



# **How to Map your ARPA Broadband Grant Project**

**Colter Sikora & Milena Bernardinello**  
**Public Service Commission of Wisconsin**

Webinar, June 29<sup>th</sup>, 2021



# Webinar Goals!

- Review the new ARPA Broadband Access Grant program basics.
- Understand grant eligibility guide areas.
- Learn how to submit grant application mapping data.
- Explore grant mapping and planning support.

# ARPA Broadband Access Grant Basics

- Note: ARPA = American Rescue Plan Act
- Not the PSC's Broadband Expansion Grant or a replacement!
- Fund to "help turn the tide on the pandemic, address its economic fallout, and lay the foundation for a strong and equitable recovery."
- Possibility of future funding at discretion of U.S. Dept. of Treasury.



# ARPA Broadband Access Grant Basics

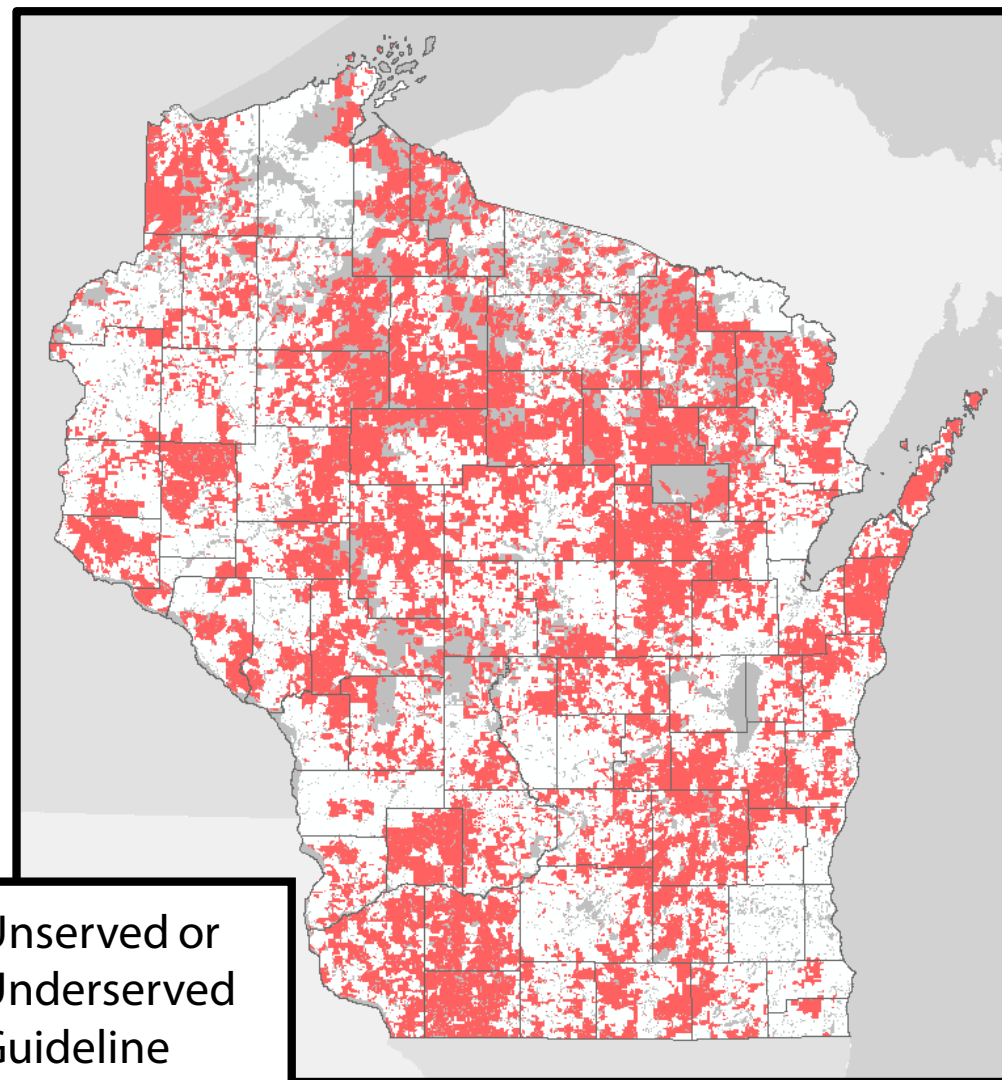
- \$100 Million available in current round.
- Application window open until 4 p.m., July 27, 2021.
- View ARPA Broadband Access Grant Information and Overview webinar recording or live on June 30, 10:30-11:30 a.m. Register for the live webinar at:  
<https://attendee.gotowebinar.com/register/3802370009764746509>

# **Grant Eligible Places & Guideline Area Criteria**

# Where may ARPA Grants be awarded?

For a project to be eligible for funding, it must serve “unserved or underserved” places.

This shifts the focus of eligibility from “areas” to places, namely households and businesses.

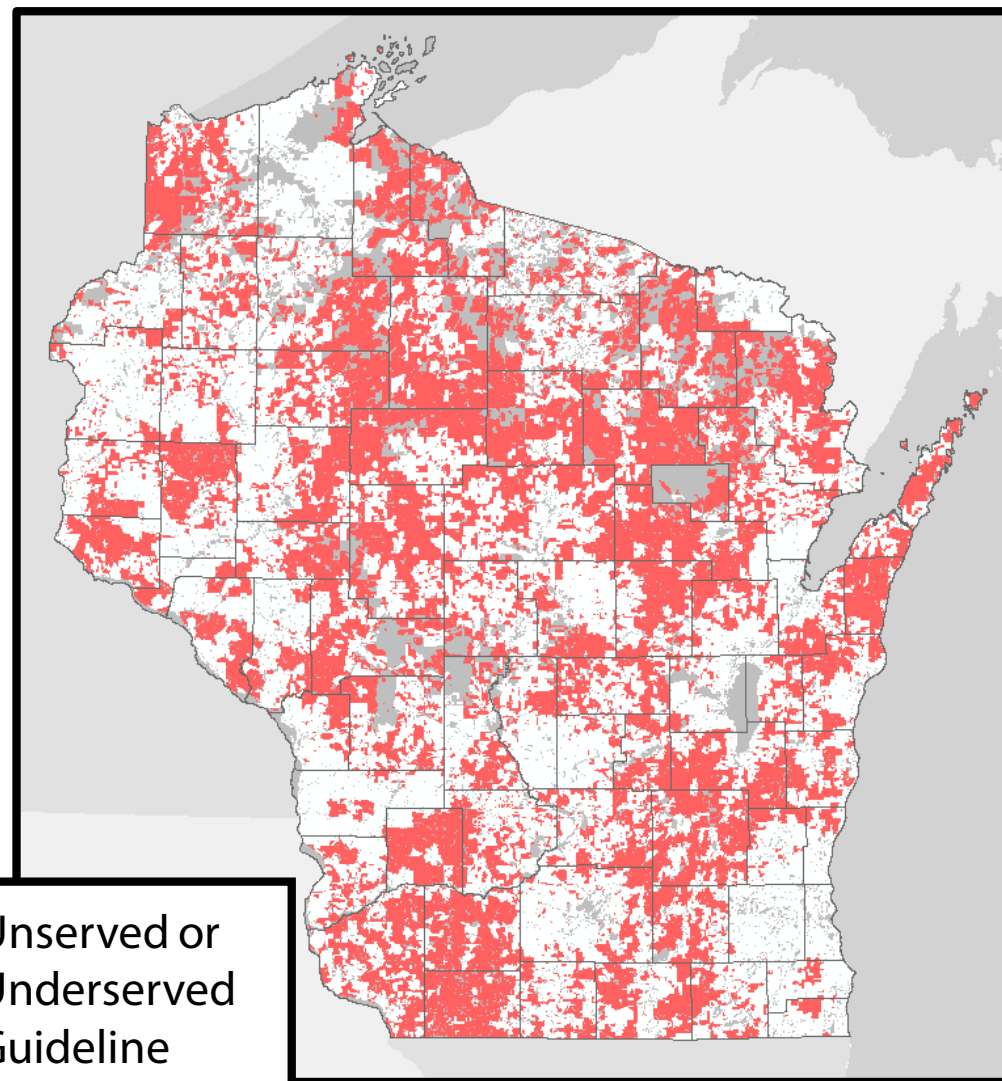


- Unserved or Underserved Guideline
- Unpopulated, Circa 2010

# Grant Eligible Places – “Unserved or Underserved”

“Unserved and underserved households or businesses means one or more households or businesses that are not currently served by a wireline connection that reliably delivers at least 25 Mbps download speed and 3 Mbps of upload speed.”

- Interim Rule, § 35.3, 86 Fed. Reg. at 26821



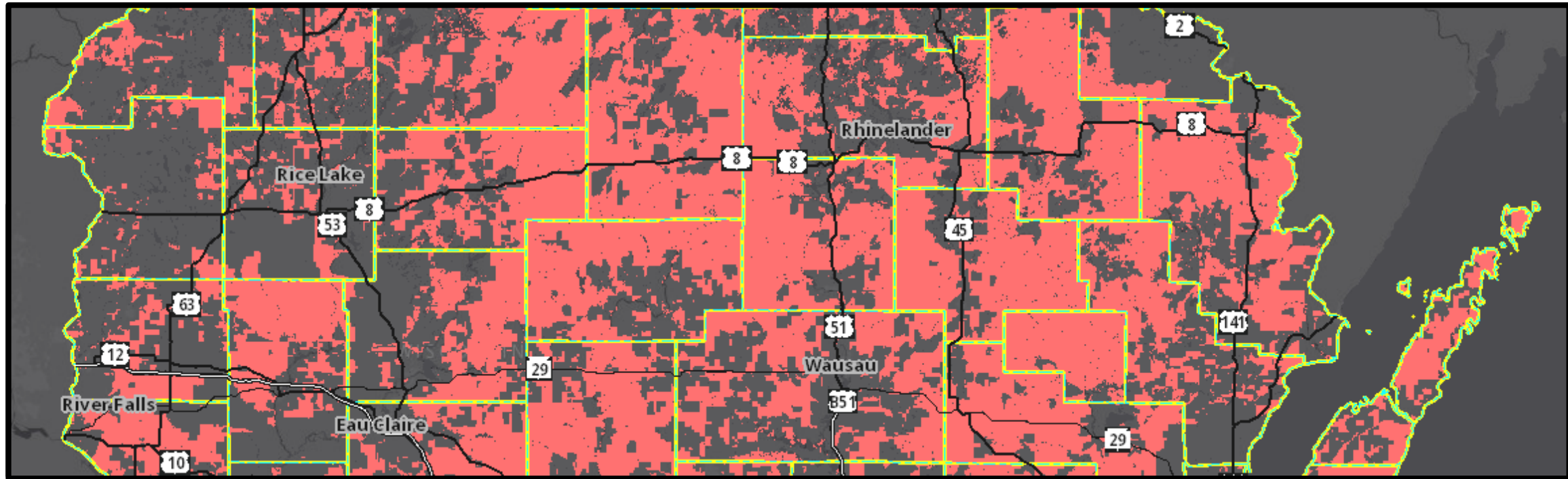
Unserved or Underserved Guideline

Unpopulated, Circa 2010



# Grant Eligible Places – Eligibility Guide

PSC-made Eligibility Guide layers include areas with no reported 25/3 wireline access. Additional eligible places/areas are expected.

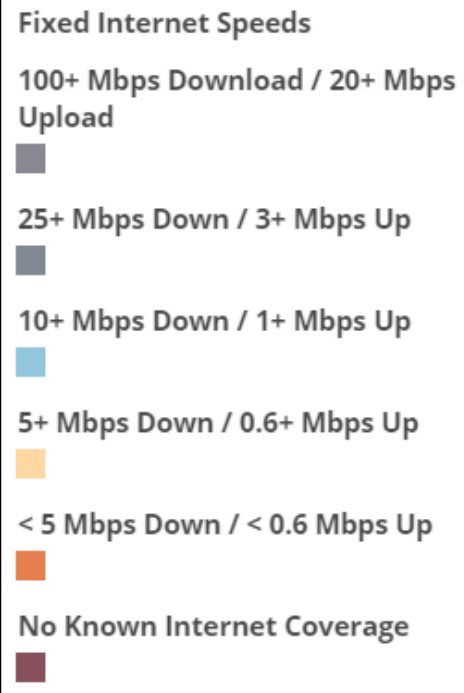
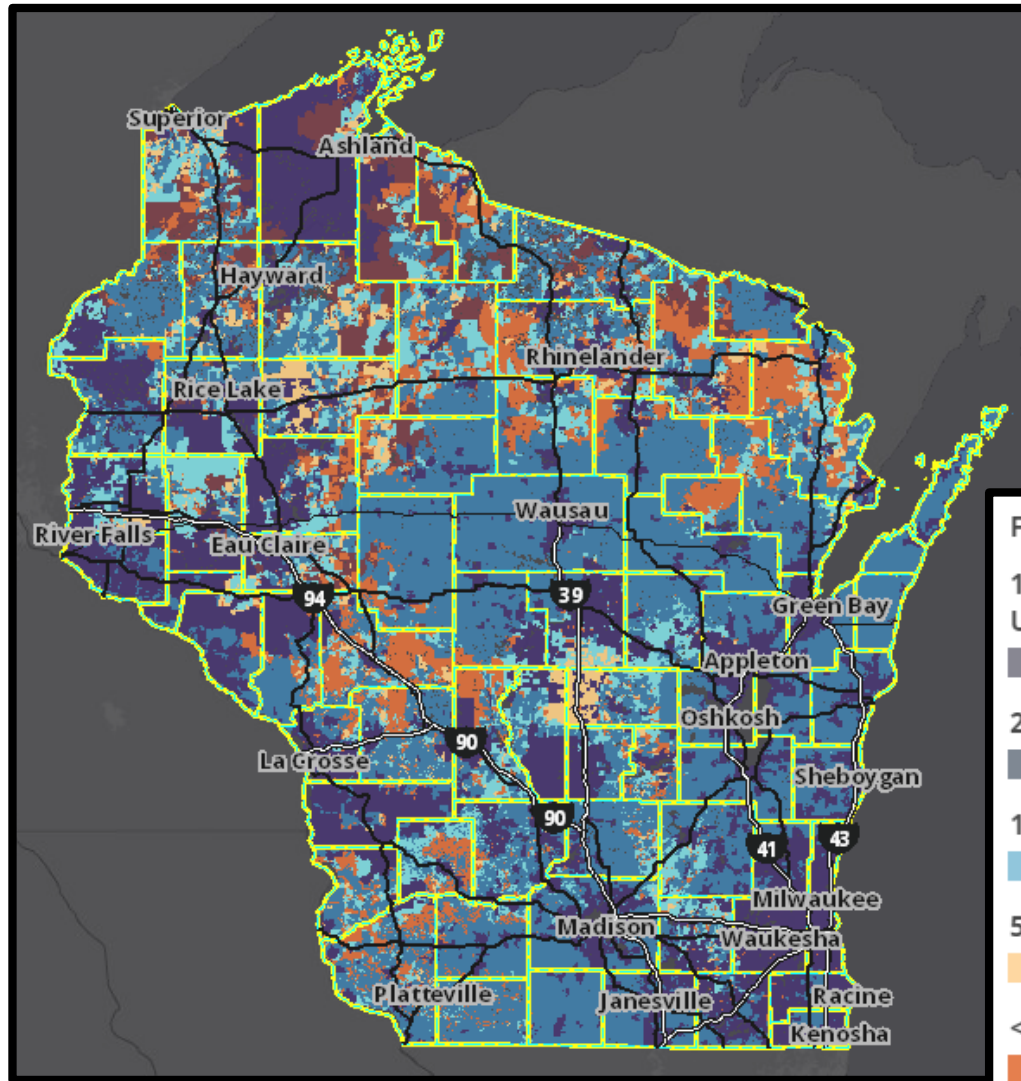




# POLL: What is your familiarity with the Wisconsin Broadband Map?

- ☐ Experienced User
- ☐ Novice/Occasional User
- ☐ Know of it but haven't used it
- ☐ What is the Wisconsin Broadband Map?

# Wisconsin Broadband Map (WBM)



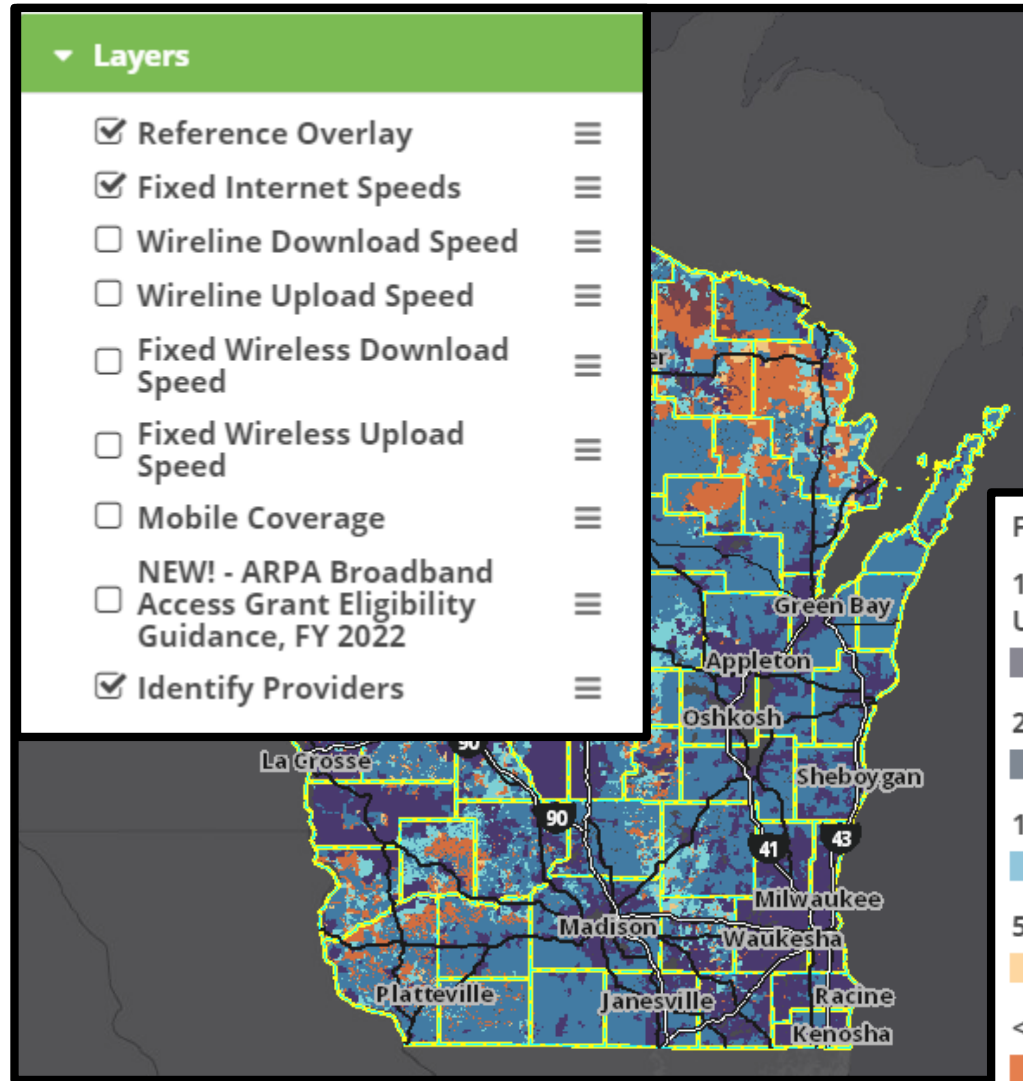
- Displays advertised coverage for residential consumers at

<https://maps.psc.wi.gov/apps/WisconsinBroadbandMap/>

- Download coverage data at

<https://psc.wi.gov/Pages/Programs/BroadbandData.aspx>

# Wisconsin Broadband Map (WBM)



- Displays advertised coverage for residential consumers at

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## Fixed Internet Speeds

100+ Mbps Download / 20+ Mbps Upload



25+ Mbps Down / 3+ Mbps Up



10+ Mbps Down / 1+ Mbps Up



5+ Mbps Down / 0.6+ Mbps Up



< 5 Mbps Down / < 0.6 Mbps Up



No Known Internet Coverage



# **“Is my location really reliably connected?”**

The PSC's grant eligible guideline data only include places where no 25/3 wireline coverage is reported. With most coverage still being reported by census block, per FCC standards, eligible locations are underrepresented.

The grant application instructions provide:

- If the project area lies within a census block designated as served on the PSC Broadband Map, the applicant needs to provide additional documentation to demonstrate the actual broadband service, speed or reliability that is available in the proposed project area that would qualify the area as un/underserved.
- If service is available, but not reliable, please describe in detail, with concrete examples, how the network is unreliable.

# **Downloadable Grant Eligibility Guide**

## **Spatial & Tabular Data**

# Grant Eligibility Guide Spatial & Tabular Data

ARPA Broadband Access Grant Eligibility Guide: Fiscal Year 2022

Developed by the WBO to provide guidance for the ARPA Broadband Access Grant program. Zip file also includes statewide Census block files to identify eligibility and unserved areas as defined by the grant program [Download](#)

- Download from <https://psc.wi.gov/Pages/Programs/BroadbandData.aspx>
- Extract files in a location accessible to tabular and spatial software.
- Explore extracted content and read README.txt files.

# Grant Eligibility Guide Spatial & Tabular Data

**ARPABbGEligibilityStatusGuide** =  
ARPA Broadband Grant Eligibility Status  
Guide

- Mapping layer that demonstrates the boundaries of unserved or underserved, and potentially served areas.
- Downloadable data available in ESRI Geodatabase and shapefile formats.
- Works in GIS software by default.

**ARPABbGCensusBlockEligibilityGuide** =  
ARPA Broadband Grant Census Block  
Eligibility Guide

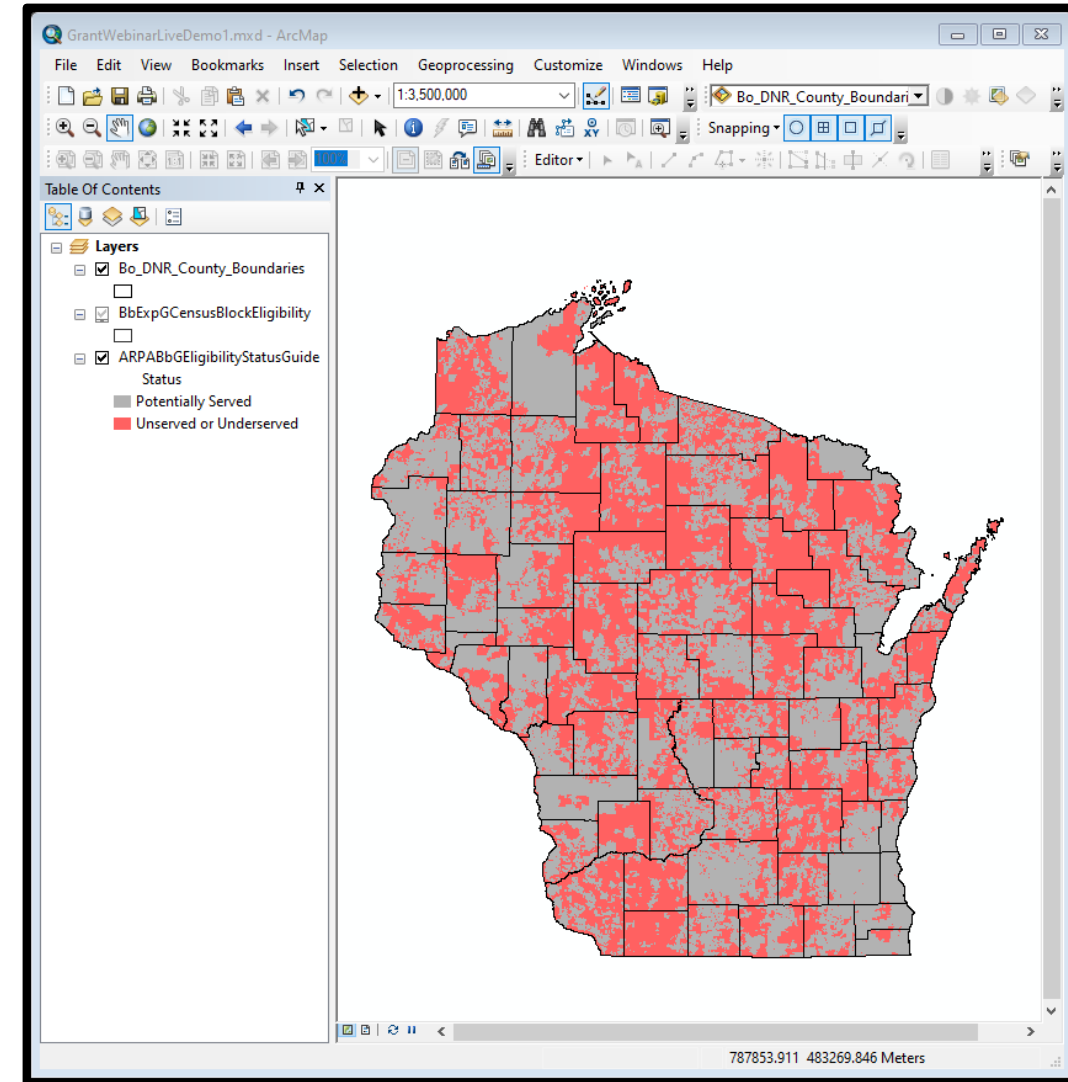
- Tabular files listing all Wisconsin census blocks by their grant eligibility guide status.
- Downloadable data available in Excel, TXT, and CSV formats.
- Works in spreadsheet and GIS tools.



# Grant Eligibility Guide Spatial & Tabular Data

## For ARPABbGEligibilityStatusGuide

- Open mapping software (ArcGIS, Google Earth Pro, etc.) and navigate to proper spatial file.
- View columns in attribute table and visualize data!



# Grant Eligibility Guide Spatial & Tabular Data

For **ARPABbGCensusBlockEligibilityGuide**

Navigate to and open tabular file.

- Look for ServedStatus columns by Census block.

	A	B	C	D	E	F	G	U	V	W	X	Y	Z
1	OBJECTID	STATEFP10	COUNTYFP10	TRACTCE10	BLOCKCE10	GEOID10	NAME10	ServedStatus	HOUSING10	POP10	CNTY_NAME	MCD_NAME	CTV
2	1	55	1	950202	2009	5.5002E+14	Block 2009	Unserved or Underserved	0	0	Adams	ROME	T
3	2	55	1	950202	2007	5.5002E+14	Block 2007	Unserved or Underserved	0	0	Adams	ROME	T
4	3	55	1	950100	2016	5.5002E+14	Block 2016	Potentially Served	0	0	Adams	ROME	T
5	4	55	1	950502	2102	5.5002E+14	Block 2102	Potentially Served	20	25	Adams	SPRINGVILLE	T
6	5	55	1	950502	2029	5.5002E+14	Block 2029	Potentially Served	0	0	Adams	SPRINGVILLE	T
7	6	55	1	950502	2055	5.5002E+14	Block 2055	Potentially Served	0	0	Adams	SPRINGVILLE	T
8	7	55	1	950502	2027	5.5002E+14	Block 2027	Potentially Served	1	2	Adams	SPRINGVILLE	T
9	8	55	1	950502	2030	5.5002E+14	Block 2030	Potentially Served	43	62	Adams	SPRINGVILLE	T

# **Submitting Geospatial Data for your Grant Application**



# Proposed Project Mapping Requirements

## Static Map Requirement

PAGE 5+: Map or Maps. A clear static map(s) of the project boundaries and locations of the project area and description or key as needed.

# Proposed Project Mapping Requirements

## Geospatial/Digital Data Requirement

Submit the related geographic/geospatial data to the project in one of the following formats:

- EASIEST PRACTICE!: Emailing spatial files to [PSCBroadbandData@wisconsin.gov](mailto:PSCBroadbandData@wisconsin.gov). Compressing the files is a general best practice.
- A URL reference to a spatial file (Geodatabase / Feature Class (ideal), Shapefile, or KML) showing the proposed service area.  
A spatial file including census blocks that intersect the proposed project area is also acceptable.

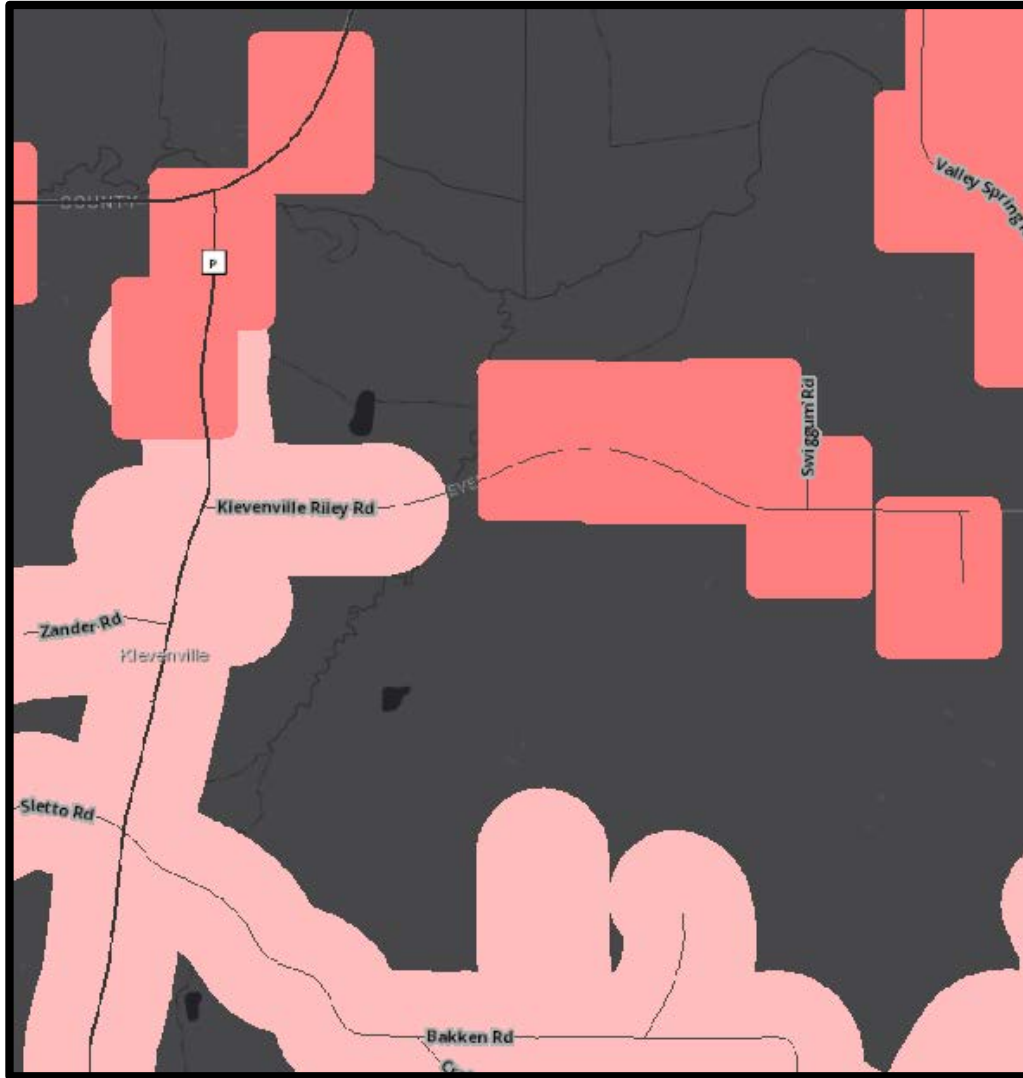


# Proposed Project Mapping Requirements

- If mapping software is not available, provide a tabular file (spreadsheet format) with either, a list of address ranges or a list of census blocks within the proposed project area.
- If neither a spatial file nor a spreadsheet is available, providing a map using Google Maps with the boundary of the project area drawn onto the map is acceptable.

PSC staff can provide support to ensure an accurate spatial file is delivered to the Commission. Please contact the State Broadband Office mapping team for mapping assistance at [PSCBroadbandData@wisconsin.gov](mailto:PSCBroadbandData@wisconsin.gov).

# Why Submitting Geospatial Data is Important



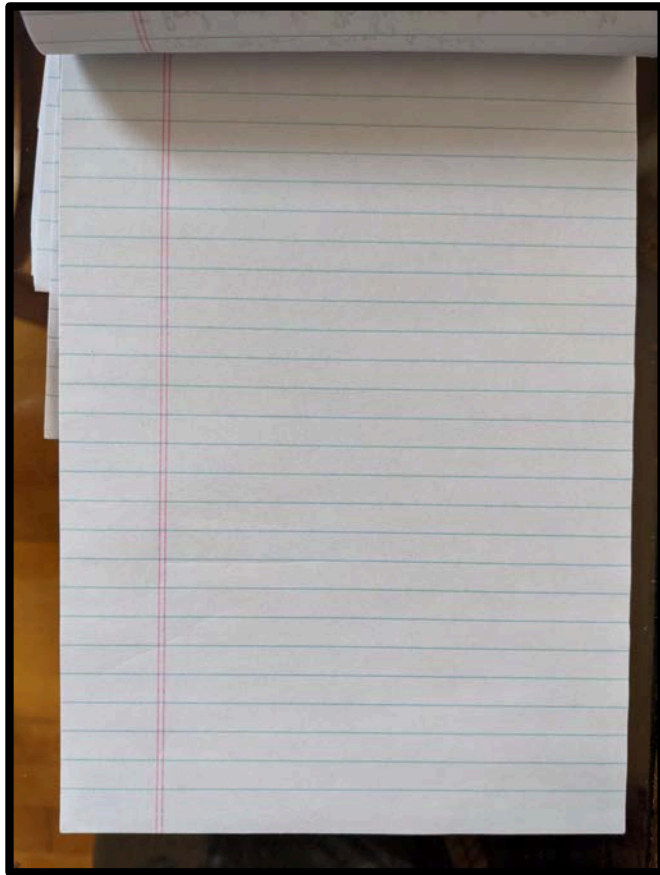
- Your project maps are the most accurate depiction of your project!
- Redrawn project maps often can't match original project map.
- Redrawing applicant map layers take a long time.



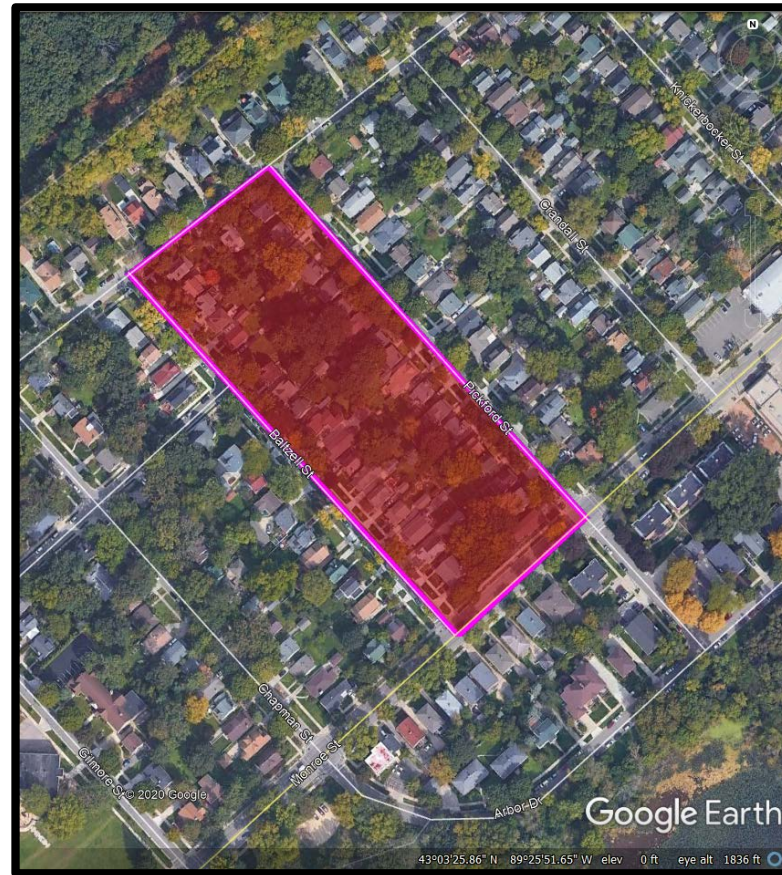
# Worst Practices: Please don't do these!

There are better ways to depict your projects than these!

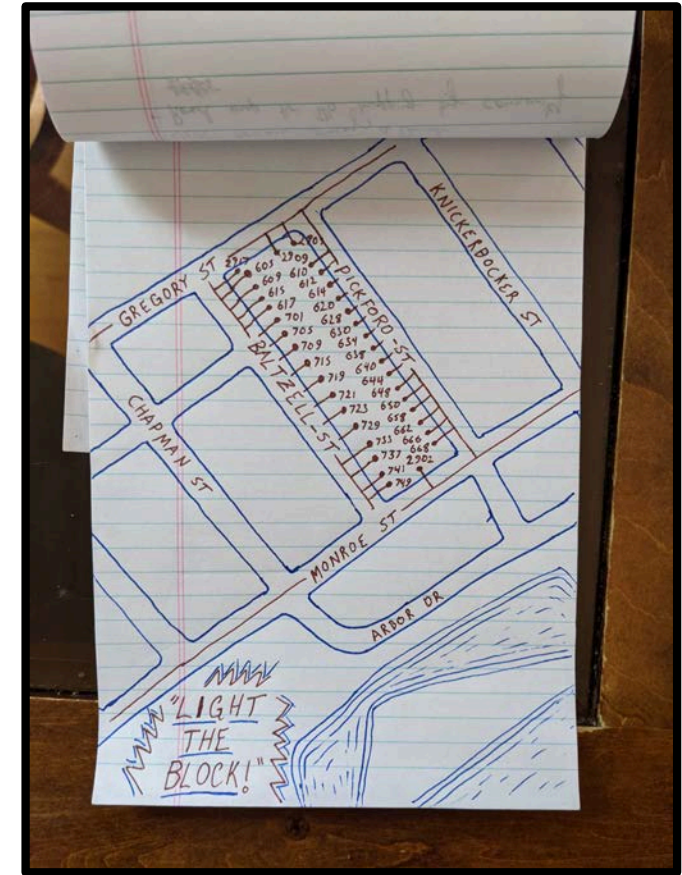
No Map – Incomplete!



Map Screen Captures



Hand-Drawn Maps



# **POLL: Does your team have access and the ability to use ArcGIS/ESRI mapping software?**

**(examples: ArcMap, ArcGIS Online, ArcGIS Pro)**

☐ Yes

☐ No

☐ I don't know

# POLL: What other mapping tools can you access and have familiarity with?

(select all that apply)

<input type="checkbox"/>	QGIS
<input type="checkbox"/>	Google Earth
<input type="checkbox"/>	Google Maps
<input type="checkbox"/>	AutoCAD
<input type="checkbox"/>	Other; add info in chat



# Best Practice: Granular Coverage ESRI Spatial Files

ESRI spatial files can include shapefiles or a feature class within a geodatabase.

Granular coverage files can be used to depict:

Address Points



Road Centerlines





# Best Practice: Granular Coverage ESRI Spatial Files

ESRI spatial files can include shapefiles or a feature class within a geodatabase.

Granular coverage files can be used to depict:

Modeled Coverage

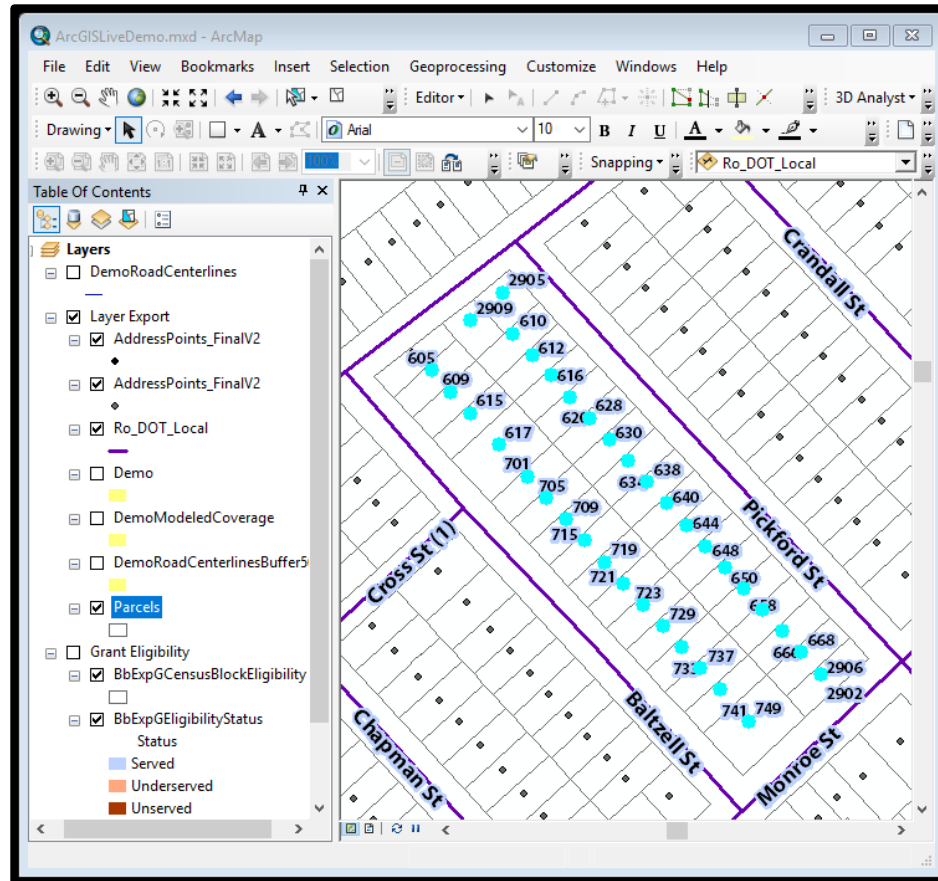


Proposed Coverage Area

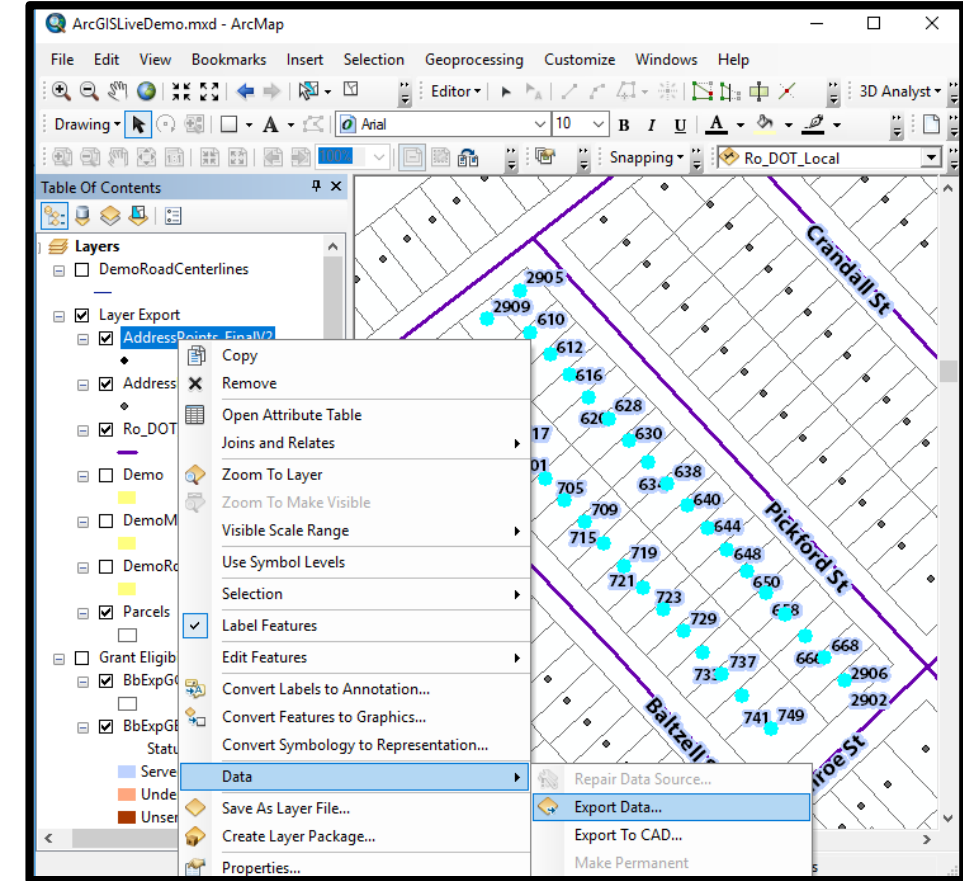


# Best Practice: Exporting & Sharing ESRI Spatial Files

## 1) Select Data

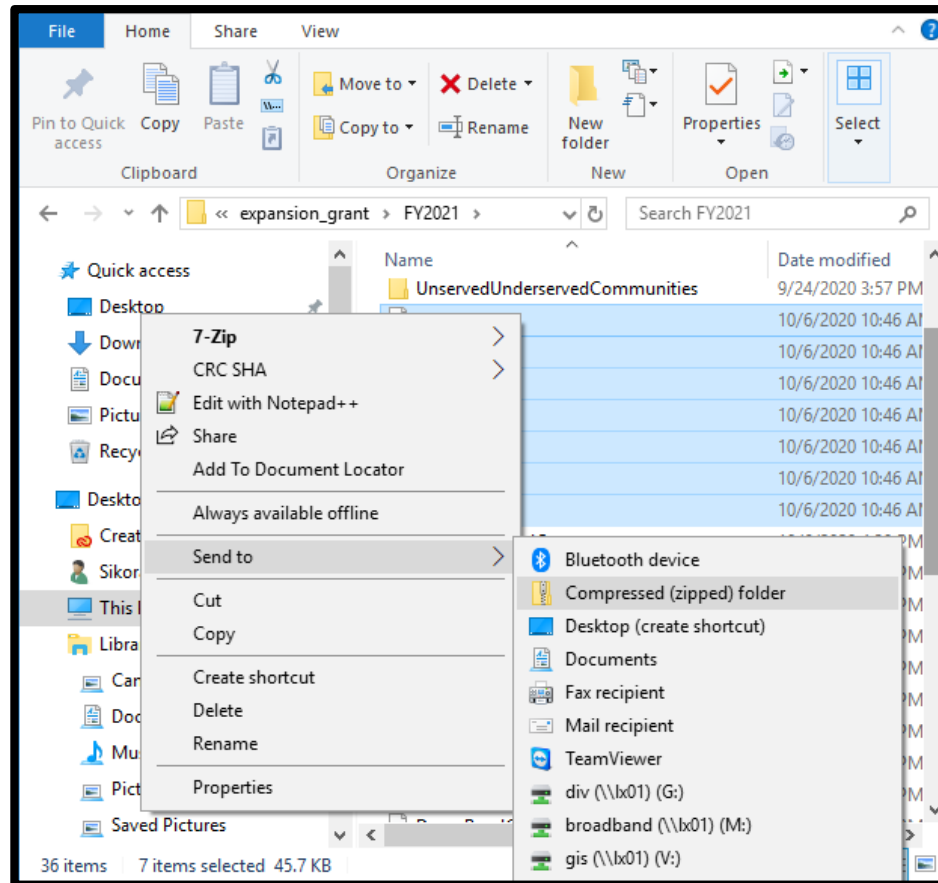


## 2) Export Data

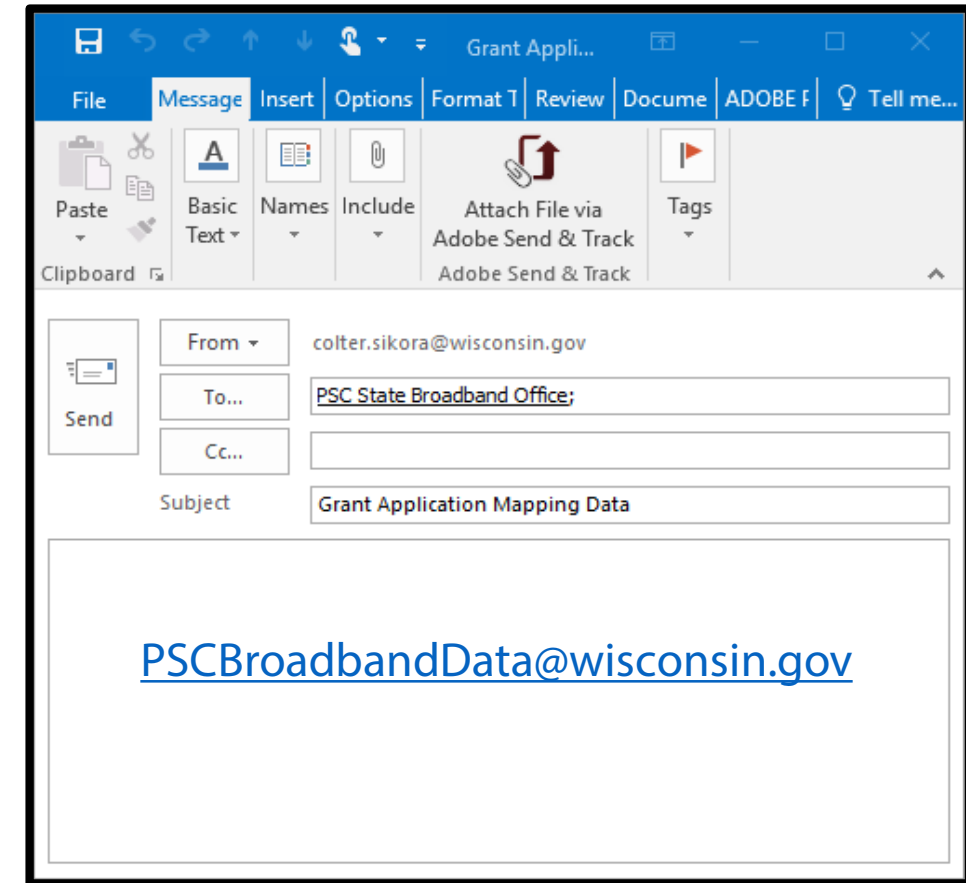


# Best Practice: Exporting & Sharing ESRI Spatial Files

3) Send Data to Compressed (ZIP) Folder.



4) Send ZIP in Link or Email to the PSC!



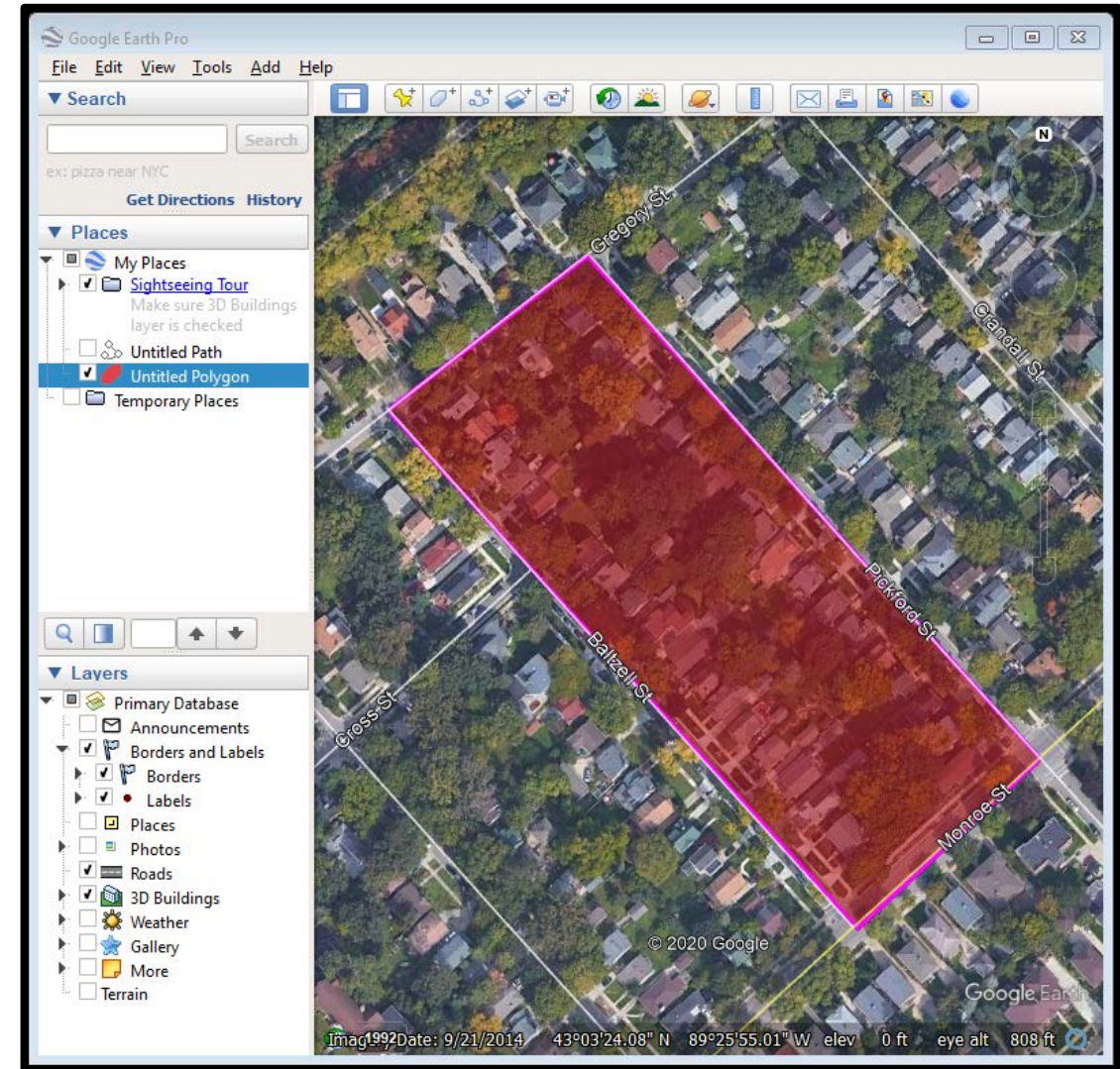


# Good Practice: Granular Coverage Google Files

Google files are often KMLs or KMZs

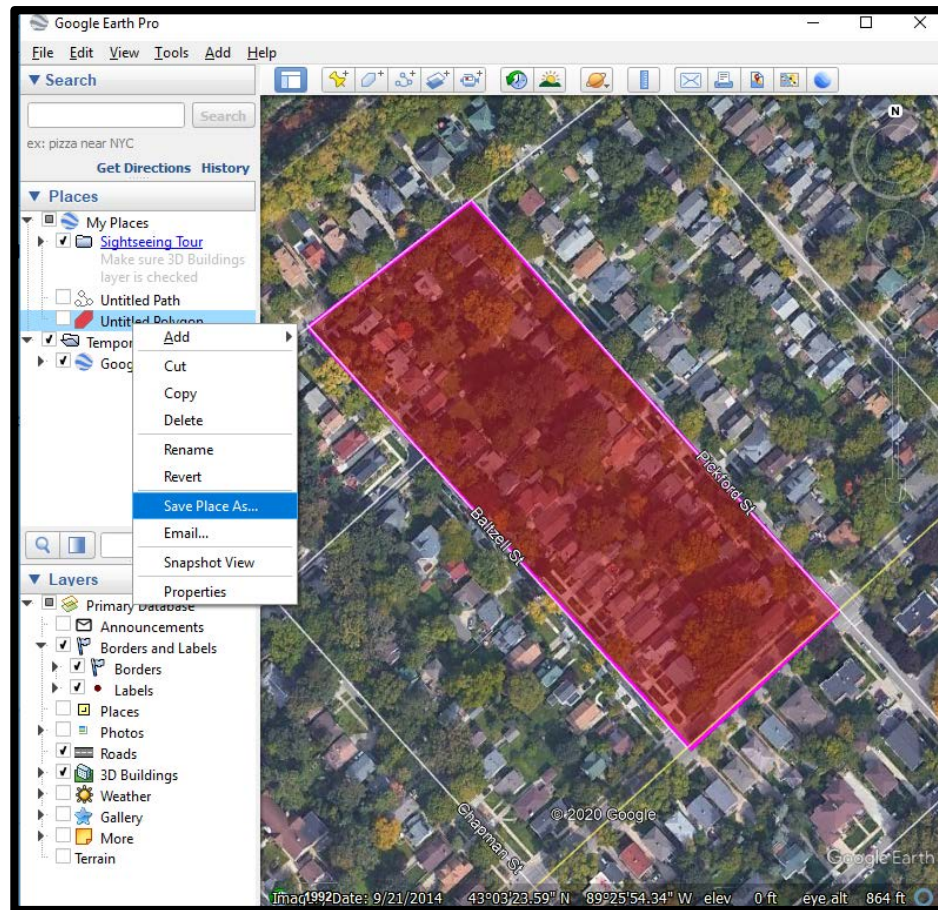
Granular Google files can be used to depict:

- Address Points
- Road Centerlines
- Modeled Coverage
- Proposed Coverage Area

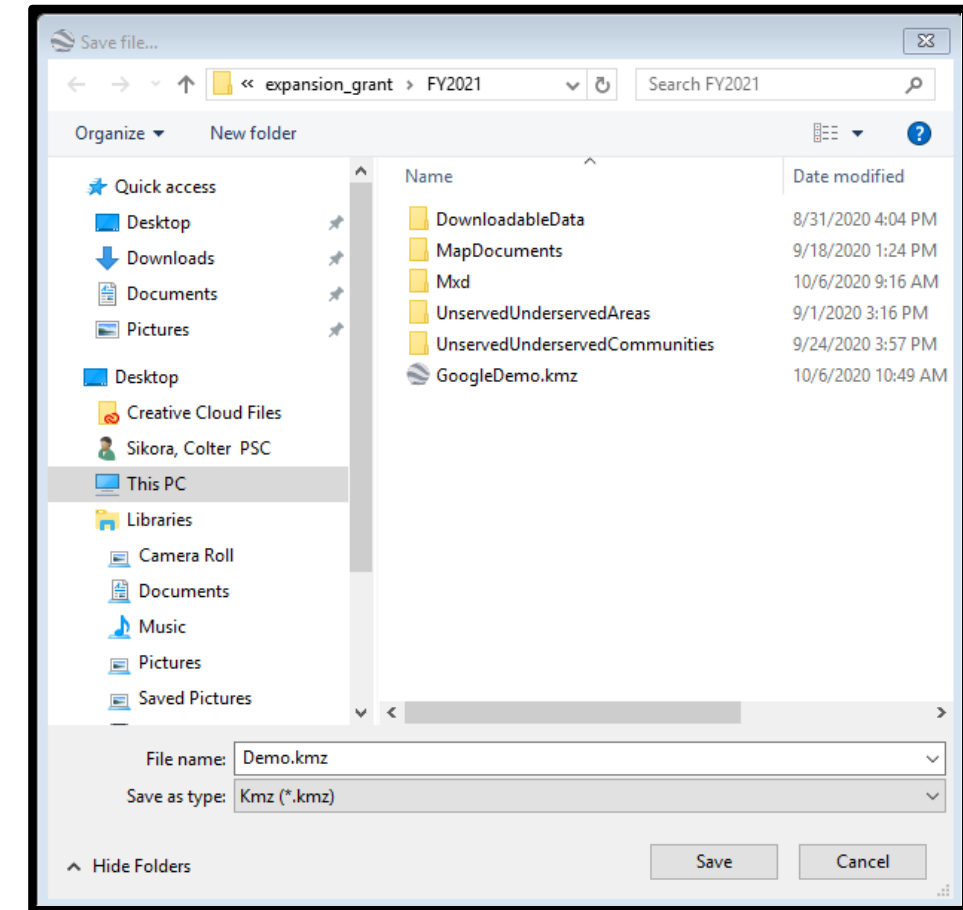


# Good Practice: Exporting & Sharing Google Files

1) Save Place As...



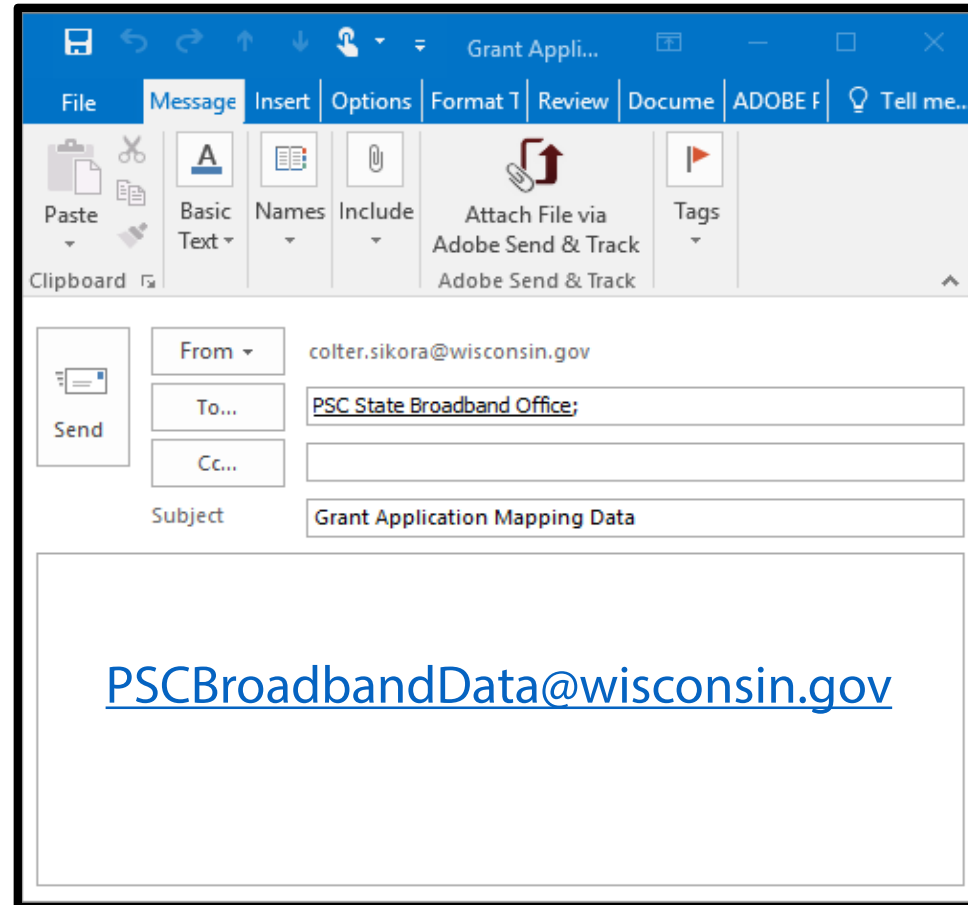
2) Save file...





# Good Practice: Exporting & Sharing Google Files

3) Send in Link or Email to the PSC! (File Compression Optional)



The screenshot shows an Adobe Acrobat email composition window. The title bar reads "Grant Appli...". The menu bar includes "File", "Message", "Insert", "Options", "Format T", "Review", "Docume", "ADOBE F", and "Tell me...". The toolbar contains icons for "Paste", "Basic Text", "Names", "Include", "Attach File via Adobe Send & Track", and "Tags". The email fields are as follows:

- From:** colter.sikora@wisconsin.gov
- To:** PSC State Broadband Office;
- Cc:**
- Subject:** Grant Application Mapping Data

The main body of the email contains the following text:

[PSCBroadbandData@wisconsin.gov](mailto:PSCBroadbandData@wisconsin.gov)

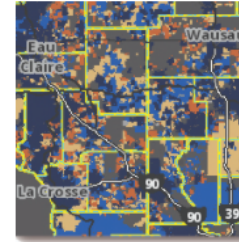
# Grant Mapping & Planning Tools

# Other Broadband Mapping Tools

View all online WBO map tools at  
<https://psc.wi.gov/Pages/Programs/BroadbandMaps.aspx>

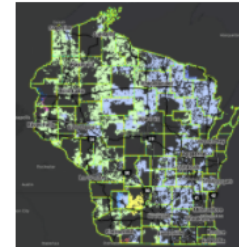
Retrieve map layers and data at  
<https://psc.wi.gov/Pages/Programs/BroadbandData.aspx>

Mapping is an important step in Wisconsin's broadband planning efforts



The Wisconsin Broadband Map is an app displaying statewide internet access as declared by internet service providers through the biannual data collections by the PSC and Federal Communications Commission (FCC). The app allows users to search by address and identify their local providers by simply clicking on the map. The PSC's Broadband Expansion Grant eligibility map layer is also displayed here when the PSC is collecting grant applications.

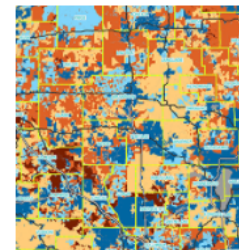
Updated on August 31, 2020 to show Broadband Expansion Grant eligibility information for the FY 2021 grant round. Previously updated on February 26, 2020 to show coverage current up to June 30, 2019.



## New! - Wisconsin RDOF Results

Find out if your location is designated for internet service expansion using over \$373 million in subsidies from the FCC's Rural Digital Opportunity Fund (CAF-II). For more information, please visit the FCC's [RDOF information webpage](#).

[Wisconsin RDOF Results Map Website](#)



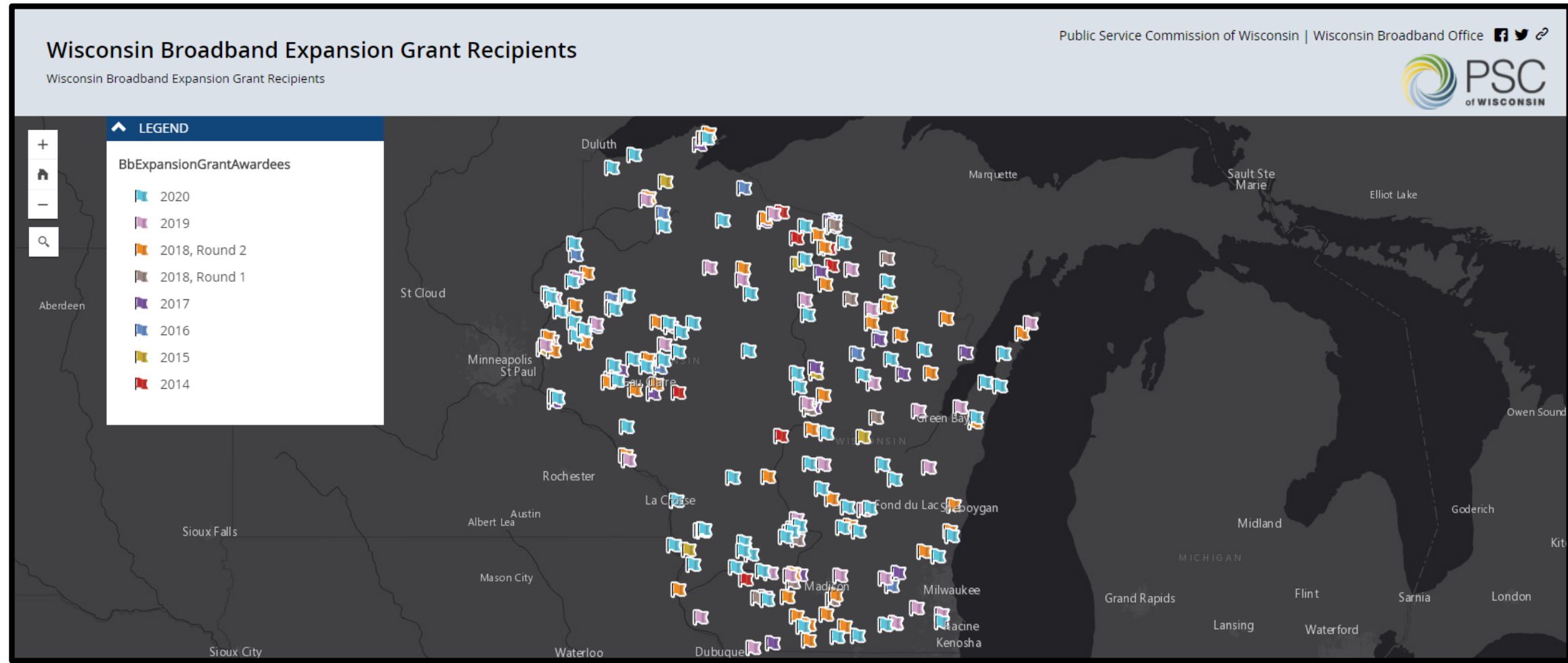
## View and Print Internet Coverage Maps

Derived from the Wisconsin Broadband Map, these PDFs display internet access for counties and legislative districts across the state. In addition to coverage data, a local summary of Broadband Expansion Grant winners is included. Download any of these 200+ maps for sharing with fellow citizens or for personal reference.

Select a map from the menus below.

# Wisconsin Broadband Expansion Grant Recipients

<https://maps.psc.wi.gov/apps/ExpansionGrantAwardees/>



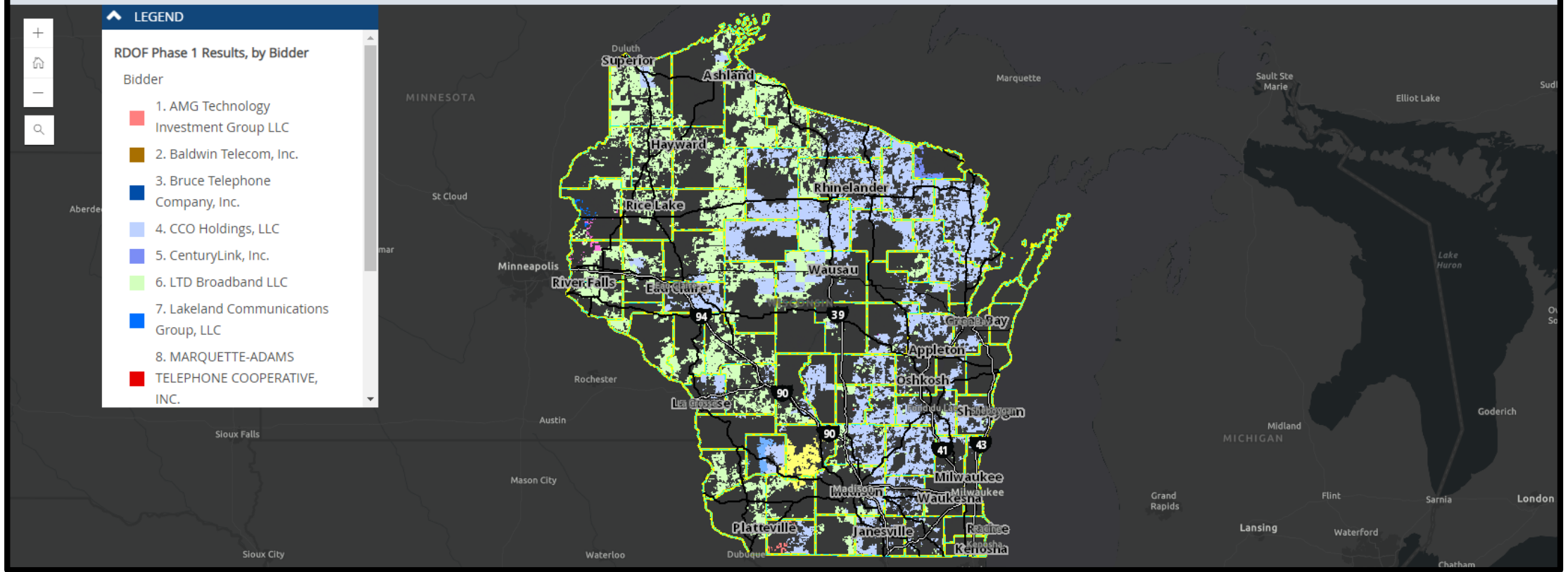
# NEW! - Wisconsin R-DOF Results

<https://maps.psc.wi.gov/apps/Rdof/>

## FCC Rural Digital Opportunity Fund (RDOF) Results

Phase 1 Auction Winners in Wisconsin

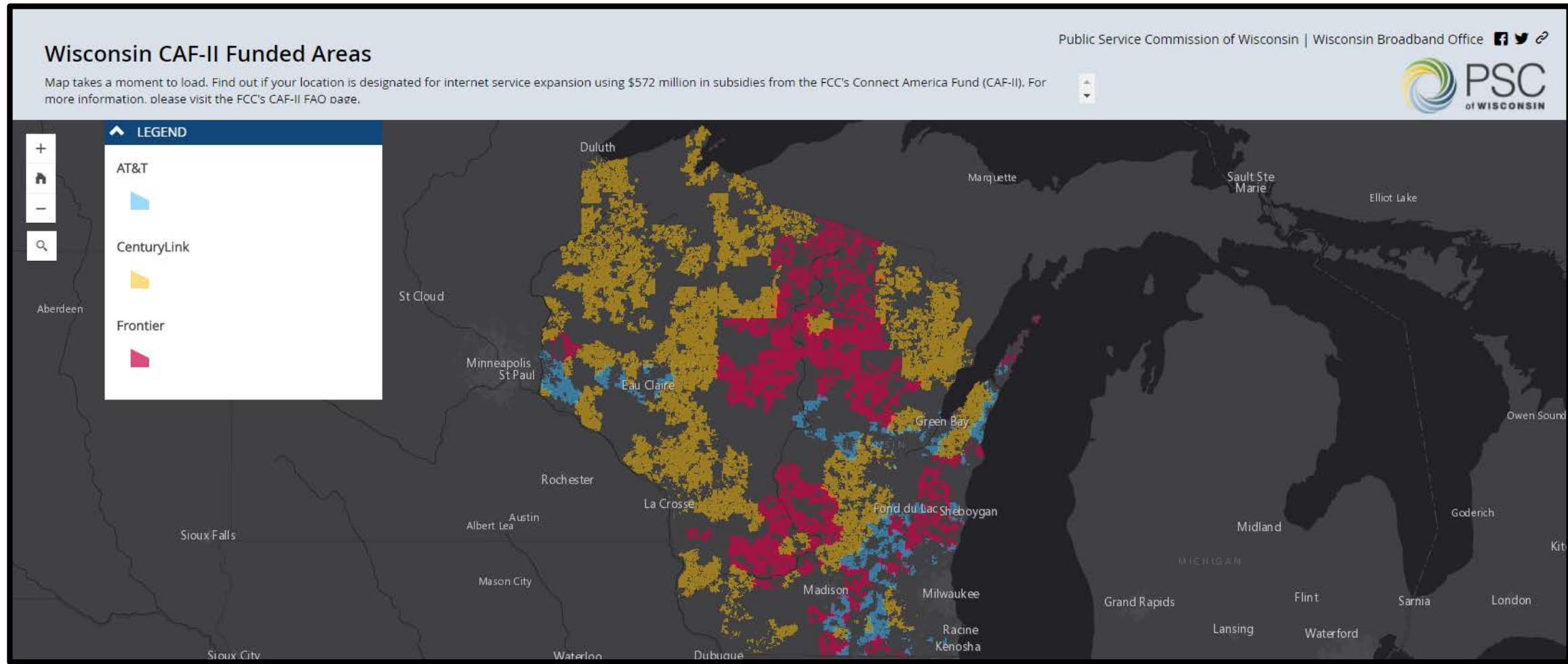
Public Service Commission of Wisconsin | Wisconsin Broadband Office





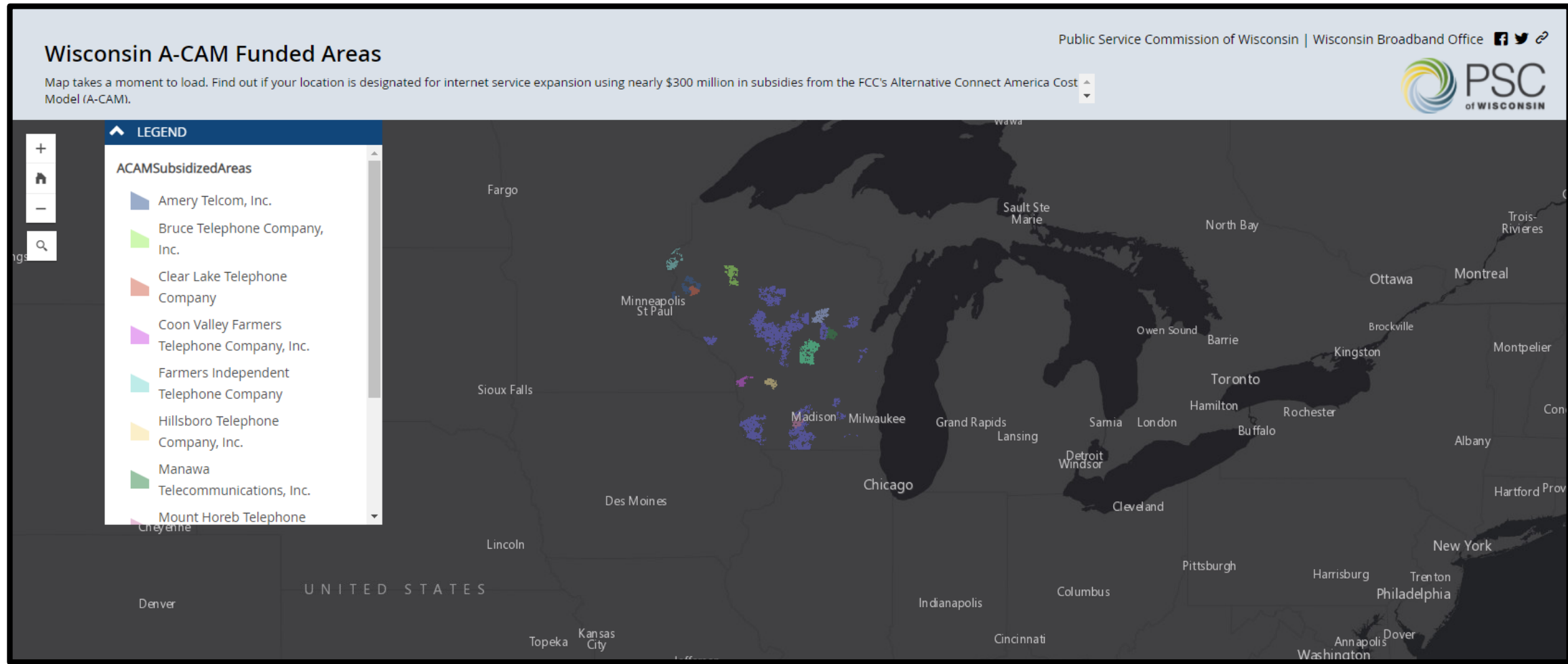
# Wisconsin CAF-II Funded Areas

<https://maps.psc.wi.gov/apps/SimpleCaf/>



# Wisconsin A-CAM Funded Areas

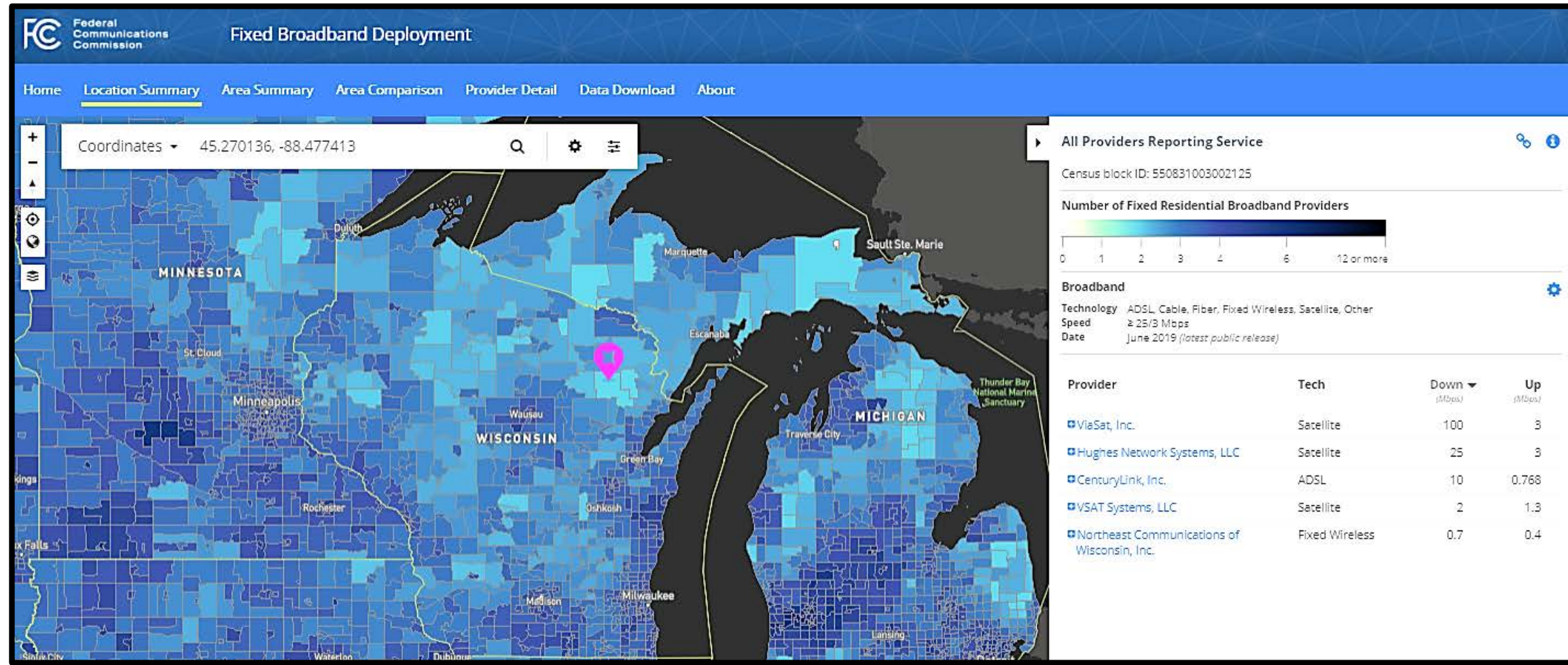
<https://maps.psc.wi.gov/apps/Acam/>





# Fixed Broadband Deployment – FCC Broadband Map

<https://broadbandmap.fcc.gov/>





# Questions?

## Contact Information

Questions related to broadband mapping and grants may be addressed to the following staff:

GIS Lead  
Colter Sikora  
[colter.sikora@wisconsin.gov](mailto:colter.sikora@wisconsin.gov)  
(608) 267-1204

GIS & Broadband Data Analyst  
Milena Bernardinello  
[milena.bernardinello@wisconsin.gov](mailto:milena.bernardinello@wisconsin.gov)  
(608) 267-6919

To email proposed coverage data and stay up-to-date with the latest Wisconsin Broadband Office news, please email our office at:  
[pscstatebroadbandoffice@wisconsin.gov](mailto:pscstatebroadbandoffice@wisconsin.gov)



# Thank You!

Don't forget the ARPA Broadband Access Grant  
Information and Overview Webinar!

Register and view the recording now at

<https://attendee.gotowebinar.com/register/5918807847133073934>

or

Live broadcast on June 30<sup>th</sup>, 10:30-11:30 a.m.

Register for the live webinar at:

<https://attendee.gotowebinar.com/register/3802370009764746509>