

# Request for Input on Project Area Unit (PAU) Participant Guidebook



## CONNECT ILLINOIS

May 2024

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# Glossary

## Reliable broadband

Broadband service that the Broadband DATA Maps show as accessible to a location via (i) fiber-optic technology, (ii) cable modem/hybrid fiber-coaxial technology, (iii) digital subscriber line (DSL) technology, or (iv) terrestrial fixed wireless technology using licensed spectrum only or a hybrid of licensed and unlicensed spectrum.<sup>1</sup>

## Unserved location

A broadband-serviceable location that (i) has no access to broadband service or (ii) lacks access to reliable broadband service with (a) a speed of not less than 25 Mbps for downloads, (b) a speed of not less than three Mbps for uploads, and (c) latency less than or equal to 100 milliseconds.<sup>2</sup>

## Underserved location

A broadband-serviceable location that (i) is not an unserved location, and (ii) lacks access to reliable broadband service offered with (a) a speed of not less than 100 Mbps for downloads, (b) a speed of not less than 20 Mbps for uploads; and (c) latency less than or equal to 100 milliseconds.<sup>3</sup>

## Enforceable commitment

Commitment that applies to any location that is already subject to a legally enforceable federal, state, or local commitment to deploy broadband.<sup>4</sup>

## Hex-8s

Hex-8s are a hexagonal grid system resembling a honeycomb that covers a map with hexagons (or "hexes") of the same size and shape. It is approximately 0.3 square miles in area and 0.33 miles in edge length.<sup>5</sup>

## Community anchor institutions (CAIs)

Based on the statutory definition of "community anchor institutions" as defined in 47 USC 1702, (a)(2)(E)<sup>6</sup>, the Illinois Office of Broadband understood the definition of "community anchor institutions" to mean:

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<sup>1</sup> [BEAD NOFO](#), Section I.C. Definitions.

<sup>2</sup> [BEAD NOFO](#), Section I.C. Definitions. Resolution from the challenge process to be incorporated.

<sup>3</sup> [BEAD NOFO](#), Section I.C. Definitions. Resolution from the challenge process to be incorporated.

<sup>4</sup> [BEAD NOFO](#), Section I.C. Definitions.

<sup>5</sup> [Introduction to H3 geospatial indexing](#), "[Table of Cell Statistics Across Resolutions](#)"

<sup>6</sup> [47 USC 1702, \(a\)\(2\)\(E\)](#), p. 466.

- School or institute of higher education.
- Library.
- Health clinic, health center, hospital, or another medical provider.
- Public safety entity (e.g., firehouse, emergency medical service station, police station, or public safety answering point.)
- Public housing organization (“including any public housing agency, HUD-assisted housing organization, or Tribal housing organization.”)
- Community support organization that facilitates greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals, and aging individuals.
- Government building.
- Park.<sup>7</sup>

### Eligible Community Anchor Institutions

A community anchor institution that requires 1Gbps symmetrical broadband service but does not currently have access to such service.<sup>8</sup>

### Project area units (PAUs)

PAUs are defined as a collection of unserved locations, underserved locations, and eligible community anchor institutions (CAIs) to serve as “building blocks” in an application for broadband deployment funding. Each PAU contains a set of “hex-8s” units within a hexagonal H3 geospatial indexing system that groups BSLs in each hex-8 unit. The H3 geospatial indexing system:

- May not be broken into a smaller collection of unserved and underserved locations.
- Cannot overlap.
- Collectively contains all unserved locations, underserved locations, and eligible CAIs in the State. Note that CAIs are not included in the preliminary PAUs and will be added after the challenge process.

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<sup>7</sup> [Connect Illinois Initial Proposal, Volume I](#)

<sup>8</sup> Ibid.

## Hard-to-serve areas

PAUs that currently have significant gaps in broadband infrastructure. This is based on the proportion of unserved BSLs, past interest, outcomes of previous grant rounds (i.e., Connect Illinois R1, R2, R3, RDOF), the poverty level of the county, and High-Cost Areas in the state (as defined by the NTIA).<sup>9, 10</sup>

# I Overview

To further the goal of connecting all Illinoisans, the Illinois Office of Broadband (IOB) has chosen to design “project area units” (PAUs) for broadband deployment. PAUs are collections of eligible broadband-serviceable locations (BSLs), which will serve as “building blocks” for potential subgrantees to create project areas. PAUs will be the smallest possible units for which potential subgrantees may apply for grants and will allow the State to streamline the subgrantee selection process. A critical next step in the process is to define PAUs in a way that synthesizes input from potential subgrantees. To that end, the State has drafted and published a preliminary set of PAUs based on the density of eligible locations and with the goal of avoiding geographical impediments to broadband deployment.

The preliminary set of PAUs, published on the [Illinois Broadband Map](#), is based on the FCC Broadband Availability Data last updated on January 23, 2024, and excludes BSLs contractually obligated to be connected through other state or federal grant programs (known as Enforceable Commitments). The list of eligible locations and PAUs is subject to change based on any other federal and state grants yet to be incorporated, as well as the BEAD Challenge Process results.

Through this Request for Input process, the State welcomes feedback from potential applicants and interested respondents, especially on other impediments or challenges that could impact the feasibility of deploying broadband across the preliminary published PAUs. This feedback, the changes resulting from incorporating additional federal and state grants, and the results of the BEAD challenge process will be incorporated into the final set of PAUs that the state will release.

Please note that *feedback on location eligibility will not be considered* for the RFI process. The PAUs will be updated with the results from the BEAD Challenge Process once it is finalized.

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<sup>9</sup> [NTIA BEAD Allocation Method](#)

<sup>10</sup> [Connect Illinois Initial Proposal, Volume II Draft as of December 2023](#)

## II Request for Input Process Timeline

The phases and associated timelines of the Connect Illinois Request for Input process are described below:

Phase	Duration and Dates
<p><b>Publication of preliminary PAUs</b></p> <p><i>PAUs are published on the <a href="#">Connect Illinois Broadband Map</a></i></p>	<p>7 weeks</p> <p>March 25 – May 12, 2024</p>
<p><b>Respondents provide input on preliminary PAUs</b></p> <p><i>Input is structured based on:</i></p> <ul style="list-style-type: none"> <li>- <i>Which PAUs they are interested in applying to serve</i></li> <li>- <i>Ways to divide a PAU if interested in only partially serving a PAU</i></li> </ul>	<p>4 weeks</p> <p>May 13 – June 9, 2024</p>
<p><b>State publishes Connect Illinois Round 4 PAUs</b></p> <p><i>The IOB plans to publish:</i></p> <ul style="list-style-type: none"> <li>- <i>Eligible locations and CAIs</i></li> <li>- <i>PAUs</i></li> <li>- <i>Hard-to-serve PAUs</i></li> <li>- <i>Reference cost per PAU</i></li> </ul>	<p>4 weeks</p> <p>Early summer 2024, but dependent on the NTIA’s review and approval of the challenge outcome</p>

## III Who May Participate in the Request for Input Process?

All interested parties may participate in the Request for Input process. Participation is **non-binding and is not required to partake in any future Connect Illinois grant rounds**. Entities who anticipate participating in the BEAD subgrantee process are recommended to participate in the Request for Input process.

Once the PAUs are finalized after the Request for Input process is completed, potential subgrantees will not have the opportunity to provide additional input on the PAU design. During the subgrantee process, unless otherwise specified by the State, potential subgrantees cannot include partial PAUs in their project areas.

## IV Participation Guide

To provide feedback for the Request for Input process, interested parties should visit the Illinois Office of Broadband website to download the Submission Template.

### Preparing for submission

Before completing the Request for Input Submission Template, the respondent should have the following information readily available:

1. PAU(s) by their PAU ID(s) that the potential subgrantee intends to cover, specifying:
  - a. Technology that the potential subgrantee will use to cover each PAU of interest (i.e., fiber, fixed wireless, or another type of reliable broadband technology)
  - b. Whether the potential subgrantee intends to cover each PAU fully or partially
2. For each PAU that the potential subgrantee is partially interested in:
  - a. The reason why the potential subgrantee cannot cover the entire PAU
  - b. The Hex IDs for each Hex within the PAU that the potential subgrantee is interested in serving

### Step 1

- Open the [Summary](#) tab.
- Provide the following contact details:

- › Name
- › Job title
- › Email address
- › Phone number
- › Associated company or organization name

**Connect Illinois Request for Input**

**Context**

To further the goal of connecting all Illinoisans, the Illinois Office of Broadband has chosen to use "project area units" (PAUs) for Connect Illinois' broadband deployment grants. PAUs, or collections of eligible broadband service locations (BSLs), are the smallest units of locations for which potential subgrantees can apply. The State intends to use the feedback received during the Request for Input process to refine the initial set of published PAUs. Specifically, the State is looking for potential impediments or challenges within a PAU that may complicate broadband deployment. This collaborative approach aims to facilitate agreement between the State and potential subgrantees on how to realize the goal of universal broadband coverage across Illinois.

The preliminary set of PAUs, published on the Illinois Broadband Map, is based on Broadband Availability Data as of Jan 23, 2024, after excluding BSLs that received federal, state, and local funding incorporated in the BEAD Challenge Map as of Feb 20, 2024. The list of eligible locations is **subject to change** based on any other federal and state grants yet to be incorporated and the BEAD challenge.

**Instructions**

1. Please enter your contact details in the table below.
2. Please use the **(1) PAUs of Interest** tab to identify the PAU(s) that you are interested in serving, and use the **(2) PAUs of Partial Interest** tab to indicate how you would split a PAU if you have indicated partial interest for any PAUs (i.e., you are only interested in serving some locations within the PAU).
3. Please use **(3) Submission Summary** tab to check if the number of PAUs of "complete interest", "partial interest", and "no interest" that are documented in the Excel matches your anticipated number.
4. After completing each tab, use Cell H13 to check if your submission is valid before returning the Excel. H13 will read "Valid Submission" if each tab has been filled out correctly.
5. Please submit your response to the Connect Illinois Round 4, Request for Input intake site (linked below).

Note that all input cells are designated in **Yellow**.  
Detailed instruction on how to complete each tab is provided at the top of the sheet. Please refer to the **Connect Illinois Request for**

Contact Details	
Name	
Job Title	
Email Address	
Phone Number	
Associated Company or Organization Name	

Are tabs ready for submission?  
Valid Submission

**Relevant links**

[Request for Input response intake](#)

[Illinois Broadband Map](#)

Connect Illinois Request for Input Participant Guidebook ([link to be added](#))

Summary (1) PAUs of Interest (2) PAUs of Partial Interest (3) Submission Summary PAU Data >> PAU Mapping

## Step 2

- Open the **(1) PAUs of Interest** tab.
- List each ID number of each PAU that you are interested in covering.

*Note: The drop-down box in Column B lists all valid PAU ID numbers.*



PAU ID (text input or drop down selection)	Technology (drop down selection)	Interest (drop down selection)	Reason for partial interest (drop down selection)	Additional explanation for partial interest (text input)	Status (automatically generated)
Example: 25_17032	Fiber	Partial	7. Other rationale (must be specified)	Challenges in reaching part of the PAU due to cost concerns	Complete
0_17001_0_17001					
0_17003_0_17003					
0_17003_1_17003					
0_17005					
0_17007					
0_17009					
0_17011_0_17011					
0_17011_1_17011					
0_17013					
0_17015_0_17015					
0_17015_1_17015					
0_17017_0_17017					

- Identify the technology that will be used to cover each PAU.
  - › Fiber
  - › Fixed wireless
  - › Other reliable broadband technology











**(3) Submission Summary**

**Instruction**  
 The count is automatically populated in this tab.  
 1. Please check to see if the count for PAUs of full interest (Cell D7), PAUs of partial interest (Cell D8 and D9), and PAUs of no interest (D10) matches the anticipated number  
 2. Please check to see if the count for PAUs of partial interest documented in (1) PAUs of Interest tab (Cell D8) matches the count documented in (2) PAUs of Partial Interest tab (Cell D9)

Category	Count (automatically generated)
PAUs of full interest	0
PAUs of partial interest	0
PAUs of no interest	4433
<b>All PAUs in Illinois</b>	<b>4433</b>

**Tab Submission Validity**  
Valid Submission

Summary (1) PAUs of Interest (2) PAUs of Partial Interest (3) Submission Summary PAU Data >> PAU Mapping +

- Verify the automated checks in the **Summary** tab, the **(1) PAUs of Interest** tab, the **(2) PAUs of Partial Interest** tab, and the **(3) Submission Summary** tab to ensure that all responses have been entered correctly. Each automated check should read “**Valid Submission.**”

Tab Submission Validity
Valid Submission

- If any automated checks read “**Invalid Submission,**” double-check that all responses have been entered correctly.
  - › Within the **(1) PAUs of Interest** tab:
    - » Verify that a technology choice, interest level, and partial interest rationale have been entered for each PAU, where applicable.
  - › Within the **(2) PAUs of Partial Interest** tab:
    - » Verify that Hex IDs have been correctly listed for each PAU with partial interest.
    - » Verify that each PAU denoted as “Partial” in the **(1) PAUs of Interest** tab is captured in the **(2) PAUs of Partial Interest** tab.
  - › Within the **(3) Submission Summary** tab:

- » Verify the number of PAUs of partial interest listed in (1) PAUs of Interest tab (Cell C8) and the number of PAUs of partial interest listed in (2) PAUs of Partial Interest tab (Cell C9) are identical.

**(3) Submission Summary**

**Instruction**

The count is automatically populated in this tab.

1. Please check to see if the count for PAUs of full interest (Cell D7), PAUs of partial interest (Cell D8 and D9), and PAUs of no interest (D10) matches the anticipated number

2. Please check to see if the count for PAUs of partial interest documented in (1) PAUs of Interest tab (Cell D8) matches the count documented in (2) PAUs of Partial Interest tab (Cell D9)

Category	Count (automatically generated)
PAUs of partial interest	0
PAUs of partial interest	0
<b>All PAUs in Illinois</b>	<b>4433</b>

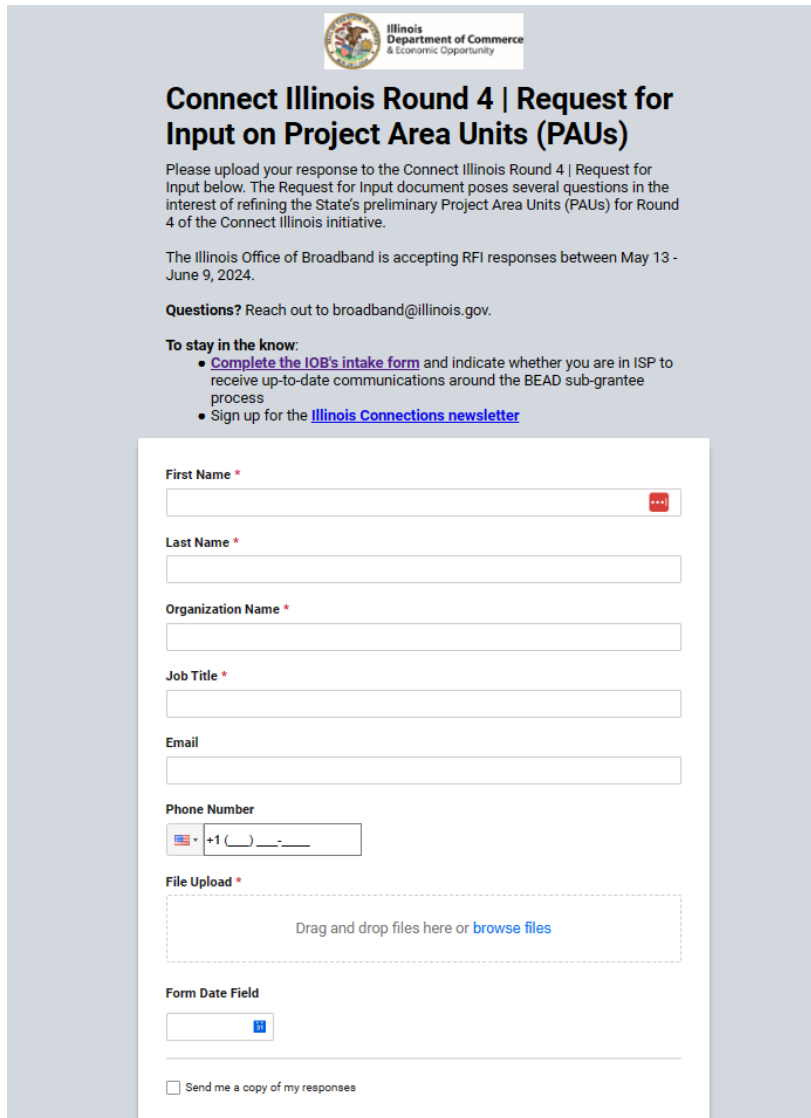
**Tab Submission Validity**

Valid Submission

< > Summary (1) PAUs of Interest (2) PAUs of Partial Interest (3) Submission Summary PAU Data >> PAU Mapping +



- Once you have completed all relevant tabs and the **Summary tab** automated check shows “Valid Submission,” submit your response to the Connect Illinois Round 4, Request for Input [submission form](#):



The screenshot shows a web form titled "Connect Illinois Round 4 | Request for Input on Project Area Units (PAUs)" from the Illinois Department of Commerce & Economic Opportunity. The form includes a header with the department's logo, a main title, and introductory text explaining the purpose of the request. It also provides contact information for questions and instructions on how to stay updated. The form fields include: First Name, Last Name, Organization Name, Job Title, Email, Phone Number (with a country code dropdown), File Upload (with a drag-and-drop area and a "browse files" link), and a Form Date Field. At the bottom, there is a checkbox labeled "Send me a copy of my responses".

**Illinois Department of Commerce & Economic Opportunity**

## Connect Illinois Round 4 | Request for Input on Project Area Units (PAUs)

Please upload your response to the Connect Illinois Round 4 | Request for Input below. The Request for Input document poses several questions in the interest of refining the State's preliminary Project Area Units (PAUs) for Round 4 of the Connect Illinois initiative.

The Illinois Office of Broadband is accepting RFI responses between May 13 - June 9, 2024.

**Questions?** Reach out to [broadband@illinois.gov](mailto:broadband@illinois.gov).

**To stay in the know:**

- [Complete the IOB's intake form](#) and indicate whether you are in ISP to receive up-to-date communications around the BEAD sub-grantee process
- Sign up for the [Illinois Connections newsletter](#)

**First Name \***

**Last Name \***

**Organization Name \***

**Job Title \***

**Email**

**Phone Number**

**File Upload \***

Drag and drop files here or [browse files](#)

**Form Date Field**

Send me a copy of my responses

## V Additional Resources and Information

For a complete list of additional resources for the Request for Input process, please visit the Illinois Office of Broadband [website](#).

If you have any additional questions, please reach out to [broadband@illinois.gov](mailto:broadband@illinois.gov).