



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



UNIVERSITY OF ILLINOIS SYSTEM

Closing the Digital Divide in Illinois

BEAD Deep-Dive Webinar: Project Area Unit Selector Tool

October 2, 2024

BEAD Deep Dive Webinar Series:

Context and Goals



Context:

To align with NTIA requirements, BEAD-funded Connect Illinois Round 4 **differs from Connect Illinois Rounds 1-3**

The Illinois Office of Broadband aims to **help all interested applicants get familiar** with these requirements ahead of the subgrantee process



Goals:

Breaking down the BEAD process

- Walk through key elements and requirements of the Connect Illinois Round 4 subgrantee process
- Clarify specific components of the BEAD program requirements ahead of the subgrantee process
- Provide regular updates on Connect Illinois Round 4

Topics for Discussion Today

1

Recap of BEAD and progress to date

2

Overview of PAU Selection Tool

1

Recap of BEAD and progress to date

BEAD is a \$42B federal grant program that aims to bring high-speed internet to all Americans

\$42.45 billion

Funds provided for BEAD

The Broadband Equity, Access, and Deployment (BEAD) Program is a federal grant program that aims to get all Americans online by funding partnerships between states or territories, communities, and stakeholders to build infrastructure where high-speed internet is currently unavailable

Program highlights

Eligible entities

- All 50 States, District of Columbia, and Puerto Rico
- Other Territories: U.S. Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands

Example eligible uses of funds

- Planning for the deployment of high-speed Internet, including conducting research, collecting data, outreach, and training
- Deploying or upgrading Internet in un/underserved areas
- Improving service to community anchor organizations
- Installing Internet and Wi-Fi in multi-unit residential buildings
- Workforce development, including Registered Apprenticeships and pre-apprenticeships, community college and/or vocational training for broadband-related occupations to support deployment, maintenance, and upgrades

What are the goals of BEAD?



The BEAD Program awarded Illinois \$1.04 billion to connect all unserved and underserved locations to broadband over the next 5 years



Ensure universal coverage across all un/underserved locations in the state, maximizing deployment of end-to-end fiber, and only using non-fiber where fiber costs are extremely high¹



Prioritize projects providing broadband access to unserved and underserved locations and community anchor institutions, Wi-Fi equipment for Multi-Dwelling Units (MDUs) then other digital equity and inclusion priorities²



Run subgrantee selection process within one year of approval of the Initial Proposal, and complete implementation within four years of receipt of funds³



Focus on improving broadband affordability through a low-cost broadband service option, and a middle-class affordability plan⁴

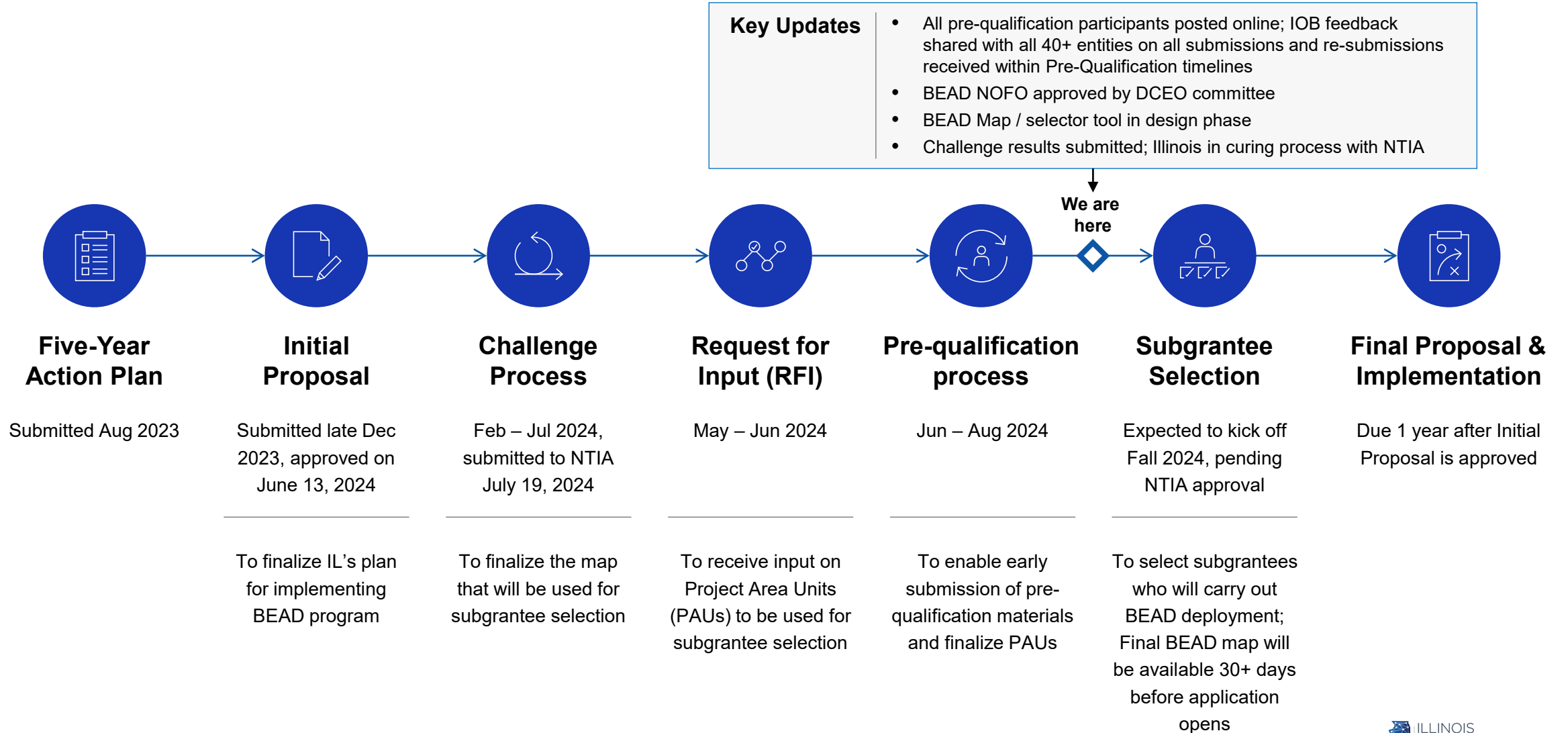
1. Page 14 of BEAD NOFO, on the definition of Priority Broadband Project
2. Page 33 of BEAD NOFO, on the allocation of grant funds
3. Page 65 of BEAD NOFO, on deployment deadlines and benchmarks
4. Page 42-46 of BEAD NOFO, on inclusion of affordability in the BEAD scoring criteria

Source: [BEAD NOFO](#)

Overview of the BEAD-funded Connect Illinois Round 4 timeline

PRELIMINARY TIMELINE - SUBJECT TO CHANGE

INFORMATION PROVIDED ON AN INFORMATIONAL BASIS AND DOES NOT SUPERCEDE ORIGINAL DOCUMENTS



2

Overview of Project Area Unit (PAU) Selector Tool

Recap: The subgrantee selection process consists of up to three waves, starting with a focus on hard-to-serve Project Area Units

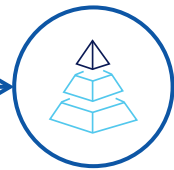


Wave 1

Timeline to be determined

Focus: hard-to-serve areas

- **End-to-end fiber projects are prioritized** (as required by BEAD)
- **Only the applications including sufficient hard-to serve areas** will be processed
- **Where there are conflicting applications, the higher scoring application will prevail**

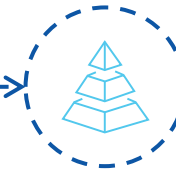


Wave 2

Timeline to be determined

Focus: all remaining locations

- **The State will determine the cost threshold (EHCPLT)**, above which the State may choose to select non-fiber over fiber projects
- Providers will be asked by the State to **remove PAUs overlapping with other higher-scoring applications**



Optional Wave 3

Timeline to be determined


Focus: all remaining locations

- **For remaining unserved or underserved areas**, applicants will have a final opportunity to submit a proposal
- The State will negotiate coverage for remaining unbid locations

Key takeaways

Project Area Units (PAUs) function as the “building blocks” of applications

The State’s PAU Selector Tool allows applicants to select and generate a State-standardized list of PAUs they want to apply for

Deep dive to follow on PAU Selector Tool 

Note: Timeline is tentative based on currently available information and may change subject to NTIA approval of the BEAD Challenge Process results

Source: Connect Illinois Initial Proposal Volume II

Before we discuss further, let's define a few concepts and terms (1/2)

Project Area Unit (PAU)

A collection of un/underserved Broadband Serviceable Locations (BSLs) and Community Anchor Institutions (CAIs) eligible for an application

PAUs do not overlap and collectively contain all un/underserved locations and eligible CAIs in the State

If awarded a PAU, a subgrantee must deploy to all included eligible locations



Broadband Serviceable Location (BSL)

A business or residential location at which fixed broadband access is, or can be, installed, where:

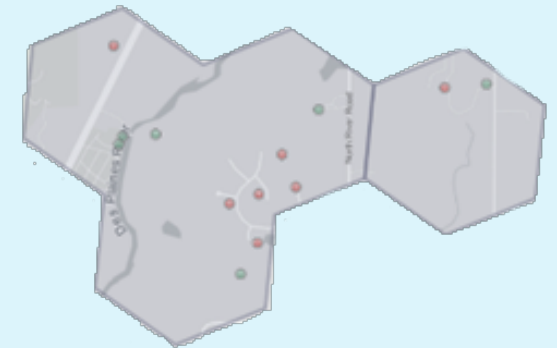
- **Unserved:** Has access to broadband service with speeds of <25/3Mbps
- **Underserved:** $\geq 25/3$ and <100/20Mbps
- **Served:** $\geq 100/20$ Mbps

Community Anchor Institution (CAI)

An entity that facilitates wider use of broadband service by vulnerable populations (e.g., schools, libraries, senior centers)¹

CAIs without access to 1Gbps symmetrical broadband service are eligible for BEAD funding

Illustration of a PAU, where each dot shown is an eligible location



NOTE: ALL DATA, VISUALIZATIONS, AND PROJECT AREA UNIT CHARACTERISTICS PRESENTED ARE ILLUSTRATIVE AND DO NOT REFLECT FINAL ELIGIBLE LOCATIONS AND/OR PROJECT AREA UNITS

1. Details on Illinois's definition of CAIs can be found in Illinois's BEAD Initial Proposal Volume I

Before we discuss further, let's define a few concepts and terms (2/2)

Project Area

One or more PAUs that an applicant proposes to serve in an application (does not need to be contiguous)

Applicants may pick any number of PAUs, but cannot split up a PAU

Must-Include PAU

A PAU identified by an applicant as necessary for an application to be viable

During deconfliction, if a must-include PAU conflicts with the project area of a provisionally awarded project, the applicant may withdraw their application

Hard-to-Serve PAU

A PAU that the State has designated as hard to serve, meeting at least one of following criteria:

- Has a high share of unserved BSLs
- Has a high share of BSLs with little provider interest in prior grant rounds
- Is in a Persistent Poverty County (*20% or more of population living in poverty over the past 30 years, per Census*)
- Is in a High-Cost Area (HCA)
- Has a high estimated cost to serve in relation to other PAUs

Hard-to-serve PAUs are prioritized for Wave 1 provisional awards

High-Cost Area (HCA)

An unserved area for which NTIA has determined the cost of building broadband service is above average

In Illinois, six Census Block Groups qualify as High-Cost Areas.

Project areas consisting of only PAUs in High-Cost Areas will be exempt from the minimum 25% match requirement.

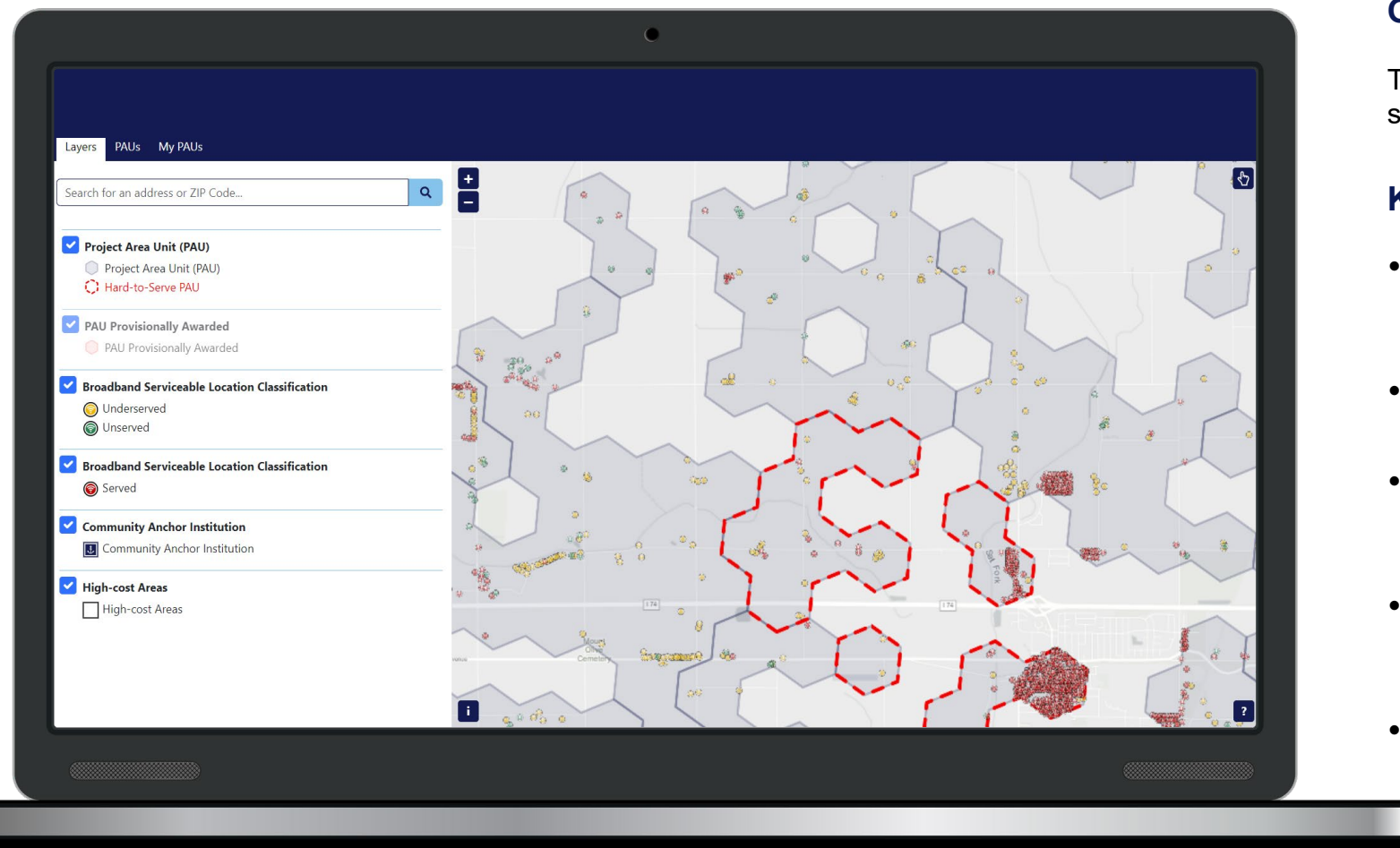
Introduction to the PAU Selector Tool

Overview of the PAU Selector Tool

The PAU Selector Tool allows users to examine and select PAUs to build their project areas

Key features of the PAU Selector Tool

- **Visualization of PAUs and their respective statistics** (e.g., number and location of unserved, underserved, and served BSLs / CAIs)
- Identification of **“High-cost areas,”** where the 25% match requirement will be waived
- Identification of State-defined **Hard-to-serve PAUs**, of which Wave 1 applications must include a designated portion
- **Search functionality** at the address, ZIP code, or other geographic level, augmented by **live navigation** on the map
- **Export** of selected data to State-standardized CSV files



The Tool allows users to select PAUs for their project area through an interactive map and 3 tabs for data visualization and export

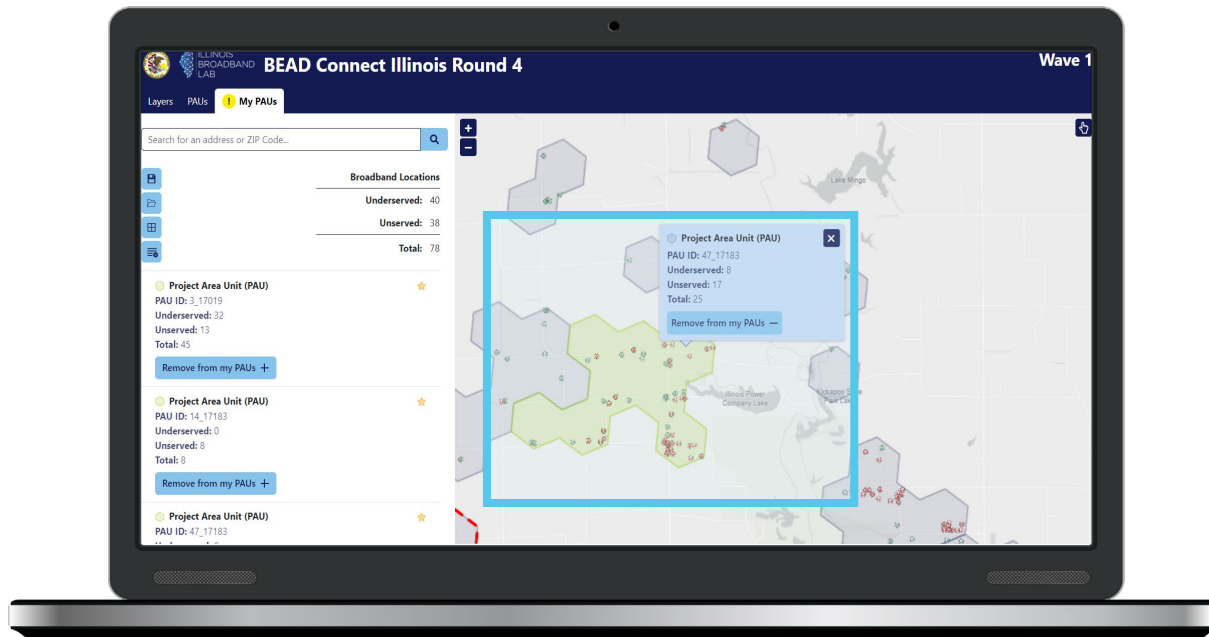


- 1 Interactive map**
 - Displays granular location data down to BSL & CAI level for each PAU
 - Allows easy PAU grouping and visual identification of key characteristics (e.g., Hard-to-Serve PAUs)
- 2 Data visualization / export tabs**
 - Hosts Search bar for addresses / ZIP codes
 - Includes on / off toggles for map characteristics
 - Enables addition and removal of individual PAUs for project areas
 - Creates data export file to be submitted as part of Connect Illinois Round 4 applications


Deep Dive 1: The Tool's interactive map allows users to select PAUs individually or in bulk

Option 1. Individual PAU selection

Individual PAUs can be added or removed simply by clicking on them, or clicking “Add” or “Remove”



Option 2. Bulk PAU selection

PAUs can be selected in bulk by drawing a shape around them via the hand icon  in the top right and selecting **Add to my PAUs**



Deep Dive 2: The Tool features 3 tabs that support data visualization and PAU selection refinement

Each tab enables users to manipulate the map and its data in a different way

A Layers

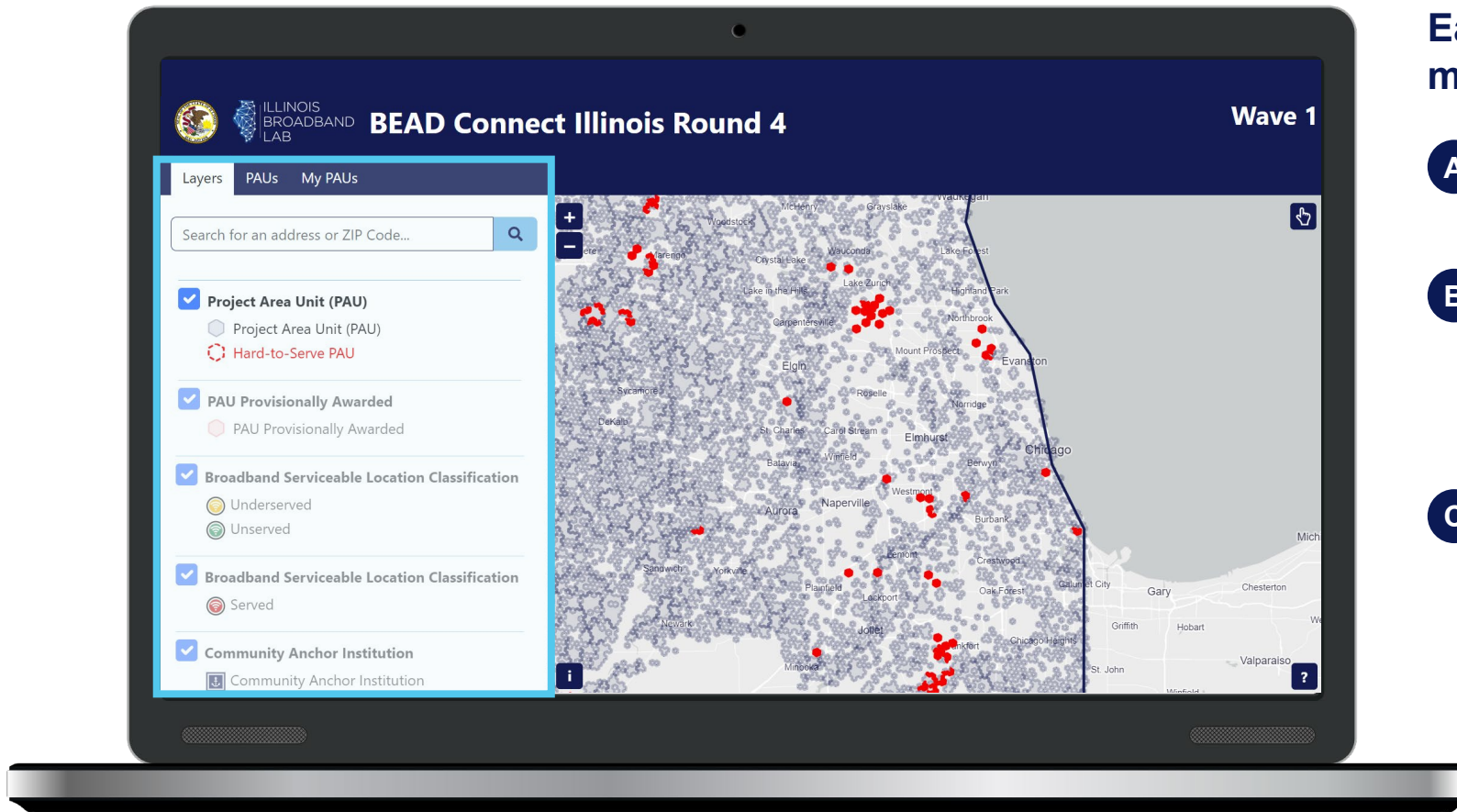
Select what data to visualize on the map

B PAUs

View details about PAUs currently displayed on the map, and select which PAUs to include in the project area

C My PAUs

Review and edit selected PAUs (e.g., display summary statistics, designate Must-Include PAUs)
Export, import, and display PAU info in a table view



Deep Dive 2A: Overview of the “Layers” tab



The **Layers** tab allows users to select which data layers to visualize on the interactive map on the right side, and displays key legend items for the map

Key functionalities

- **Project Area Units (PAU) Layer** shows PAU boundaries and Hard-to-Serve status
- **Broadband Serviceable Location Classification Layers** display which BSLs are unserved, underserved, or served
- **Community Anchor Institution Layer** displays BEAD-eligible CAIs
- **High-cost Areas Layer** shows High-Cost Areas designated by NTIA, which are exempt from BEAD’s 25% match requirement

As the user navigates the interactive map and selects PAUs, **the user can choose which information to display** on the map through the Layers tab



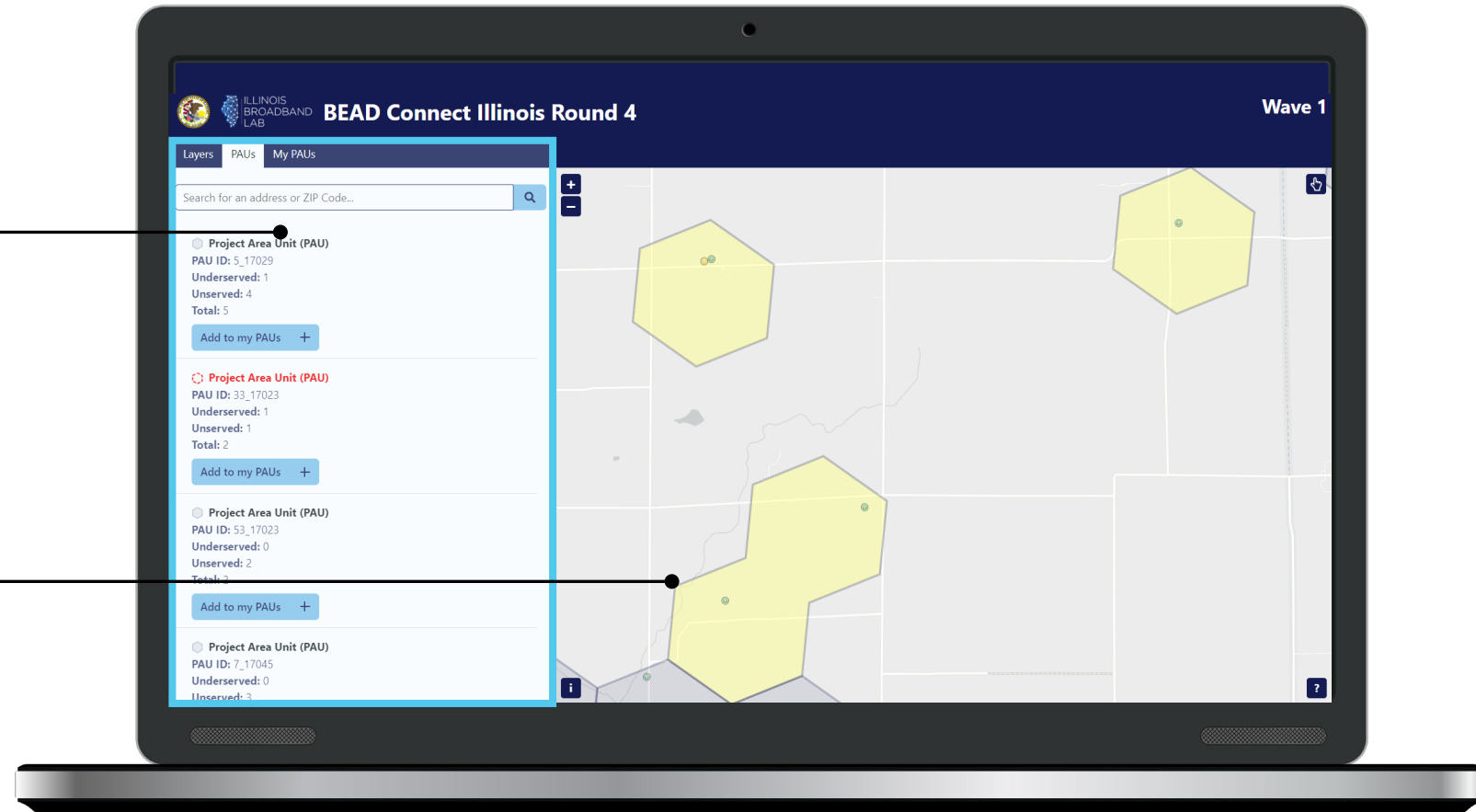
Deep Dive 2B: Overview of the “PAUs” tab



The PAUs tab serves as the main hub to view summary statistics about PAUs on the map and to add them to a given project area

Key functionalities

- **Main attributes for each PAU** such as the PAU ID, number of unserved & underserved locations, total BSL count, total CAI count (*in development*), and Hard-to-Serve status
- **Ability to add and remove PAUs from project area** with “Add to my PAUs” toggle
- Clicking on any PAU on the left side of the screen will **automatically select the given PAU** and zoom into it on the map
- **Moving the map around will change the PAUs displayed** on the left to those currently shown on the map



Deep Dive 2C: Overview of the “My PAUs” tab



The **My PAUs** tab acts as a gateway to view a comprehensive list of selected PAUs and generate the project area selection file that should be submitted for each application

Key functionalities

- **Comprehensive list** of PAUs selected for the project area
- **Summary statistics of PAUs in the project area**, such as the number of un/underserved BSLs, share of hard-to-serve PAUs (*in development*), and reference costs (*in development*)
- **Ability to mark Must-Include PAUs** through the star (★) icon next to each entry
- **Data export / import / review functions**, such as:



Save PAUs as CSV

Exports a CSV table in a State-defined format, with key characteristics about the PAUs and its BSLs / CAIs in the selected project area



Open PAUs from CSV

Imports data from previously exported CSV tables to allow users to save progress



Table view

Opens an in-browser table with key characteristics about BSLs and CAIs in the project area

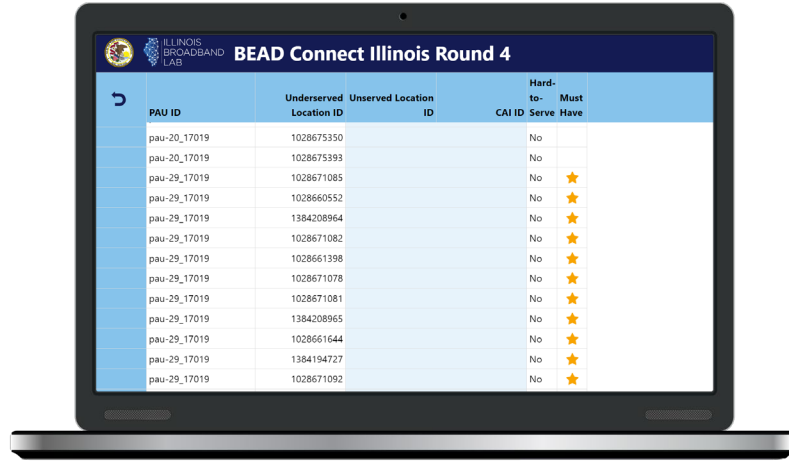


Delete all PAUs

Removes all selected PAUs from the project area, effectively resetting the list



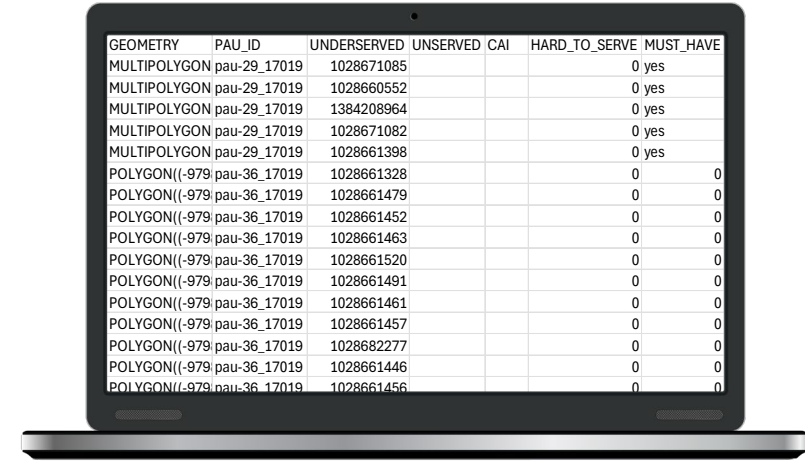
The PAU Selector Tool helps users maintain continuity through easy data export and import



The in-browser table view gives a readable list of locations for review ...

The table gives a **comprehensive list** of:

- IDs of selected PAUs
- Unserved & underserved BSL IDs (one unique location per row)
- Community Anchor Institution (CAI) IDs
- Whether a location is considered Hard-to-Serve
- Whether a location is marked as Must-Include by the applicant



... and the CSV export allows users to save and load data between sessions

The CSV export of the final selected project area needs to be submitted as part of the project application process

(More details to follow at a later date)



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Next Webinar:

October 9, 12-1PM (every Wednesday)

Topic: Qualifying for a State Grant (GATA & more)

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