

Exhibit K—Project Selection and Data Export/Import Instructions (NOFA #007)

Section 1 - Introduction

Please read the following instructions on how to complete your Broadband Grants Application. The Application requires the use of data available through the Iowa Broadband Availability Map v4, available at: <https://ocio.iowa.gov/broadband-availability-map-version-4> or <https://arcg.is/1a9Gfv0>. Applicants must acquire the appropriate underlying data related to their Project following these instructions.

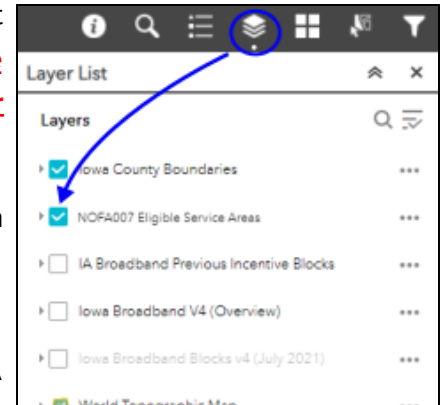
First, you will need to select the Eligible Blocks forming the basis of your Project. This is described in the section [Determine Project Blocks Using the Eligible Areas Selection Tool](#) on page 2.


Second, you will need to Export the Infrastructure Project area data from the blocks you selected. See [Export Project Data](#) on page 3.

Third, you will need to copy the underlying data into the **ESA Input** tab within the **Broadband Grants Core Application**, which will in turn populate, in part, the **Broadband Grants Core Application Worksheet, Exhibit B**. See [Copying Infrastructure Project Data to Broadband Grants Core Application](#) on page 3.

Section 2 - Determine Project Blocks Using the Eligible Areas Selection Tool

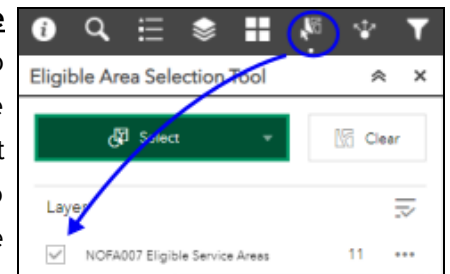
You can select the Census Block(s) forming the basis of your Project using the Eligible Area Selection Tool available on the Iowa Broadband Availability Map v4 (published at <https://arcg.is/1a9Gfv0>). Zoom into your project area or area of interest so that the Census Blocks comprising your Project are visible, usually about the scale of a county or two. **Reminder: For this Notice of Funding Availability, only identified Eligible Service Areas are eligible for funding.**



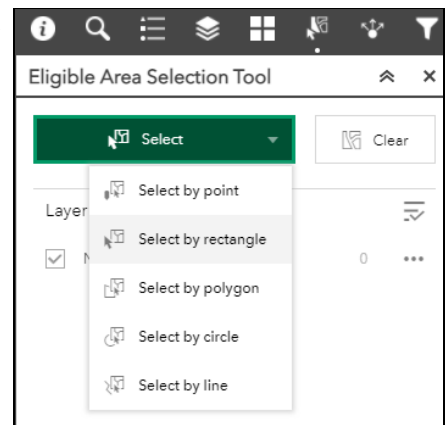
1. The Broadband Availability Map includes the following layers, for which you can use the Layer List to toggle the visibility of the layers on and off:
 - a. Iowa County Boundaries
 - b. NOFA007 Eligible Service Areas - blocks eligible under NOFA #007
 - c. IA Broadband Previous Incentive Blocks - blocks that have received an award under a previous grant issued by OCIO that would be disqualifying under NOFA #007
 - d. Iowa Broadband V4 (Overview) - Iowa Broadband Version 4 consolidated tiers to allow the map to draw faster at statewide scales
 - e. Iowa Broadband Blocks v4 (July 2021) - detailed block information
2. Turn on the NOFA007 Eligible Service Areas layer - click on the **Layer List** button  to display the list of layers available. Check the box next to the NOFA007 Eligible Service Area layer to draw blocks eligible under NOFA #007. **To increase the visibility of the eligible areas, uncheck the Iowa Broadband v4 (overview) and Iowa Broadband Blocks v4 (July 2021) layers.**

3. On the menu bar of the Iowa Broadband Map Version 4, click the **Eligible Area Selection Tool**. 

4. After the **Eligible Area Selection Tool** opens, **make sure the NOFA007 Eligible Service Areas layer is checked**, as in the image to the right. If you are not zoomed in far enough the NOFA007 Eligible Service Areas layer will appear greyed out. If the layer is greyed out click the + tool on map navigation tools on the left-side of the map to zoom in a little further. This layer allows you to visualize blocks that are eligible under NOFA #007.



5. **Selection Mode.** Choose a selection mode to select all the blocks that cover the extent of your Project area. The drop-down menu will provide 5 selection tools. The Select By Point or Select By Polygon options work best for selecting large areas. Try each tool in a small area to get an idea of how they work.




- a. **Select By Point** - A single block can be selected at a time. Use Shift + Mouse click after your first block is selected to add to the collection of blocks. Your screen may re-center to include all selected blocks. You can also click the ellipsis icon (...) then select **Zoom To** to cause the map to recenter to show all of the selected blocks. A block can be removed by clicking CTRL + Click (⌘ + Click on OSX).
- b. **Select By Rectangle** - Draw a box around the blocks that should be selected in your Project area. Shift + Click to add additional areas, and CTRL + Click (⌘ + Click on OSX) to remove areas.
- c. **Select By Polygon** - This selects all blocks that are within or touch the polygon drawn on the map. Start drawing a polygon by clicking on the first block in your Project area, click near but within your Project area boundaries until the polygon contains your Project area. Double-click to complete the selection of all blocks that are within or touch that polygon. Your project area polygon doesn't need to be exact since you are only selecting Census blocks that will be served in the project area.
- d. **Select By Line** - Draw a straight or irregular line by placing your first mouse click inside an eligible block that is part of your Project area, click to include another block, double-click to start the selection process. Shift + Click to add additional areas, and CTRL + Click (⌘ + Click on OSX) to remove areas.
- e. **Select by Circle** - Click on a location on the map. Continue to hold down the mouse button while dragging the mouse to create a circle. This tool might be useful for selecting eligible areas (blocks) that involve the placement of towers. Shift + Click to add additional areas, and CTRL + Click (⌘ + Click on OSX) to remove areas.

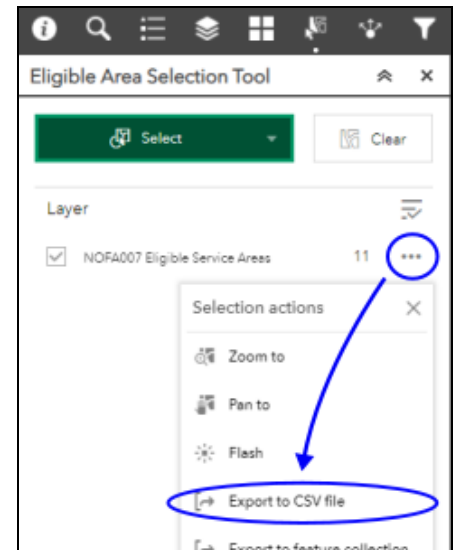
6. Next, follow the instructions in the [Export Project Data](#) section of this document (below).

Section 3 - Export Project Data

Regardless of which selection option you used to select your Project area above, you will now export the underlying census block data. To do this:

Export Selected Blocks to a CSV file:

1. In the **Eligible Area Selection Tool**, click the **Selection Actions** icon (...) to display Export options. See image to the right.
2. Choose **Export to CSV file** to export the selected Census Block IDs and corresponding data forming the basis of your Project.
3. Save your file using this naming convention: **features.csv**.
4. Click the  in the top right corner of the tool menu to close the **Eligible Area Selection Tool**.



Section 4 - Copying Project Data to the Broadband Grants Core Application

1. Open the **Broadband Grants Core Application** worksheet. Complete the following sections:
 - a. On the **Menu** Tab, the bottom section features a checklist of items required for the application to be complete. If incomplete, the Status column describes the action that must be addressed. As you work through the Application, the Status will change to “Complete.”
 - b. **Applicant Name** - Use the Business Organization indicated in your Iowa Grants Application.
 - c. **Study Area Code and Exchange Name** - If applicable, indicate your FCC SAC and Exchange Name.
 - d. **Facilitated Speeds** - Choose your project type, either 100/20 or 100/100.

| General Application Information | |
|---------------------------------|----------|
| Applicant Name: | Required |
| Study Area Code: | |
| Exchange Name: | |

| Facilitated Broadband Speeds - Select Only One From Below | |
|---|----------|
| Facilitated Speeds: | Required |

| Follow The Steps Below | |
|---|---|
| Instructions | Hot Buttons |
| 1) Populate the Eligible Service Area data. Detailed directions in Exhibit L. 1a) Populate your exported Eligible Service Area data on the ESA Input tab. | Go to Eligible Service Area/Project Input Tab |
| 2) Refresh Exhibit B - Project Worksheet with the Eligible Service Area data. 2a) The "Hot Button" to the right will transfer your ESA Input data to Exhibit B. | Refresh Exhibit B with ESA Input Tab Data |
| 3) Populate data in Exhibit B - Project Worksheet. 3a) Check only one Delivery Platform that applies. 3b) Select the appropriate Infrastructure Type to be deployed. | Go to Exhibit B - Project Worksheet Tab |

2. To copy the underlying data into the **ESA Input** tab, which will in turn populate the **Project Worksheet**, in **Exhibit B**:

- Open the .csv file for your Project you generated through the Eligible Area Selection Tool (“features.csv”). **DO NOT alter the contents of any fields or change the formatting of cells.**
- Select/highlight all the data (excluding the column headers) beneath **“OBJECTID”** (Column A) through and including the column labeled **“y”** (Column AF).

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z | AA | AB | AC | AD |
|---|----------|-------------|----------|----------|-----------|------------|------------|---------|---------------|----------|-----|---------|------------|-------|-------|-------|-------|--------------|---------|---------|---------|---------|---------|-----------|----------|-------|--------|---------|----------|----|
| 1 | OBJECTID | ocloblockid | blockid | areasmil | household | population | businesses | schools | effectivedate | county | tsa | tsatier | partial_se | tier1 | tier2 | tier3 | tier4 | previous_PTE | NOFA001 | NOFA002 | NOFA003 | NOFA004 | NOFA005 | longitude | latitude | aland | awater | Shape_A | Shape_Lt | |
| 2 | 190448 | 19183-96 | 1.92E+14 | 0.48 | 1 | 2 | 0 | 0 | 20210701 | Washingt | yes | 3 | | | | 1 | no | | | | | | | | | | | | | |
| 3 | 190475 | 19183-96 | 1.92E+14 | 0.61 | 12 | 30 | 2 | 0 | 20210701 | Washingt | yes | 3 | | | | 1 | no | | | | | | | | | | | | | |
| 4 | 190476 | 19183-96 | 1.92E+14 | 0.98 | 5 | 11 | 0 | 0 | 20210701 | Washingt | yes | 3 | | | | 1 | no | | | | | | | | | | | | | |
| 5 | 190991 | 19183-96 | 1.92E+14 | 1.57 | 7 | 18 | 5 | 0 | 20210701 | Washingt | yes | 3 | | | | 1 | no | | | | | | | | | | | | | |

- Right-click to open the dialogue box. Click **“Copy”** to copy this data or use **CTRL+C** to copy.
- After pasting the data into the **ESA Input** tab, go back to the **Menu** Tab.
- On the Menu Tab, click on the Hot Button **“Go to Eligible Service Area/Project Input Tab.”**
- The **ESA Input** Tab will open. Click on the first available row in Column A (**“OBJECTID”**).

| Paste Your Eligible Service Area Data Below in Row 3 | | DO NOT EDIT DATA FROM MAP EXPORT | | | | | | | | | | | | | | | | | | | | Return To Menu | | | | | | | | | |
|--|------------------|----------------------------------|-------------|------------|------------|------------|---------|---------------|--------|-----|---------|-------|-------|-------|-------|--------------------|---------|---------|---------|---------|---------|----------------|----------|--------------|-------------|---------|--------|-------------|--------------|---|---|
| OBJECTID | ocloblockid | blockid | areasmil | households | population | businesses | schools | effectivedate | county | tsa | tsatier | tier1 | tier2 | tier3 | tier4 | previous_incentive | NOFA001 | NOFA002 | NOFA003 | NOFA004 | NOFA005 | NOFA006 | eligible | longitude | latitude | aland | awater | Shape_Area | Shape_Length | x | y |
| 3550 | 19011-9602002064 | 1.9012E+14 | 0.99 | 3 | 5 | 0 | 0 | 20210701 | Benton | Yes | 1 | 100 | 0 | 0 | 0 | yes | | | | | | | yes | -92.07609953 | 42.13037563 | 3569253 | 0 | 0.000279756 | 0.067928344 | | |
| 3561 | 19011-9604002007 | 1.9012E+14 | 0.000788425 | 0 | 0 | 0 | 0 | 20210701 | Benton | Yes | 1 | 100 | 0 | 0 | 0 | yes | | | | | | | yes | -92.06627651 | 42.12500398 | 1992 | 0 | 2.17E-07 | 0.001854514 | | |
| 3576 | 19011-9603004087 | 1.9012E+14 | 0.15 | 1 | 3 | 0 | 0 | 20210701 | Benton | Yes | 1 | 100 | 0 | 0 | 0 | yes | | | | | | | yes | -91.99797867 | 42.15588629 | 408043 | 0 | 4.42617E-05 | 0.030430495 | | |
| 3577 | 19011-9602002119 | 1.9012E+14 | 0.2 | 0 | 0 | 0 | 0 | 20210701 | Benton | Yes | 1 | 100 | 0 | 0 | 0 | yes | | | | | | | yes | -92.07273797 | 42.11055103 | 524750 | 0 | 5.71204E-05 | 0.039439656 | | |
| 3583 | 19011-9602002002 | 1.9012E+14 | 2.8 | 13 | 24 | 1 | 0 | 20210701 | Benton | Yes | 1 | 95.8 | 1.53 | 1.37 | 1.25 | yes | | | | | | | yes | -92.09625262 | 42.17326966 | 7260649 | 0 | 0.000791112 | 0.145544311 | | |

- Right-click on cell A3 to open the dialogue box. Select **“Paste”** from the pop-up menu to paste the data to the sheet.
- Duplicate blocks - if you have duplicate blocks in the **ESA Input** Tab, you will see a yellow message bar at the top of the tab. If you do not see a yellow bar proceed to the next step. To remove the yellow message bar, you must remove any duplicate blocks. To do this, select the

cells for the duplicate record and click the delete key. The message will disappear when there are no duplicate blocks.

| J | K | L | M | N | O | P | Q | R | S | T | U | V | W | |
|---|-----|---------|-------|-------|-------|-------|--------------------|---------|---------|---------|---------|---------|---------|-----|
| PLEASE REMOVE DUPLICATE CENSUS BLOCKS FROM ESA INPUT DATA -- FAR RIGHT COLUMN SHOWS DUPLICATES (COLUMN AI) | | | | | | | | | | | | | | |
| county | tsa | tsatier | tier1 | tier2 | tier3 | tier4 | previous_incentive | NOFA001 | NOFA002 | NOFA003 | NOFA004 | NOFA005 | NOFA006 | eli |

- i. Return to the **Menu** Tab and click on the Hot Button **“Refresh Exhibit B with ESA Input Tab Data”**
- j. If you are not redirected to the Exhibit B tab automatically, click on the Hot Button **“Go to Exhibit B – Project WorksheetTab.”** Please note the message at the top of the worksheet. The message **PLEASE REVIEW EXHIBIT FOR INCOMPLETE ITEMS** will appear at the top of all tabs that have incomplete information.
- k. Any Eligible Service Area Blocks you selected on the map will be displayed in **Exhibit B** if they are designated as Eligible Service Areas. The following Columns should contain your project data:
 - i. **Census Block #**
 - ii. **Eligible**
 - iii. **Previously Funded**
 - iv. **County**
 - v. **Sq. Miles**
 - vi. **Total Number of Broadband Units in Project Area** (HSBs = Homes, Schools, and Businesses)
 - vii. **Total Number of Broadband Units New Service Will Be Facilitated To**

NOTE: The Project Worksheet will assume you intend to service 100% of the HSBs in every Census Block once the project is complete. If you intend to serve a different number of HSBs in any or all Census Blocks, you must make the appropriate corrections to HSB counts in this section. For example, in the below screenshot, the households cell has been adjusted to 0 households, to reflect that the Project does not intend to serve any of the households in that particular Census Block. See Screenshot, Area A.

 - viii. **Facilitated Speeds in Project Area Upon Completion** (Screenshot, Area B)

Use the drop-down menu to select the new download and upload speeds available upon completion of the project.
- l. In addition, follow the instructions at the top of **Exhibit B** and complete the following:
 - i. Check the delivery platform that applies to the Project under the **“Delivery Platform”** section. (Screenshot, Area C)

- ii. In the **“Prospective Products Attributes”** section complete as applicable. Applicants must respond to each of the elements (Availability, Latency, Performance Credits, and Data Cap). (Screenshot, Area D)
- iii. The area labeled **“Application Calculations”** (Screenshot, Area E) will automatically be calculated using the information provided in Exhibits B, C, D and D.1, if applicable. The Efficiency calculation (Cost per Passing) will remain blank until budget information is entered on Exhibits D and D.1.

C Delivery Platform: (Check or Populate Other)

| | |
|-----------------------|---|
| - FTTH | <input checked="" type="checkbox"/> Check |
| - DSL | <input type="checkbox"/> Check |
| - Cable Modem | <input type="checkbox"/> Check |
| - Wireless Spectrum * | <input type="checkbox"/> Check |
| - Fixed Wireless * | <input type="checkbox"/> Check |
| - Other | |

* If this delivery platform is selected, Applicants must provide a completed Exhibit I.

E Application Calculations

| | |
|--|--------|
| Total Broadband Units Facilitated Service To | 17.0 |
| Rurality (Units Facilitated Per Square Mile) | 4.1 |
| Completeness | 94.00% |
| Efficiency (Cost per Passing) \$ | 220.59 |

D Prospective Product Attributes: (Populate Responses)

| | | |
|-----------------------|---|--------------|
| - Availability | 100.00% | percent |
| - Latency | 1 | milliseconds |
| - Performance Credits | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |
| - Data Cap | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | |

| Census Block # | Eligible | Eligible Service Area | | | Total Number of Broadband Units in Project Area | | | | Total Number of Broadband Units New Service Will Be Facilitated To | | | | Facilitated Speeds in Project Area Upon Project Completion | |
|------------------|----------|-----------------------|--------|-----------|---|---|---|-------|--|---|---|-------|--|-----------|
| | | Previously Funded | County | Sq. Miles | H | S | B | Total | H | S | B | Total | Down (Mbps) | Up (Mbps) |
| 5 | | | 1 | 4.1408 | 17 | 0 | 1 | 18 | 16 | 0 | 1 | 17 | 500 | 25 |
| 19011-9602002064 | YES | | Benton | 0.9900 | 3 | 0 | 0 | 3 | 3 | 0 | 0 | 3 | 500 | 25 |
| 19011-9604002007 | YES | | Benton | 0.0008 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 500 | 25 |
| 19011-9603004087 | YES | | Benton | 0.1500 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 500 | 25 |
| 19011-9602002119 | YES | | Benton | 0.2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 500 | 25 |
| 19011-9602002002 | YES | | Benton | 2.8000 | 13 | 0 | 1 | 14 | 13 | 0 | 1 | 14 | 500 | 25 |
| END OF DATA | | | | | | | | | | | | | | |

Once finished, refer to the Checklist at the bottom of the **Menu** Tab to verify whether any other sections of the Broadband Grants Core Application are incomplete.

If you have questions about how to complete this process, contact ociogrants@iowa.gov for further information.