



BEAD Challenge Process – Reference Material for Bulk Challenge CSV Templates

As of 2/26/2024

Bulk Challenge

Who is this for?

- Challengers with access to the FCC Fabric
- Challengers who want to submit a large number of challenges, and can:
 - Pull Location IDs from the FCC Fabric; or
 - Download or document Location IDs from the BEAD Challenge Map

If this sounds like you, **consider submitting a bulk challenge using a designated CSV template** the Illinois Office of Broadband (IOB) will provide for download, along with **resources to support identifying the right data points** and filling them in, at DCEO.Illinois.gov/BEADchallenge.

CSV templates by Challenge Type

	Challenge Code	Challenge Type
Individual CSV	A	Availability
Individual CSV	S	Speed
Individual CSV	L	Latency
Individual CSV	D	Data cap
Individual CSV	E	Enforceable commitment
Individual CSV	P	Planned (or Existing) service
Individual CSV	N	Not part of enforceable commitment
Individual CSV	C	Location is a CAI
Individual CSV	R	Location is not a CAI
Shared CSV	T	Technology
	B	Business service only

All CSVs to be available for download

Name	Type	Compressed size	Password prot...	Size	Ratio
all_others	Microsoft Excel Comma Separate...	1 KB	No	1 KB	18%
availability	Microsoft Excel Comma Separate...	1 KB	No	1 KB	24%
data_cap	Microsoft Excel Comma Separate...	1 KB	No	1 KB	22%
is_a_cai	Microsoft Excel Comma Separate...	1 KB	No	1 KB	23%
is_an_enforceable_commitment	Microsoft Excel Comma Separate...	1 KB	No	1 KB	34%
is_not_a_cai	Microsoft Excel Comma Separate...	1 KB	No	1 KB	5%
is_not_an_enforceable_commitment	Microsoft Excel Comma Separate...	1 KB	No	1 KB	34%
latency	Microsoft Excel Comma Separate...	1 KB	No	1 KB	24%
planned_or_existing_service	Microsoft Excel Comma Separate...	1 KB	No	1 KB	34%
speed	Microsoft Excel Comma Separate...	1 KB	No	1 KB	32%

Sample CSV

The screenshot shows a Microsoft Excel spreadsheet titled 'availability - Read-Only'. The active cell is A1, which contains the text 'challenge_type'. The spreadsheet has a standard Excel interface with a ribbon (File, Home, Insert, Page Layout, Formulas, Data, Review, View, Automate, Help, Acrobat) and a search bar. The grid shows columns A through I and rows 1 through 10. The first row (row 1) contains the following headers: challenge_type, location_or_cai_id, fcc_provider_id, technology_code, residential_or_business, building_unit, reason_code. The rest of the grid is empty.

Challenge Type Codes

Code	Challenge Type	Description
A	Availability	The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).
S	Speed	The actual speed of the service tier falls below the unserved or underserved thresholds.
L	Latency	The round-trip latency of the broadband service exceeds 100 ms.
D	Data cap	The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer.
T	Technology	The technology indicated for this location is incorrect.
B	Business service only	The location is residential, but the service offered is marketed or available only to businesses.
E	Enforceable commitment	The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation.
N	Not part of enforceable commitment	This location is in an area that is subject to an enforceable commitment to less than 100% of locations and the location is not covered by that commitment.
P	Planned (or existing) service	The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment. OR Location has existing service available that is not currently reflected in the availability data.
C	Location is a CAI	The location should be classified as a CAI.
R	Location is not a CAI	The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.

Technology Codes

Technology Code	Technology	Description/ Examples
10	Copper Wire	Fixed wireline service using copper wire (e.g., Asymmetric or Symmetric DSL, ethernet over copper, T-1, etc.)
40	Coaxial Cable	Fixed wireline service using coaxial cable or hybrid fiber-coaxial (e.g., DOCSISx)
50	Optical Carrier / Fiber to the Premises	Fixed wireline service using fiber to the home or business end user, but does not include "fiber to the curb"
71	Licensed Terrestrial Fixed Wireless	<ul style="list-style-type: none"> Fixed terrestrial wireless service using entirely licensed spectrum (including priority access licenses in the 3.5 GHz band) or a hybrid of licensed, unlicensed, and licensed-by-rule spectrum to make last-mile connections to fixed locations. This includes service provided over a 4G LTE or 5G-NR mobile network but sold as a fixed solution. Providers that use licensed microwave spectrum for backhaul but otherwise use unlicensed or licensed-by-rule spectrum for last-mile connections to end users may not use this technology code.
72	Licensed-by-Rule Terrestrial Fixed Wireless	<ul style="list-style-type: none"> Fixed terrestrial wireless services using entirely licensed-by-rule spectrum or a hybrid of licensed-by-rule and unlicensed spectrum to make last-mile connections to fixed locations. Licensed-by-rule spectrum users include operators providing last-mile connections through general authorized access (GAA) in the 3.5 GHz Citizens Broadband Radio Service (CBRS) band.
0	Other	Fixed service using any other technology not otherwise detailed for another code.
60	Geostationary Satellite	Fixed non-terrestrial wireless service using satellites in geostationary orbit (i.e., Geostationary Earth Orbit)
61	Non-Geostationary Satellite	Fixed non-terrestrial wireless service using satellites in non-geostationary orbit (i.e., Low Earth Orbit or Medium Earth Orbit)
70	Unlicensed Terrestrial Fixed Wireless	Fixed terrestrial wireless service using entirely unlicensed spectrum, including services provided over WiFi as a fixed solution

Availability (Type A) - *availability.csv*

The broadband service identified is not offered at the location, including a unit of a multiple dwelling unit (MDU).

Column Name in CSV	Description	Tips / Where to find this																
challenge_type	A	Slide 4																
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list																
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge																
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map.	DCEO.Illinois.gov/BEADchallenge																
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger decision																
building_unit	[OPTIONAL, only include if applicable] The unit, apartment, or suite number, if applicable. If included, challenge only applies to specific unit.	The address of the building																
reason_code	<p>The reason_code field for challenges of type A (availability) is drawn from the <i>FCC Broadband Data Collection: Data Specifications for Bulk Fixed Availability Challenge and Crowdsourced Data</i>.⁵²</p> <table border="1"> <tbody> <tr> <td>1</td> <td>Provider failed to schedule a service installation within 10 business days of a request.</td> </tr> <tr> <td>2</td> <td>Provider did not install the service at the agreed-upon time.</td> </tr> <tr> <td>3</td> <td>Provider requested more than the standard installation fee to connect the location.</td> </tr> <tr> <td>4</td> <td>Provider denied the request for service.</td> </tr> <tr> <td>5</td> <td>Provider does not offer the technology entered above at this location.</td> </tr> <tr> <td>6</td> <td>Provider does not offer the speed(s) shown on the Broadband Map for purchase at this location.</td> </tr> <tr> <td>8</td> <td>No wireless signal is available at this location (only for technology codes 70 and above).</td> </tr> <tr> <td>9</td> <td>New, non-standard equipment had to be constructed at this location.</td> </tr> </tbody> </table>	1	Provider failed to schedule a service installation within 10 business days of a request.	2	Provider did not install the service at the agreed-upon time.	3	Provider requested more than the standard installation fee to connect the location.	4	Provider denied the request for service.	5	Provider does not offer the technology entered above at this location.	6	Provider does not offer the speed(s) shown on the Broadband Map for purchase at this location.	8	No wireless signal is available at this location (only for technology codes 70 and above).	9	New, non-standard equipment had to be constructed at this location.	DCEO.Illinois.gov/BEADchallenge
1	Provider failed to schedule a service installation within 10 business days of a request.																	
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8	No wireless signal is available at this location (only for technology codes 70 and above).																	
9	New, non-standard equipment had to be constructed at this location.																	



Speed (Type S) - *speed.csv*

The actual speed of the service tier falls below the unserved (25/3 mbps) or underserved (100/20 mbps) thresholds.

Column Name in CSV	Description	Tips / Where to find this
challenge_type	S	Slide 4
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge
building_unit	[OPTIONAL, only include if applicable] The unit, apartment, or suite number, if applicable. If included, challenge only applies to specific unit.	The address of the building
measured_download_speed	Download speed in megabits per second as measured through a speed test	Result of a speed test (BEADchallenge.org or other test platform)
measured_upload_speed	Upload speed in megabits per second as measured through a speed test	Result of a speed test (BEADchallenge.org or other test platform)

Latency (Type L) - *latency.csv*

The round-trip latency of the broadband service exceeds 100 ms.

Column Name in CSV	Description	Tips / Where to find this
challenge_type	L	Slide 4
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge
building_unit	[OPTIONAL, only include if applicable] The unit, apartment, or suite number, if applicable. If included, challenge only applies to specific unit.	The address of the building
measured_latency	The latency as measured through a speed test in millisecond (ms)	Displays on the results of a speed test (BEADchallenge.org or other test platform)

Data Cap (Type D) - *data_cap.csv*

The only service plans marketed to consumers impose an unreasonable capacity allowance (“data cap”) on the consumer

Column Name in CSV	Description	Tips / Where to find this
challenge_type	D	Slide 4
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map.	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge
building_unit	[OPTIONAL, only include if applicable] The unit, apartment, or suite number, if applicable. If included, challenge only applies to specific unit.	The address of the building

Planned (or Existing) Service (Type P) - *planned_or_existing_service.csv*

The challenger has knowledge that broadband will be deployed at this location by June 30, 2024, without an enforceable commitment or a provider is building out broadband offering performance beyond the requirements of an enforceable commitment. **ALSO** use for instances if location has existing service available that is not currently reflected in the availability data.

Column Name in CSV	Description	Tips / Where to find this
challenge_type	P	Slide 4
planned_or_exisitng	Based on the challenge, enter P if the challenge is for planned service or E if challenge is for existing service	Challenger knowledge
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map.	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge
advertised_download_speed	Download speed in megabits per second (mbps) that will be made available by the internet service provider at this location by June 30, 2024, or already exists at the location	Based on the internet service provider's network capabilities and service offerings
advertised_upload_speed	Upload speed in megabits per second (mbps) that will be made available by the internet service provider at this location by June 30, 2024, or already exists at the location	Based on the internet service provider's network capabilities and service offerings

Enforceable Commitment (Type E) - *is_an_enforceable_commitment.csv*

The challenger has knowledge that broadband will be deployed at this location by the date established in the deployment obligation

Column Name in CSV	Description	Tips / Where to find this
challenge_type	E	Slide 4
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map.	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge
enforceable_commitment_program_name	Include the name of the federal or state program under which this location will be served per BEAD's minimum technology and speed requirements	Challenger knowledge
committed_download_speed	Download speed in megabits per second (mbps) that the internet service provider has committed to offering at the location based on the terms of the respective federal or state grant program that meets BEAD's minimum technology and speed requirements	Federal or State grant program agreement document
committed_upload_speed	Upload speed in megabits per second (mbps) that the internet service provider has committed to offering at the location based on the terms of the respective federal or state grant program that meets BEAD's minimum technology and speed requirements	Federal or State grant program agreement document

Not part of Enforceable Commitment (Type N) - *is_not_an_enforceable_commitment.csv*

This location is in an area that is subject to an enforceable commitment less than 100% of locations and the location is not covered by that commitment.

Column Name in CSV	Description	Tips / Where to find this
challenge_type	N	Slide 4
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map.	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge
enforceable_commitment_program_name	Include the name of the federal or state program under which the location is currently listed as served, but challenger has information that this location will not be covered by that specific program	Challenger knowledge

Location is a CAI (Type C) - *is_a_cai.csv*

The location should be classified as a Community Anchor Institution (CAI)

Column Name in CSV	Description	Tips / Where to find this										
challenge_type	C	Slide 4										
cai_type	From the CAI Type column in the CAI list	BEAD Challenge Map or All CAI list										
entity_name	Name of the entity that is being challenged	Challenger knowledge										
street_address	Address of the entity that is being challenged	Address of CAI										
city	City of the entity that is being challenged											
state	State of the entity that is being challenged											
zip_code	Zip Code of the entity that is being challenged											
category_code	Select the category code that best describes why the challenged location should be listed as a CAI	<table border="1"> <tbody> <tr> <td>D</td> <td>Definition: The challenger believes that the location either satisfies the definition of a CAI established by the Eligible Entity (challenge type C) or fails to meet the definition (challenge type R). For example, while the location may be correctly labeled as a school, the challenger believes that it does not fall within the definition of a school put forth by the Eligible Entity.</td> </tr> <tr> <td>N</td> <td>New CAI, <i>i.e.</i>, CAI established or to be operational by June 30, 2024.</td> </tr> <tr> <td>I (letter I)</td> <td>Independent location, <i>i.e.</i>, this CAI is affiliated with a listed CAI, but is a separate location and requires its own broadband service.</td> </tr> <tr> <td>T</td> <td>The type of the CAI contained in the list provided by the Eligible Entity is wrong. The remainder of the fields should clearly identify the existing listing. The type field should describe the type the challenger believes to be correct.</td> </tr> <tr> <td>O (letter O)</td> <td>Other, as described in the explanation column.</td> </tr> </tbody> </table>	D	Definition: The challenger believes that the location either satisfies the definition of a CAI established by the Eligible Entity (challenge type C) or fails to meet the definition (challenge type R). For example, while the location may be correctly labeled as a school, the challenger believes that it does not fall within the definition of a school put forth by the Eligible Entity.	N	New CAI, <i>i.e.</i> , CAI established or to be operational by June 30, 2024.	I (letter I)	Independent location, <i>i.e.</i> , this CAI is affiliated with a listed CAI, but is a separate location and requires its own broadband service.	T	The type of the CAI contained in the list provided by the Eligible Entity is wrong. The remainder of the fields should clearly identify the existing listing. The type field should describe the type the challenger believes to be correct.	O (letter O)	Other, as described in the explanation column.
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O (letter O)	Other, as described in the explanation column.											
explanation	Describe why the challenged location should be listed as a CAI	Challenger explanation. Note: Please do not use commas in your explanation and keep it on one line in the CSV (this will impact how the data is read by the system)										

Location is not a CAI (Type R) - *is_not_a_cai.csv*

The location is currently labeled as a CAI but is a residence, a non-CAI business, or is no longer in operation.

Column Name in CSV	Description	Tips / Where to find this										
challenge_type	R	Slide 4										
location_or_cai_id	Unique identifier for the location from the FCC Fabric or CAI list (Location ID for households & businesses; CAI ID for CAIs)	BEAD Challenge Map, FCC Fabric Data, or All CAI list										
cai_id	Unique identifier for the CAI location	BEAD Challenge Map or All CAI list										
entity_name	Entity name from the CAI or BEAD Challenge Map that is being challenged	BEAD Challenge Map or All CAI list										
category_code	Select the category that best describes why the challenged location should NOT be listed as a CAI	<table border="1"> <tbody> <tr> <td>X</td> <td>CAI has ceased operation.</td> </tr> <tr> <td>B</td> <td>Location does not require fiber broadband service appropriate for CAI. (For example, the location is a remote field station affiliated with a university.)</td> </tr> <tr> <td>R</td> <td>CAI is a private residence or a non-CAI business, <i>i.e.</i>, it is mislabeled in the CAI list. For example, a former school building has been converted into an apartment building.</td> </tr> <tr> <td>D</td> <td>Definition: The challenger believes that the location either satisfies the definition of a CAI established by the Eligible Entity (challenge type C) or fails to meet the definition (challenge type R). For example, while the location may be correctly labeled as a school, the challenger believes that it does not fall within the definition of a school put forth by the Eligible Entity.</td> </tr> <tr> <td>O (letter O)</td> <td>Other, as described in the explanation column.</td> </tr> </tbody> </table>	X	CAI has ceased operation.	B	Location does not require fiber broadband service appropriate for CAI. (For example, the location is a remote field station affiliated with a university.)	R	CAI is a private residence or a non-CAI business, <i>i.e.</i> , it is mislabeled in the CAI list. For example, a former school building has been converted into an apartment building.	D	Definition: The challenger believes that the location either satisfies the definition of a CAI established by the Eligible Entity (challenge type C) or fails to meet the definition (challenge type R). For example, while the location may be correctly labeled as a school, the challenger believes that it does not fall within the definition of a school put forth by the Eligible Entity.	O (letter O)	Other, as described in the explanation column.
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O (letter O)	Other, as described in the explanation column.											
explanation	Describe why the challenged location should NOT be listed as a CAI	Challenger explanation. Note: Please do not use commas in your explanation and keep it on one line in the CSV (this will impact how the data is read by the system)										

All Others - *all_others.csv*

Use this template for:

Technology (T) The technology indicated at this location for the specific ISP is incorrect.

Business Service Only (B) The location is residential, but the service offered is marketed or available only to businesses.

Column Name in CSV	Description	Tips / Where to find this
challenge_type	The single letter code to represent the challenge type (T for Technology and B for Business Service Only)	Slide 4
location_id	Unique identifier for the location from the FCC Fabric	BEAD Challenge Map or FCC Fabric Data
fcc_provider_id	A unique 6-digit code generated by the FCC that identifies each service provider	DCEO.Illinois.gov/BEADchallenge
technology_code	Code for the technology of the service being challenged, as shown on the Broadband Map	DCEO.Illinois.gov/BEADchallenge
residential_or_business	Based on the type of service being challenged, enter R if residential or B if business	Challenger knowledge