- Bleufer (*Potamilus purpuratus*)
- Gulf mapleleaf (*Quadrula nobilis*)
- Pistolgrip (*Tritogonia verrucosa*)

Further, the following species were on the 2005 SGNC list and are on the Illinois SGNC list but require edits to their scientific names:

Crustaceans:

- Illinois crayfish (*Faxonius illinoensis*)
- Indiana crayfish (*Faxonius indianensis*)
- Kentucky crayfish (*Faxonius kentuckiensis*)
- Shrimp crayfish (*Faxonius lancifer*)
- Bigclaw crayfish (*Faxonius placidus*)
- Little wabash crayfish (*Faxonius stannardi*)

Mussels:

- Spectaclecase mussel (*Margaritifera monodonta*)
- Ebonyshell (*Reginaia ebena*)
- Rabbitsfoot mussel (*Theliderma cylindrica*)

(iv) The PEIS referenced the injurious species list from 2015. Since the PEIS was written there has been an update to the injurious species list of Illinois as of December 2023. The list now includes 58 fish or aquatic species. The following is the updated list of species which are illegal to possess, sell, import, or release within the state of Illinois:

Aquatic Invertebrates:

- Dreissenid mussels, genus *Dreissena*, including but not limited to zebra and quagga mussels

- Mitten crabs of the genus *Eriocheir*
- Rusty crayfish (*Orconectes rusticus*)
- Yabby (*Cherax destructor*)
- Golden mussel (*Limnoperna fortune*)
- Marmorkreb/marbled crayfish (*Procambarus virginalis*)
- New Zealand mud snail (*Potamopyrgus antipodarum*)

Fish:

- Walking catfish of the family *Clariidae*
- Snakehead fishes of the genera *Channa* and *Parachanna* (or their generic synonyms of *Bostrychoides*, *Orphicephalus*, *Ophinocephalus*, and *Paraphiocephalis*) of the family *Channidae*, including but not limited to:
 - Chel or borna snakehead (*Channa amphibeus*)
 - Northern or Amur snakehead (*Channa asiatica*)
 - *Channa aurantimaculata*
 - Bangka snakehead (*Channa bankanensis*)
 - Baram snakehead (*Channa baramensis*)
 - Barca or Tiger snakehead (*Channa barca*)
 - Rainbow or Jewel snakehead (*Channa bleheri*)
 - Bluespotted snakehead (*Channa cyanospilos*)
 - Dwarf, Gaucha, or Frog snakehead (*Channa gachua*)
 - Inle snakehead (*Channa harcourtbutleri*)
 - Shiny or splendid snakehead (*Channa Lucius*)
 - Blotched snakehead (*Channa maculata*)
 - Bullseye, Murrel, Indian, Great, or Cobra snakehead (*Channa marulius*)
 - Emperor snakehead (*Channa maruloides*)
 - *Channa melanoptera*
 - Black snakehead (*Channa melasoma*)
 - Giant, Red, or Redline snakehead (*Channa micropeltes*)

- *Channa nox*
- Ceylon or Ceylonese Green snakehead (*Channa orientalis*)
- *Channa panaw*
- Ocellated, Spotted, or Eyespot snakehead (*Channa pleurophthalmus*)
- Dotted or Spotted Snakehead (*Channa punctata*)
- Golden Snakehead (*Channa stewartia*)
- Chevron or Striped Snakehead (*Channa striata*)
- Niger or African Snakehead (*Parachanna Africana*)
- Congo, Square-spotted African, or Light African Snakehead (*Parachanna insignis*)
- Dark African, Dusky, or Square-spotted Snakehead (*Parachanna obscura*)
- Crucian carp (*Carassius Carassius*)
- Prussian carp (*Carassius gibelio*)
- Largescale silver carp (*Hypophthalmichthys harmandi*)
- Silver carp (*Hypophthalmichthys molitrix*)
- Bighead carp, *Hypophthalmichthys nobilis*
- Black carp, *Mylopharyngodon piceus*
- Eurasian minnow (*Phoxinus phoxinus*)
- River ruffe (*Gymnocephalus cernuus*)
- Round goby (*Neogobius melanostomos*)
- Tubenose goby (*Roterorhinus marmoratus*)
- Roach (*Rutilus rutilus*)
- Nile perch (*Lates niloticus*)
- Amur sleeper (*Perccottus glenii*)
- European perch (*Perca fluyiatilis*)
- Rudd (*Scardinius erythrophthalmus*)
- Stone moroko (*Pseudorasbora parva*)
- Zander (*Sander lucioperca*)
- Wels catfish (*Silurus glanis*)

- Asian swamp eel (*Monopterus albus*)
- Tench (*Tinca tinca*)

4.1.6.6 Threatened and Endangered Species and Species of Conservation Concern

(i) At the time the PEIS was written the USFWS under the Endangered Species Act (ESA) had identified 20 federally endangered, and 11 federally threatened species known to occur in Illinois. Two of these species had designated Critical Habitat. One candidate species occurred within the state. An Official Species List dated August 28, 2025, was generated for the entire state of Illinois by the USFWS Information, Planning, and Conservation System (IPaC) and transmitted on behalf of the Illinois-Iowa Ecological Services Field Office. The list includes 23 federally endangered, 12 federally threatened, two proposed as federally endangered, three proposed as federally threatened, and one experimental population non-essential species within the state of Illinois. There are four designated critical habitats and four proposed critical habitats within the state. At this time there are no candidate species within the state of Illinois. See *USFWS IPaC Official Species List* generated for the state of Illinois in *Appendix A*).

(ii) Mammals: Since 2017, the ESA status of the following species, known to occur in the states covered by the Central FirstNet Region PEIS, has changed:

- Northern long-eared bat (*Myotis septentrionalis*) – Threatened to Endangered 2023 per 87 FR 73488-73504.

Since 2017 the following species, known to occur in the states covered by the Central FirstNet Region PEIS, was proposed for listing by the USFWS as ‘Endangered’ under the ESA on September 14, 2022, per 87 FR 56381-56393:

- Tricolored bat (*Perimyotis subflavus*)

The PEIS inaccurately stated that there was no Critical Habitat designated in Illinois for federally listed mammal species. The following final Critical Habitat was designated in Illinois at the time of the PEIS but was not included:

- Indiana bat (*Myotis sodalist*) – Critical Habitat designated in 1976 per 41 FR 41914

(iii) Birds: Since 2017 the following species, known to occur in the states covered by the Central FirstNet Region PEIS, has been removed from the List of Endangered and Threatened Wildlife due to recovery and therefore no longer has prohibitions and protections under the ESA:

- Least tern (*Sternula antillarum*) – Endangered to Delisted in 2021 per 86 FR 2564-2581

The PEIS erroneously omitted the following species and Critical Habitat, known to occur in the states covered by the Central FirstNet Region PEIS, and were not included in the PEIS:

- Whooping crane (*Grus americana*) - Experimental population, non-essential and is afforded protections under the ESA when occurring within a National Wildlife Refuge or National Park on June 26, 2001, per 66 FR 33903-33917

- Piping plover (*Charadrius melodus*) Great Lakes Distinct Population Segment (DPS) – Endangered in 1985 per 50 FR 50726-50734
- Piping plover (*Charadrius melodus*) Great Lakes DPS Critical Habitat in 2001 per 66 FR 22938-22984

(iv) Reptiles: The PEIS erroneously omitted the following species protected by the ESA, known to occur in the states covered by the Central FirstNet Region PEIS, and was not included in the PEIS:

- Eastern massasauga (*Sistrurus catenatus*) – Added as Threatened in 2016 per 81 FR 67193-67214

Since 2017 the following species, known to occur in the states covered by the Central FirstNet Region PEIS, was proposed for listing by the USFWS as ‘Threatened’ under the ESA on November 9, 2021, per 86 FR 62434-62463:

- Alligator snapping turtle (*Macrochelys temminckii*)

(v) Invertebrates: Since 2017 the following species and Critical Habitats, known to occur in the states covered by the Central FirstNet Region PEIS, have been granted protected status/designated under the ESA, and were not included in the PEIS:

- Longsolid (*Fusconaia subrotunda*) – Added as Threatened in 2023 per 88 FR 14794-14869
- Rusty patched bumble bee (*Bombus affinis*) – Added as Endangered in 2017 per 82 FR 3186-3209
- Rusty patched bumble bee (*Bombus affinis*) – Critical Habitat designated in 2024 per 89 FR 93245-93272
- Sheepnose mussel (*Plethobasus cyphus*) – Critical Habitat designated in 2024 per 89 FR 101100-101206
- Snuffbox mussel (*Epioblasma triquetra*) – Critical Habitat designated in 2024 per 89 FR 101100-101206
- Spectaclecase mussel (*Cumberlandia monodonta*) – Critical Habitat designated in 2024 per 89 FR 101100-101206

The PEIS erroneously omitted the following species protected by the ESA, known to occur in the states covered by the Central FirstNet Region PEIS, and were not included in the PEIS :

- Fat pocketbook (*Potamilus capax*) – Endangered in 1976 per 41 FR 24062-24067
- Northern riffleshell (*Epioblasma rangiana*) – Endangered in 1993 per 58 FR 5638-5642
- Ring pink (*Obovaria retusa*) – Endangered in 1989 per 54 FR 40109-40112
- Rough pigtoe (*Pleurobema plenum*) – Endangered in 1976 per 41 FR 24062-24067

Since 2017 the following species, known to occur in the states covered by the Central FirstNet Region PEIS, were proposed for Listing by the USFWS under the ESA:

- Salamander mussel (*Simpsonaias ambigua*) – Proposed Endangered August 22, 2023, per 88 FR 57224-57290
- Monarch Butterfly (*Danaus plexippus*) – Proposed Threatened December 12, 2024, per 89 FR 100662-100716
- Western Regal Fritillary (*Argynnis idalia occidentalis*)- Proposed Threatened August 6, 2024, per 89 FR 63888-63909

Since 2017 the following species are no longer known to occur in the state of Illinois and are considered extirpated from the state and do not need to be considered for analysis:

- Karner blue butterfly (*Lycaedies melissa samuelis*)
- Scaleshell mussel (*Leptodea leptodon*)

Since 2017 the following species, known to occur in the states covered by the Central FirstNet Region PEIS, was found to be not warranted for Listing as Endangered or Threatened Species as of July 23, 2020, per 85 FR 44478-44483

- Rattlesnake-master borer moth (*Papaipema eryngii*)

4.1.9 Socioeconomics

Since the publication of the PEIS, there have been federal updates including: revocation of Executive Orders 12898 and 14096, the implementation of Executive Order 14154, and overall updates to NEPA Section 102 and how they impact implementation.

The PEIS states no state, local, or tribal laws or regulations exist directly relevant to socioeconomics for the project. The state of Illinois has since passed several bills related to broadband, as recent as 2025, that could be evaluated for relevancy; however, the deployment of broadband to underserved communities is considered to have an overall beneficial effect on socioeconomics.

4.1.10 Environmental Justice

Several federal updates have occurred in 2025, including: revocation of Executive Orders 12898 and 14096, the implementation of Executive Order 14154, and overall updates to NEPA Section 102 and how they impact implementation (consideration of Environmental Justice is no longer federally mandatory and databases, such as EJ Screen, are no longer available).

4.1.11 Cultural Resources

The regulatory information in the PEIS is outdated. Several programmatic comments from the Advisory Council on Historic Preservation (ACHP) have been made since 2017, some of which are directly applicable to BEAD projects. In addition, the definition of “direct” and “indirect” effects to cultural resources has changed due to a US District Court decision in 2019. A

summary is attached and can be reviewed here: [Court Rules on Definitions; Informs Agencies on Determining Effects | Advisory Council on Historic Preservation](#). Other relevant information since 2017 includes Federal Register (Vol.85, No. 169, August 31, 2020) Notice of Amendments to the Program Comment to Avoid Duplicative Reviews for the Wireless Communications Facilities Construction and Modification; ACHP's Amendment to the Program Comment for Communications Projects on Federal Lands and Property (effective March 13, 2024) ([Program Comment for Federal Communications Projects | Advisory Council on Historic Preservation](#)), and NTIAs Memorandum for SHPOs, etc., for grant recipients to initiate Section 106 Consultation for NTIA Funded Projects. These procedures and regulations will apply to future NEPA evaluations under BEAD.

4.1.14. Climate Change

The final NEPA Guidance on Climate Change has been withdrawn. This section will need to be updated in future documents to the most current accepted version, likely 2021, as well as any changes to the IL *Climate and Equitable Jobs Act*. Chicago has also updated its Climate Action Plan and Goals with a 2017 baseline published after release of the PEIS. Climate change is no longer an area of special consideration under NEPA.

4.1.15 Human Health & Safety

No significant regulatory changes were noted, with the exception of 1926.1153 Respirable Silica Dust. This change will need to be considered in subsequent evaluations.

Changes in Environmental Consequences (Impacts):

Section 4.2 of Volume 2 – Chapter 4 Illinois

4.2.1 Infrastructure

This section will need updated in future documents for the effect on commercial communications due to assumptions about spectrum on page 4-232. Commercial telecommunications systems, communications, and/or level of service as proposed through BEAD would experience a potentially significant impact of a persistent nature, but it would be a positive increase in the availability of access and capabilities.

Also, deployment of equipment on satellites that are already being launched for other purposes is analyzed as "no impact" on page 4-233 of the PEIS: that assessment is still valid. However, should BEAD proposals include equipment on new satellites that are not being launched for any other purpose, that scope would warrant further analysis.

4.2.6 Biological Resources

4.2.6.4 Terrestrial Wildlife

The PEIS stated (Pg. 4-300, Birds, 1st sentence) that "The direct removal of migratory bird nests are protected under the MBTA." Consider revising this to "Destruction of an in-use nest requires MBTA authorization. MBTA authorization is also required to relocate a nest, whether the nest is

in-use or inactive. An in-use nest is defined as a nest that contains viable eggs or nestlings. A nest becomes in-use when the first egg is laid and remains in-use until nestlings fledge and are no longer dependent on the nest.”

4.2.6.6 Threatened and Endangered Species and Species of Conservation Concern

Species which are Federally Listed and Critical Habitats protected under the ESA not previously identified in the PEIS will require analysis of impacts and effects determinations. State of Illinois Threatened and Endangered species require analysis of impacts and impacts determinations.

4.2.7 Land Use, Recreation, and Airspace

Deployment of equipment on satellites that are already being launched for other purposes is analyzed as "no impact" on page 4-345 of the PEIS; this is still valid. However, should a BEAD proposal include equipment on satellites that are not being launched for any other purpose that scope would warrant further analysis.

4.2.8 Visual Resources

This section should be reviewed in the applicability of the analysis on effects to cultural resources considered as historic properties in light of the US District Court ruling on the definitions of direct and indirect effects mentioned previously.

4.2.11 Cultural Resources

This section will need to be updated and revised due to the changes in the definition of direct and indirect effects. In particular, Table 4.2.11-1 will need to be revised as indirect effects no longer include visual, noise, vibration, and atmospheric considerations.

4.2.12 Air Quality

Increases in nonattainment levels and areas will change the environmental impacts that should be addressed. Areas in and around Chicago (Cook County) will need extra review due to changes in permitting limits and nonattainment levels.

4.2.14 Climate Change

The project will generally generate minimal levels of greenhouse gas emissions on a temporary basis. It is unlikely there will be any changes to consequences based on the new regulatory changes.

Changes to Avoidance, Minimization, Mitigation Measures, or Best Management Practices:

Volume 17 – Chapter 19 Best Management Practices and Mitigation Measures

19.1 Infrastructure

BMPs for the deployment of equipment on dedicated low orbit earth satellites should be developed. As the BEAD proposals would impact the commercial telecommunications spectrum of use, assumptions regarding a lack of competition, as were made in the PEIS, are not consistent with BEAD. Development of BMPs to reduce or eliminate conflicts regarding spectrum use and competition is recommended in future evaluations.

19.6 Biological Resources

19.6.2 Wildlife

19.6.2.1 BMPs and Mitigation Measures for All Project Types

The USFWS has published a "*Nationwide Avoidance & Minimization Measures for Birds*" document in July 2024. This document includes effective measures that should be employed at all project development sites nationwide as applicable and practicable with the goal of avoiding and minimizing impacts to birds and their habitats. The PEIS did not include reference to the USFWS Nationwide Guidance document although some aspects of the document was included as individual BMPs.

19.6.2.2 Project-Type Specific BMPs and Mitigation Measures

The Avian Power Line Interaction Committee (APLIC) has updated and published a document in 2024 "*Suggested Practices For Avian Protection on Power Lines: State of the Art in 2024*". This version revises the original 2006 document which was incorporated in the PEIS.

In March 2021 the USFWS has released an updated "*Recommended Best Practices for Communication Tower, Design, Siting, Construction, Operation, Maintenance, and Decommissioning*" The PEIS incorporated the recommended best practices from the 2013 version of this document. Further, this document provides recommendations that have incorporated the state of the science and the 2020 Federal Avian Administration "*Obstruction Marking and Lighting Advisory Circular AC 70/7460-1M*". The PEIS incorporated the recommended best practices from the 2007 version of this document.

The PEIS referenced Birds of Conservation Concern dated 2008. Since the time of the PEIS the USFWS has updated the Birds of Conservation Concern List as of 2021 and should be incorporated into the PEIS.

The PEIS referred to FAA requirements to eliminate steady-burning flashing obstruction lights and use only flashing obstruction lights in accordance with FAA Advisory Circulars (AC) 70/7460-1L and AC 150/5345-43H and January 6, 2017, FAA notice titled *Opportunities to Reduce Bird Collisions with Communications Towers While Reducing Tower Lighting Costs*. It is important to note that as of August 2, 2021 the FAA has revised its AC that prescribes tower lighting to eliminate new use of L-810 steady- burning side lights on towers taller than 350 feet (106.7 meters) above ground level (AGL), or to make L-810 lights flash on towers 150 to 350 feet (45.7 -106.7 meters) AGL.

19.7 Land Use, Recreation, and Airspace

BMPs for the deployment of equipment on dedicated satellites should be developed.

19.8 Visual Resources

BMPs for the deployment of equipment on dedicated satellites should be developed. Future evaluations should include updated impact considerations to visual resources.

19.10 Environmental Justice

19.10.1 BMPs and Mitigation Measures for All Project Types

The PEIS references federal definitions that are no longer federally required or applicable. This section needs to be updated to reflect as such and call out state level definitions or requirements.

19.11 Cultural Resources

While the BMPs presented cover a variety of possibilities, more should be developed from sources such as those presented in the General Terms and Conditions for the NTIA BEAD Program funds dated April 2024 (Section 13, A., B., C. and E.) and the updated NTIA guidance on NEPA Compliance dated June 2025 in Appendix D. Suggested BMPs are having a qualified cultural resources professional perform a records review to examine the databases for previously recorded resources. A qualified archaeologist should review that data and other relevant contextual data to evaluate an area for probability of archaeological materials. In addition, should archaeological resources be present and sites cannot be avoided by the proposed project, directional boring of materials should be an option once the extent and depth of a site is ascertained. Open trenching in archaeological sites should not be conducted.

Overall Conclusions and Recommendation:

Based on a review of the Central Region PEIS specifically for the State of Illinois, the 2017 PEIS is sufficient for the future NEPA EA Tiering being proposed under BEAD. NTIA may still rely on it for purposes of subsequent environmental documents; however, updates to key impact areas will be required on individual projects. EAs completed for BEAD that Tier off of the 2017 PEIS should consider the findings of this memo in their development to ensure relevant portions of the NEPA analysis are updated, as determined appropriate for the individual project. Subgrantees should also follow the NTIA established process and templates for EIS Tiering. Baseline environmental information for the affected areas should be updated accordingly so impacts can be evaluated on a project-by-project basis.

Attachment 3: Tribal Resolution of Consent

Illinois intends to utilize NTIA's programmatic waiver for an extension for the Tribal Consent requirement.