

# **E-Rate Open Data Course 1: Open Data Overview September 14, 2023**



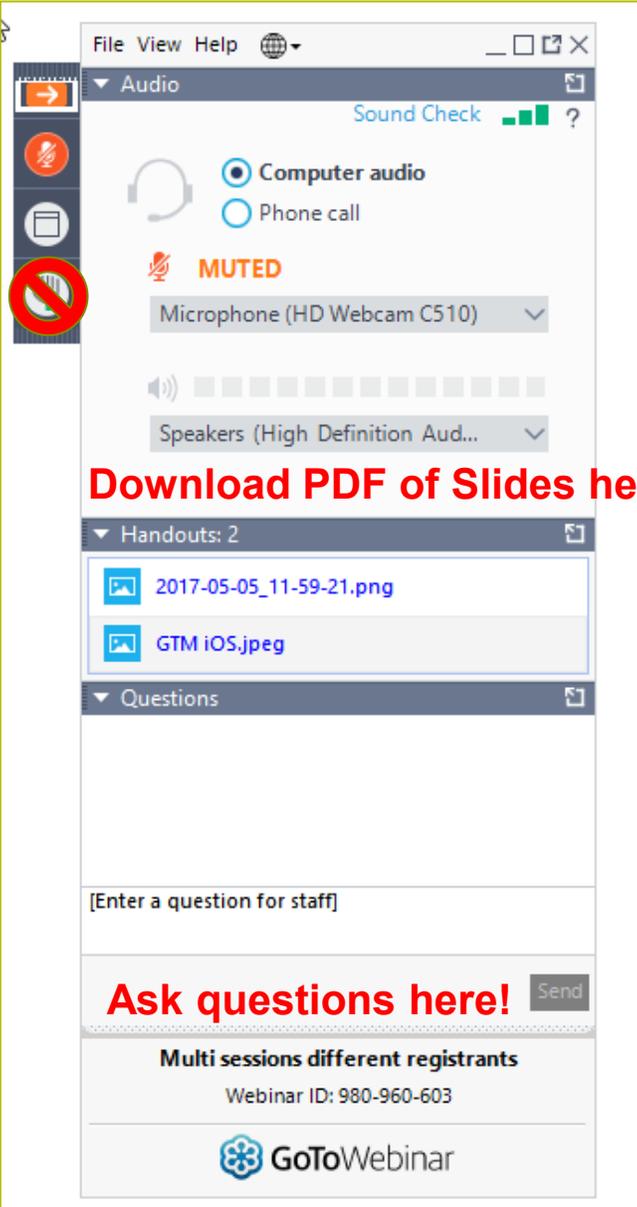
Universal Service  
Administrative Co.

# Disclaimer

To accommodate all attendees, real-time closed captions will be present during this presentation. We apologize in advance for any transcription errors or distractions. Thank you for your support.

# Housekeeping

- Audio is available through your computer's speakers.
- The audience will remain on mute.
- Enter questions at any time using the **“Questions”** box.
- If your audio or slides freeze, restart the webinar.
- A copy of the slide deck is in the **“Handouts”** section of webinar panel.



The screenshot shows the GoToWebinar interface. At the top, there is a menu bar with 'File', 'View', and 'Help'. Below it, the 'Audio' section is expanded, showing 'Sound Check' with a green indicator. The audio source is set to 'Computer audio', and the microphone is muted, indicated by a red 'MUTED' label and a red 'X' over the microphone icon. The speaker output is set to 'Speakers (High Definition Aud...'. Below the audio settings, the 'Handouts: 2' section is expanded, showing two files: '2017-05-05\_11-59-21.png' and 'GTM iOS.jpeg'. The 'Questions' section is also expanded, showing a text input field with the placeholder '[Enter a question for staff]' and a 'Send' button. At the bottom, there is a red text overlay that says 'Ask questions here!' and 'Multi sessions different registrants Webinar ID: 980-960-603' with the GoToWebinar logo.

**Download PDF of Slides here!**

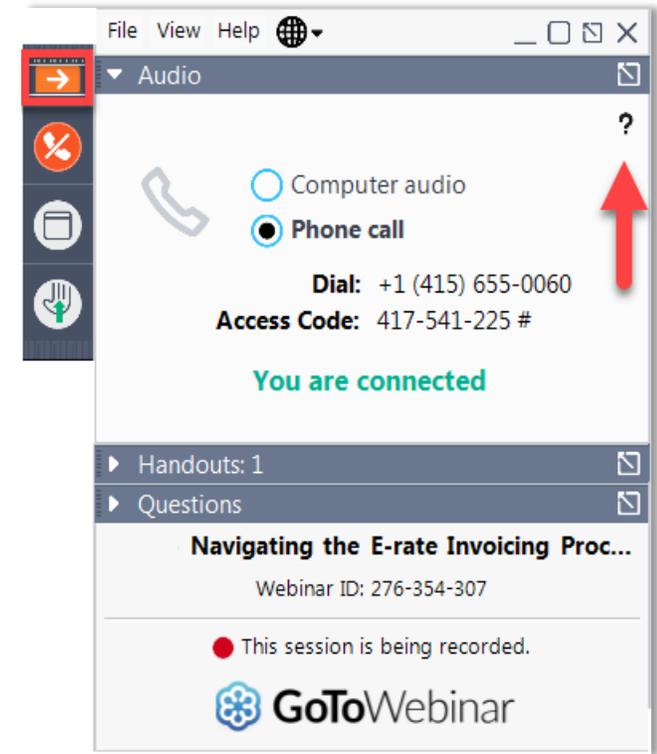
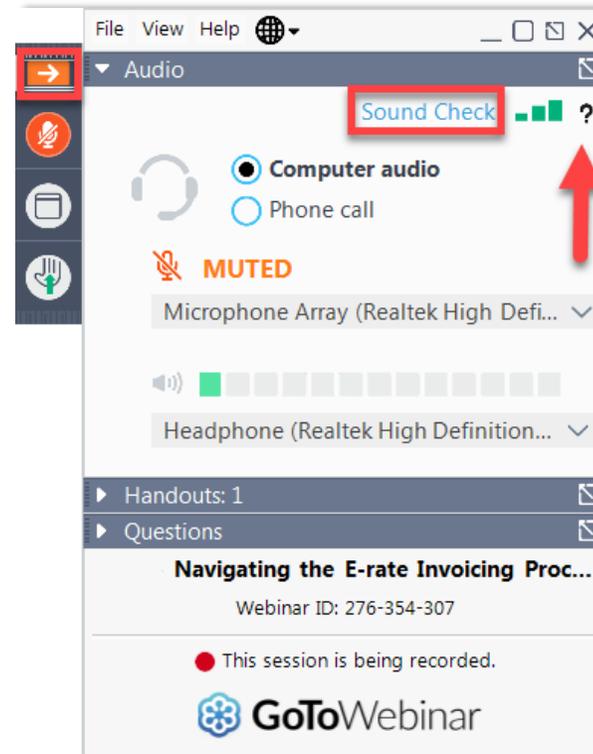
**Ask questions here!** Send

Multi sessions different registrants  
Webinar ID: 980-960-603

GoToWebinar

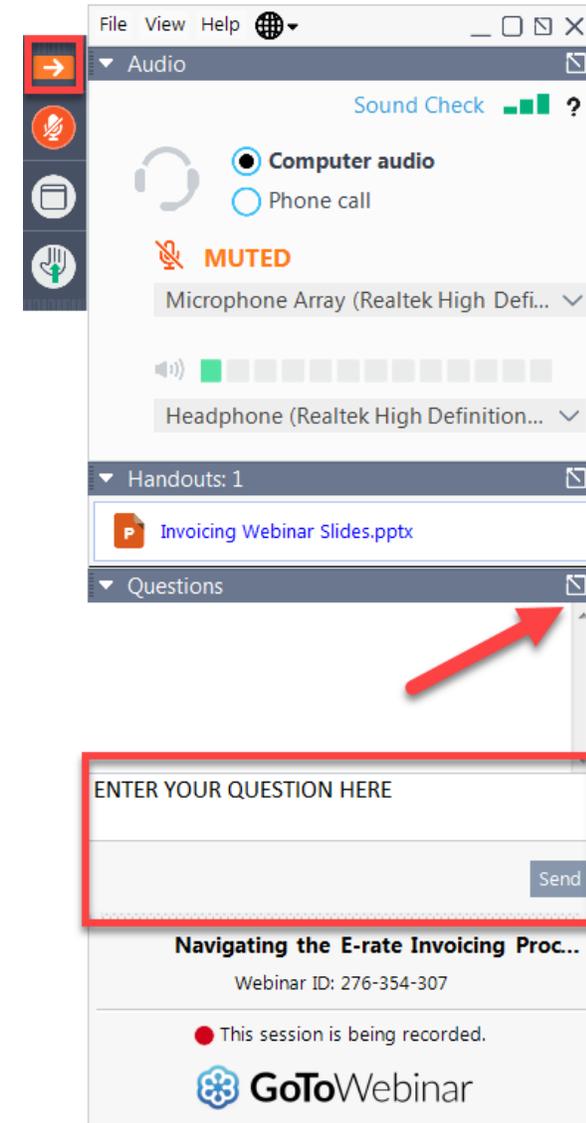
# Housekeeping – Technical Issues

- Use the **Sound Check** link and click question mark icon for audio help.
- Exit webinar and click the check system requirements link in the event confirmation email to determine whether your computer meets the requirements to see and hear the webinar.
- If issues persist, call 833-851-8340 to troubleshoot with GoToWebinar.



# Housekeeping Q & A

- There will be a live Q&A session focused on today's topics.
- Tips for submitting questions:
  - Use the **Questions** box in your webinar control panel anytime during the presentation.
  - Click the box with the arrow above the questions box to expand it and see all written answers.
  - Write in full sentences.
  - Ask one question at a time.
  - Ask questions related to webinar content.



The screenshot displays a webinar control panel with several sections:

- Audio:** Includes a "Sound Check" indicator, radio buttons for "Computer audio" (selected) and "Phone call", a "MUTED" status, and dropdown menus for "Microphone Array (Realtek High Defi...)" and "Headphone (Realtek High Definition...)".
- Handouts:** Shows a single handout titled "Invoicing Webinar Slides.pptx".
- Questions:** A section with a red arrow pointing to a box containing the text "ENTER YOUR QUESTION HERE" and a "Send" button.
- Footer:** Contains the text "Navigating the E-rate Invoicing Proc...", "Webinar ID: 276-354-307", a red dot icon with the text "This session is being recorded.", and the "GoToWebinar" logo.

# E-Rate Customer Service Center (CSC)



**Call us at (888) 203-8100**

Monday – Friday 8 a.m. to 8 p.m. ET



**Create a customer service case in the  
E-Rate Productivity Center (EPC):**

1. Log in to EPC.
2. Select the **Contact Us** link from the upper right menu on the landing page.

# MEET THE TEAM



**Lorenzo Sanchez**

Lead Data Analyst| E-Rate



**Thomas Nesbitt**

Director| E-Rate

# What we will cover



Open Data introduction



Learn to navigate the open data platform



Explain the various open data sets and tools available



Search for tools



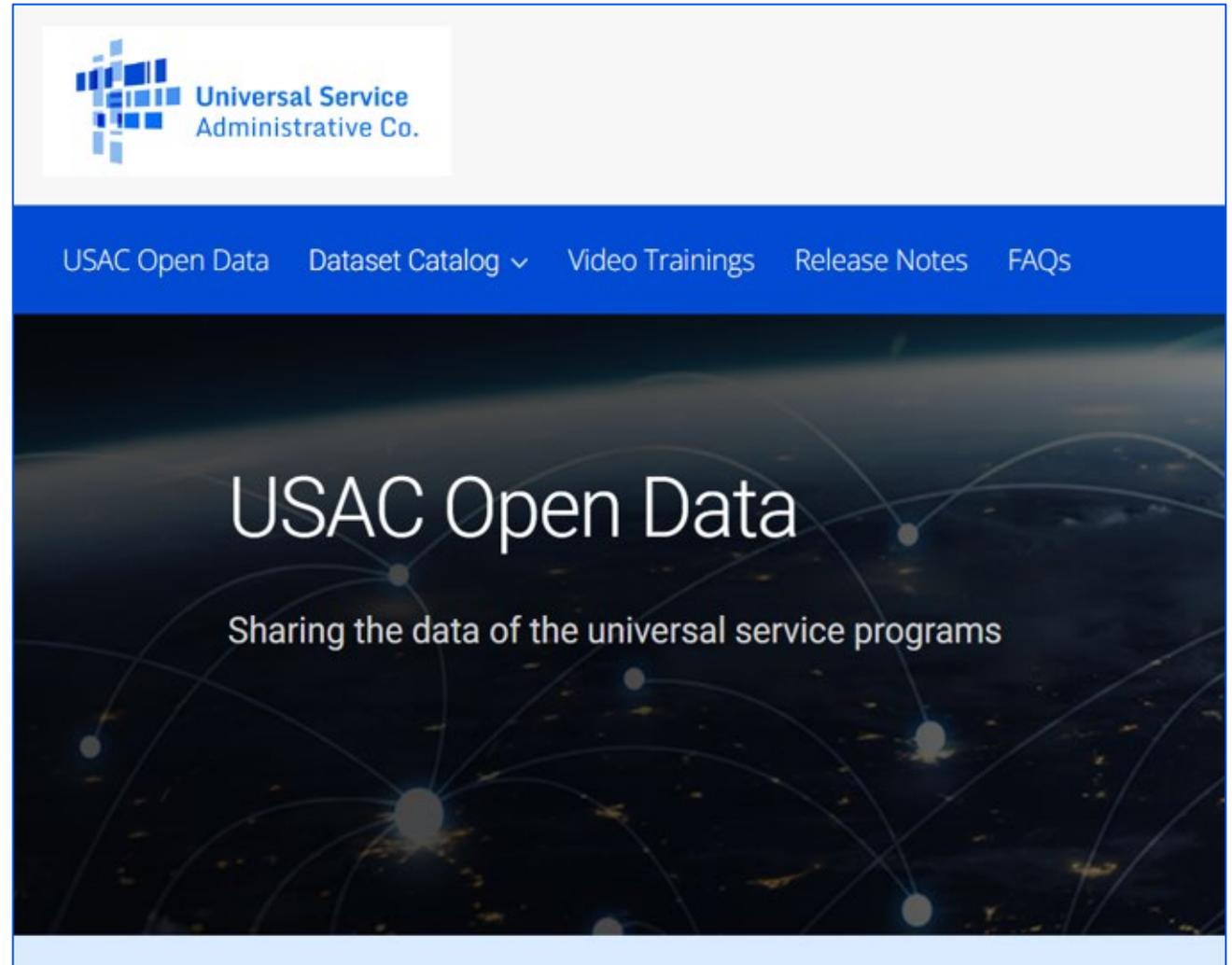
Walk through a tool use case



Review additional resources

# What is Open Data?

- USAC's Open Data is a web portal where you can access:
  - Raw data submitted by universal service program participants
  - Self-service tools connected to USAC data
- As part of USAC's Open Data initiative, we make this data open and accessible to the general public.
  - Anyone is free to use, re-use, and redistribute the data in our datasets



# What is it for?

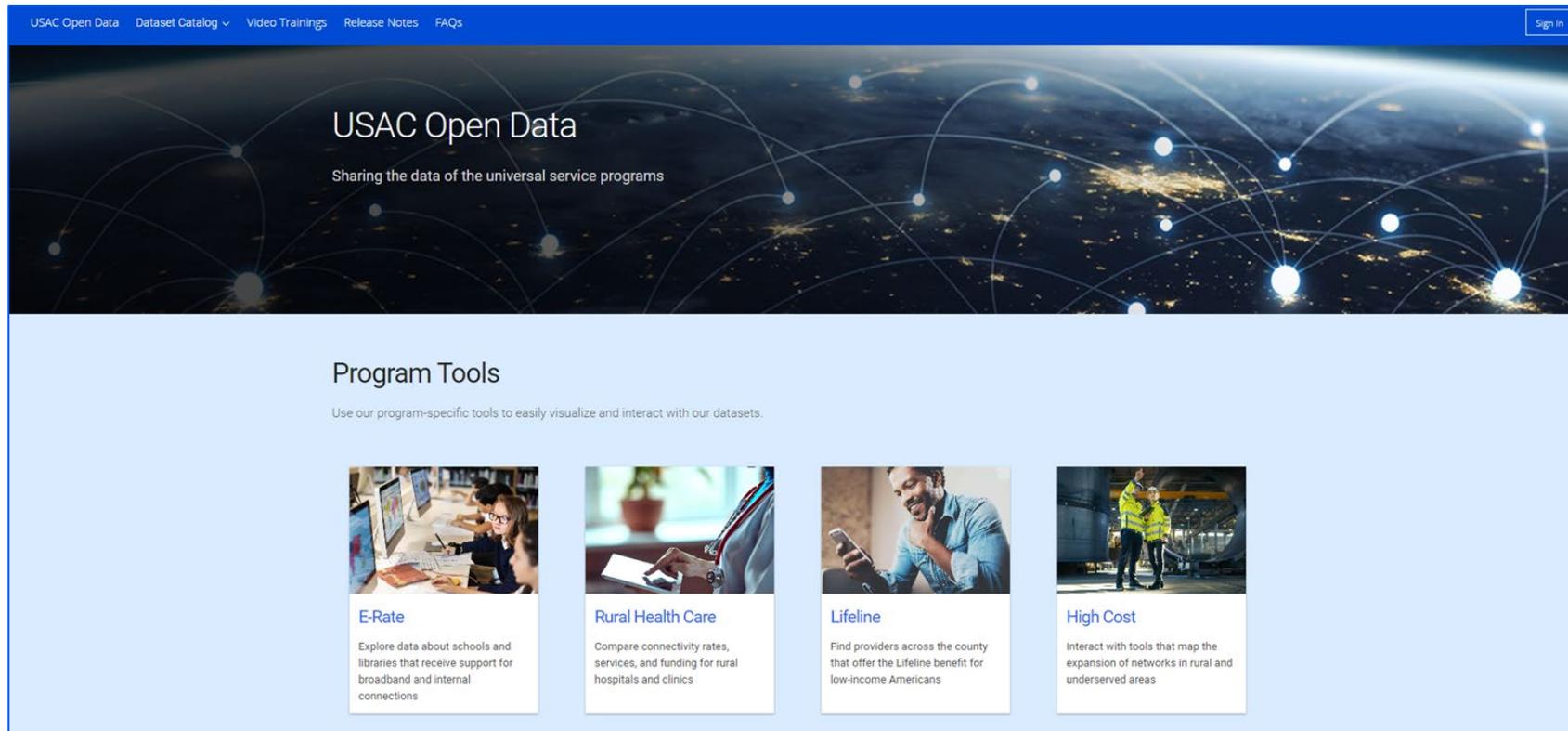
- Make universal service fund program data available to the public in an equitable and reliable way
- Provide transparency, visibility, and self-service in a highly secure platform
- Help stakeholders answer universal service fund program questions using the available data

# How does Open Data accomplish this for E-Rate?

- Provides E-Rate data related to:
  - FCC Form 470 (competitive bidding)
  - FCC Form 471 (request for discount on services and funding commitments)
  - FCC Forms 472/474 (reimbursements)
  - Category 2 FY2021+ budgets
  - E-Rate Productivity Center (EPC) related data
- Allows searching large datasets of aggregated E-Rate information using a variety of filters
- Allows creating customized reports and visualizations
- Provides data export options in multiple formats including Excel

# How to access Open Data

Access USAC Open Data Website: <https://opendata.usac.org/>



The screenshot shows the homepage of the USAC Open Data website. The header is blue with navigation links: "USAC Open Data", "Dataset Catalog", "Video Trainings", "Release Notes", and "FAQs". A "Sign in" button is in the top right. The main banner features a network of glowing nodes and lines over a satellite view of Earth, with the text "USAC Open Data" and "Sharing the data of the universal service programs". Below this is a "Program Tools" section with the subtext "Use our program-specific tools to easily visualize and interact with our datasets." Four tool cards are displayed: "E-Rate" (schools and libraries), "Rural Health Care" (connectivity rates), "Lifeline" (providers for low-income Americans), and "High Cost" (network expansion in rural areas).

USAC Open Data Dataset Catalog Video Trainings Release Notes FAQs Sign in

## USAC Open Data

Sharing the data of the universal service programs

### Program Tools

Use our program-specific tools to easily visualize and interact with our datasets.

- E-Rate**  
Explore data about schools and libraries that receive support for broadband and internal connections
- Rural Health Care**  
Compare connectivity rates, services, and funding for rural hospitals and clinics
- Lifeline**  
Find providers across the county that offer the Lifeline benefit for low-income Americans
- High Cost**  
Interact with tools that map the expansion of networks in rural and underserved areas

# Datasets and tools

## Open Data Datasets vs. Tools: How do they differ?

**Datasets**

Go directly to our datasets to access all of the raw data submitted by universal service program participants.

As p  
make  
gene  
and n

**E-Rate Data**

100,000+ schools and libraries connected

**Rural Health Care Data**

9,000+ clinics supported

Search

16 Results filtered by Categories > E-rate x View Types > Datasets x Clear All Sort by Alphabetical

Category	Dataset Name	Updated	Views
E-Rate	<b>E-Rate C2 Budget Tool Data FY2021+</b>	February 7, 2023	24,231
E-rate	<b>E-Rate Invoices and Authorized Disbursements (FCC Forms 472 and 474)</b>	February 7, 2023	1,769
E-rate	<b>E-Rate Open Competitive Bidding: Basic Information (FCC Form 470 and Related Information)</b>		

**Program Tools**

Use our program-specific tools to easily visualize and interact with our datasets.

These tools provide access to public E-Rate Program data including commitments and disbursements. For the full catalog of datasets, see [E-Rate Datasets](#), which includes data from [FCC Forms 470](#), [FCC Forms 471](#), and information about [entities](#), [consultants](#), and [annexes](#).

**Featured Tools**

[E-Rate FRN Status Tool FY2016+](#)

The E-Rate FRN Status Tool FY2016+ provides the latest funding request number (FRN) data including: applicant/BEN data; service provider data; FRN status; service type; service start and end dates; FRN costs and funding amounts; FCC Form 473 - Service Provider Annual Certification (SPAC) status; applicant FCC Form 498 status, application pending reasons; FCC Form 486 status; wave date; Funding Commitment Decision Letter (FCDL) comments; last post commitment/appeal wave data; service delivery and invoice deadlines; invoicing mode; and total disbursement amount. Each row in the data set is for a single FRN.

Watch the [video walkthrough](#) to learn how to use the tool.

[E-Rate FRN Invoice Deadline Tool](#)

The E-Rate FRN Invoice Deadline Tool provides users with the ability to search, view, and download funding request number (FRN) data related to invoicing including the invoice deadline date, funds remaining for invoicing

**Instructions**

Use the filters on the right to select your data. You must select 'Apply' to activate...

Click and drag to pan the chart

**Instructions**

Use the filter drop-down lists on the right to specify the data to display. Click t...

# Key E-Rate Open Data tools

Datasets	Tools
E-Rate Supplemental Entity Information	<ul style="list-style-type: none"> <li>• <a href="#">E-Rate Entity Search Tool</a></li> </ul>
E-Rate Request for Discount on Services: FRN Status (FCC Form 471 and Related Information)	<ul style="list-style-type: none"> <li>• <a href="#">E-Rate FRN Status Tool FY2016+</a></li> <li>• <a href="#">E-Rate FRN Invoice Deadline Tool</a></li> </ul>
E-Rate Request for Discount on Services (all datasets)	<ul style="list-style-type: none"> <li>• <a href="#">E-Rate FCC Form 471 Download Tool</a></li> </ul>
E-Rate Invoices and Authorized Disbursements (FCC Forms 472 and 474)	<ul style="list-style-type: none"> <li>• <a href="#">E-Rate Invoice Disbursements Data Lookup Tool</a></li> </ul>
E-Rate C2 Budget Tool Data FY2021+	<ul style="list-style-type: none"> <li>• <a href="#">E-Rate C2 Budget Tool FY2021+</a></li> </ul>

# Search Open Data for E-Rate assets

Dataset Catalog: <https://opendata.usac.org/browse?category=E-Rate>

The screenshot displays the USAC Open Data Dataset Catalog interface. The top navigation bar includes "USAC Open Data", "Dataset Catalog" (highlighted with a red box), "Video Trainings", "Release Notes", and "FAQs". A search bar is also highlighted with a red box. The main content area shows 16 results filtered by "Categories > E-Rate" and "View Types > Datasets". The results are sorted by "Alphabetical".

**Categories:** E-Rate (selected), Emergency Connectivity Fund, High Cost, Lifeline, Rural Health Care

**View Types:** Calendars, Charts, Data Lens pages, Datasets (selected), External Datasets, Files and Documents, Filtered Views, Forms

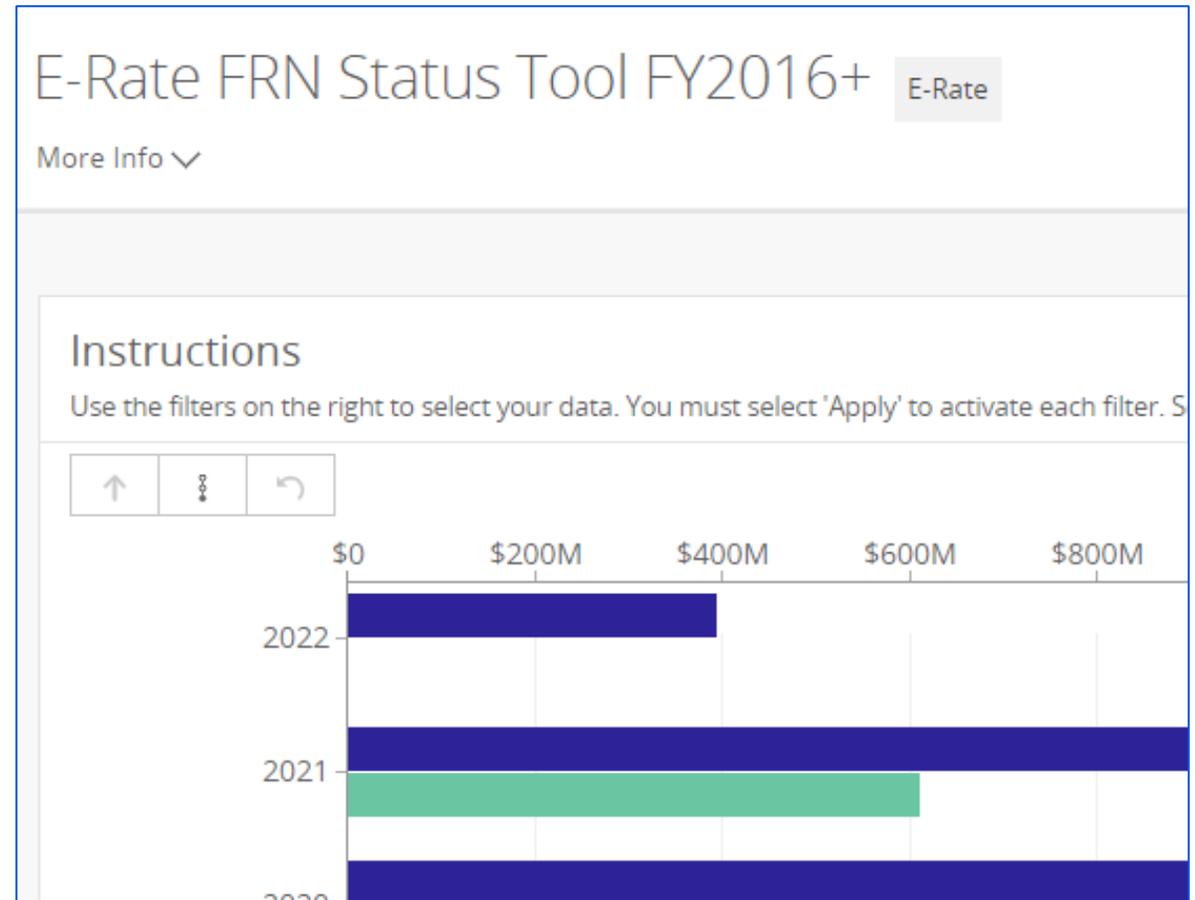
**16 Results filtered by** Categories > E-Rate View Types > Datasets Clear All Sort by Alphabetical

Dataset Title	Updated	Views
<b>E-Rate C2 Budget Tool Data FY2021+</b>	June 29, 2023	6,881
<b>E-Rate Invoices and Authorized Disbursements (FCC Forms 472 and 474)</b>	June 28, 2023	1,792
<b>E-Rate Open Competitive Bidding: Basic Information (FCC Form 470 and Related Information)</b>	June 29, 2023	49,497
<b>E-Rate Open Competitive Bidding: Consortium Entity Information (FCC</b>		

# Demo: E-Rate FRN Status Tool FY2016+

## Use Case [E-Rate FRN Status Tool FY2016+](#) :

As an applicant, what is the status of all funding requests I've submitted for the most recent funding year?

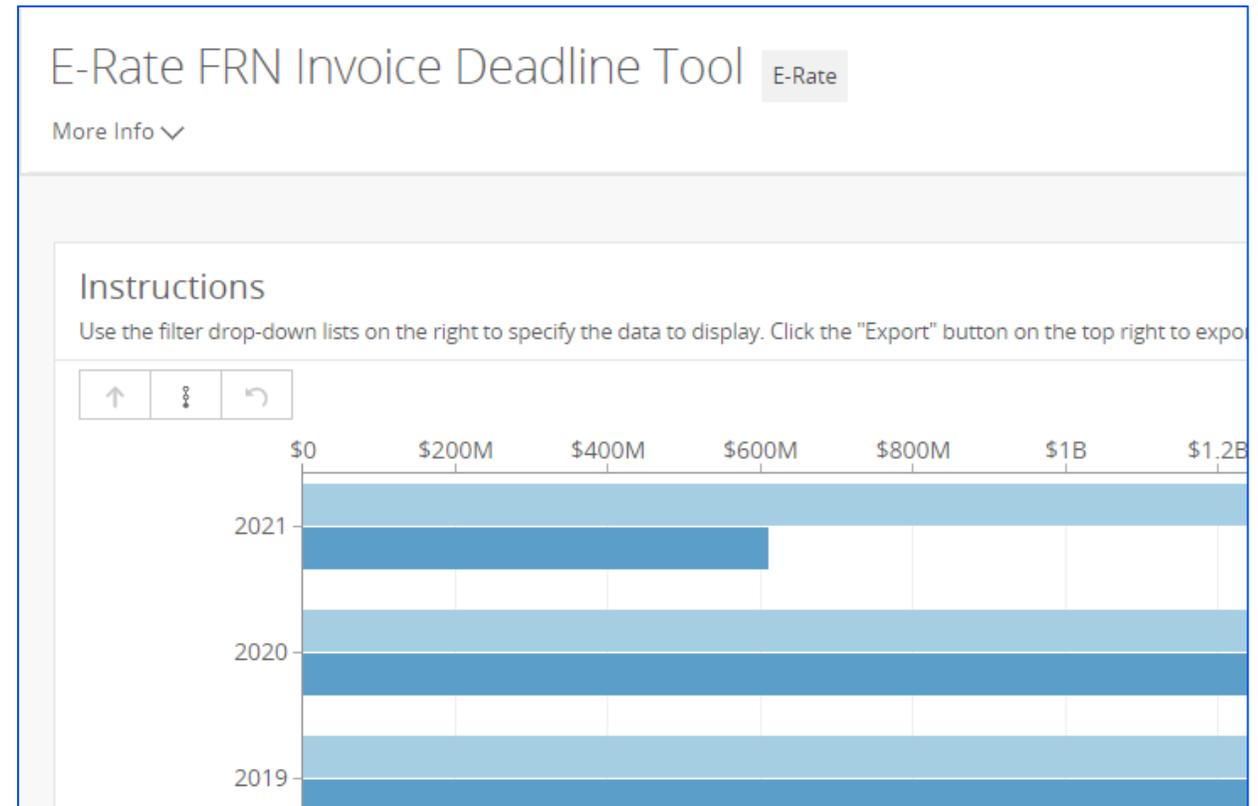


# Demo: E-Rate FRN Invoice Deadline Tool

## Use Case [E-Rate FRN Invoice Deadline Tool](#):

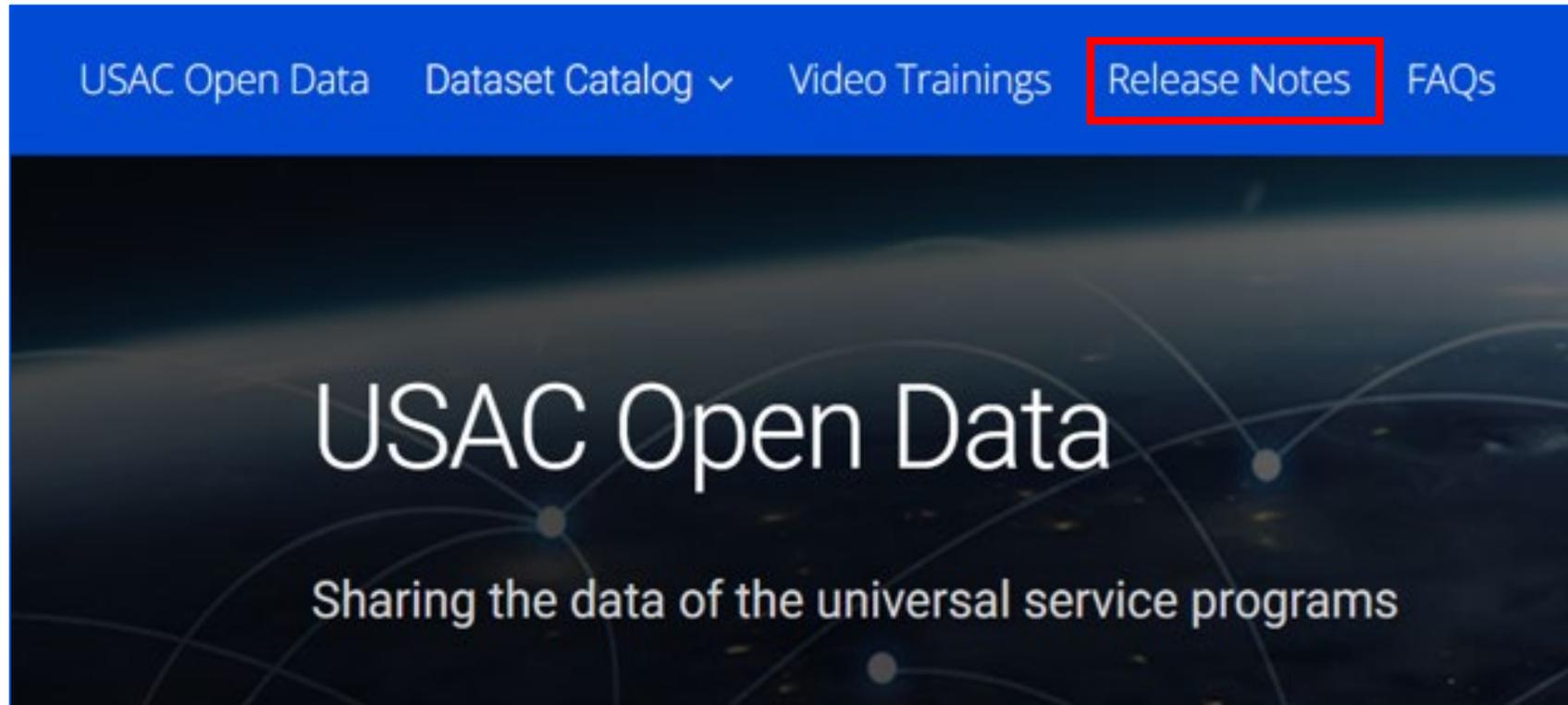
As a service provider, how much funding is remaining for funding requests where we are listed as the service provider and that are:

- Invoicing ready, not expired, and with SPI as the invoicing method?  
What are the invoicing deadlines?



# Open Data Resources

- You can find a list of all major Open Data updates (new assets, enhancements, and resolved issues) in our [Release Notes](#) page



# Dataset resources

Each Dataset includes the following resources:

Columns in this Dataset

Column Name	Description	Type
Application Number	Unique application number is generated at the time an applica...	Plain Text T
Funding year	Funding year for the application.	Plain Text T
Billed Entity State	Applicant's state.	Plain Text T
Form Version	Indicates whether the form version of the application is 'curre...	Plain Text T
Window Status	Indicates whether the application has been certified in the win...	Plain Text T
Billed Entity Number	Unique number assigned to the billed entity/ applic...	
Applicant's Organization Name	Applicant organization name.	

- List of columns with short descriptions

Related Content Using this Data

 **E-Rate FRN Invoice Deadline Tool**

February 7, 2023 492 Views



The E-Rate FRN Invoice Deadline Tool is designed to assist applicants and service providers with identifying FRNs with an upco...

 **E-Rate FRN Status Tool FY2016+**

February 7, 2023 464 Views



This dataset is de... dataset. It provide... information, filter...

- Connected tools (if available)

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## E-rate Request for Discount on Services: Funding Request Number Status

### FCC Form 471 and Related Information Dataset Glossary

This dataset contains data about the Funding Request Number (FRN) listed within each FCC Form 471, along with related information on the Funding Commitment Decision Letter (FCDL), wave information, the FCC Form 486, invoicing, and disbursements.

Use this dataset to answer questions such as:

- What are the individual service types?
- What quantity of service did the applicant request?
- Which service provider is supplying service and what is the length of the contract?
- What invoicing mode is being used?
- How much funding has been disbursed?

The information within the FRN information data collection from the FCC Form 471 is self-reported by applicants.

USAC is committed to sharing the highest quality data possible. We conduct a full analysis of all datasets to determine if they are complete prior to publishing. Each dataset field is described with a "field completeness" metric that ranges from 0 to 100 percent. Any value less than 100 percent indicates a field with missing values. In most cases, missing values are the result of "not required" fields.

Field Name	Field Description	Field Completeness
Application Number	Unique application number generated at the time applicants begin to file the FCC Form 471. Applicants can request funding for multiple services under the same application number. The unique application number begins with the last two digits of the funding year. This field is available in each dataset allowing for quick access of data from each of the seven FCC Form 471 data collections, at the application level. The application number is limited to customizing and creating visualizations of data to each of the seven FCC...	100%
Funding year		
Billed Entity State		

- Glossary with definitions

# Dataset resources (contd.)

Each Dataset includes the following additional resources:

- Developer and API documentation reference links\*

The screenshot shows a dataset page with a modal window titled "Access this Dataset via SODA API". The modal contains the following text: "The Socrata Open Data API (SODA) provides programmatic access to this dataset including the ability to filter, query, and aggregate data." Below this text are two buttons: "API Docs" and "Developer Portal". At the bottom of the modal, there is a section for "API Endpoint" with a text input field containing the URL "https://opendata.usac.org/resource/qdmp-ygft.js", a dropdown menu set to "JSON", and a "Copy" button. In the background, a table snippet shows "Updated: June 29, 2023" and "Data Provided by: Universal Service Administrative Company".

- A “*Contact Dataset Owner*” button to submit questions to USAC related to Open Data\*\*

The screenshot shows a dataset page with a table of metadata. The table includes the following rows: "Publisher", "Contact Name", "Contact Email", "Geographic Co", "Update Freque", "Language", and "Homepage". Below the table, there is a section for "Data Provided by" with the text "Universal Service Administrative Company" and "Dataset Owner" with the text "Tom Nesbitt". A large blue button labeled "Contact Dataset Owner" is positioned below this section.

\*For developer/API questions, contact the Socrata support team at:  
<https://support.socrata.com/hc/en-us/requests/new>

\*\*For E-Rate program or application specific questions, contact the program team directly.  
 See <https://www.usac.org/e-rate/contact-us/>

# Open Data Webinar Part 2



Uses for custom reports



Creating an Open Data account



Demo: Creating a custom report



Uses for visualizations



Demo: Creating a simple chart visualization

**Questions?**

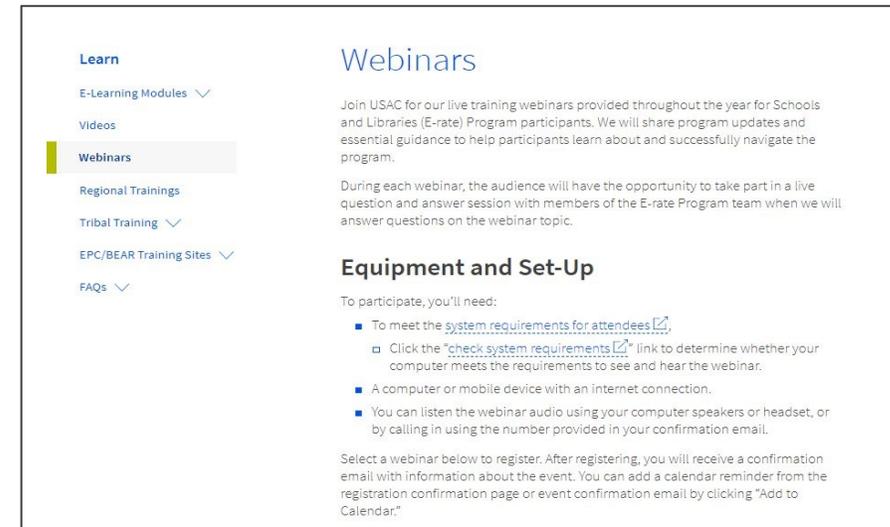
# UPCOMING WEBINARS

**Our next webinar is on:  
9/21/23 at 2 p.m. ET**

**Topic (This should be the webinar  
strictly focused on training)**

**Recommended for:** Applicants  
and service providers

**E-Rate Experience Level:** All



The screenshot shows a navigation menu on the left with the following items: Learn, E-Learning Modules (with a dropdown arrow), Videos, Webinars (highlighted with a yellow bar), Regional Trainings, Tribal Training (with a dropdown arrow), EPC/BEAR Training Sites (with a dropdown arrow), and FAQs (with a dropdown arrow). The main content area is titled "Webinars" and contains the following text:

Join USAC for our live training webinars provided throughout the year for Schools and Libraries (E-rate) Program participants. We will share program updates and essential guidance to help participants learn about and successfully navigate the program.

During each webinar, the audience will have the opportunity to take part in a live question and answer session with members of the E-rate Program team when we will answer questions on the webinar topic.

**Equipment and Set-Up**

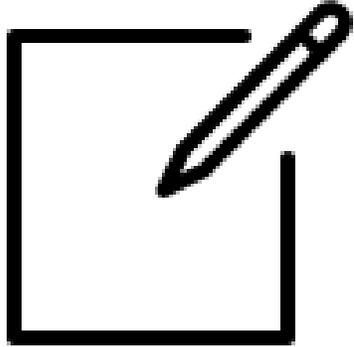
To participate, you'll need:

- To meet the [system requirements for attendees](#)
  - Click the "[check system requirements](#)" link to determine whether your computer meets the requirements to see and hear the webinar.
- A computer or mobile device with an internet connection.
- You can listen the webinar audio using your computer speakers or headset, or by calling in using the number provided in your confirmation email.

Select a webinar below to register. After registering, you will receive a confirmation email with information about the event. You can add a calendar reminder from the registration confirmation page or event confirmation email by clicking "Add to Calendar."

Go to the E-Rate [Webinars](#)  
page for additional  
information.

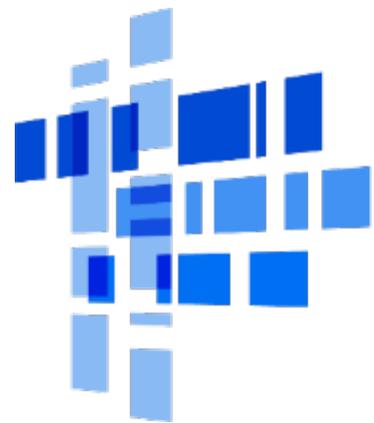
# Take Our Survey



- We want to hear about your webinar experience.
- A survey will appear on your screen at the end of the webinar.
- If you are not able to complete the survey today, one will be emailed to you within one to two business days.
- We appreciate your feedback!

**Thank You!**





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# Key Terms

Term	Definition
<b>Dataset</b>	A set of numbers or values that relate to a specific topic
<b>Tool</b>	A user-friendly interface that facilitates viewing or exporting data from datasets
<b>Raw data</b>	Data that has not been altered or processed for use
<b>Self-service</b>	A system of serving oneself without needing assistance from another person
<b>Open Data Assets</b>	Any object within Open Data including datasets and tools

# Key Terms

Term	Definition
<b>Open Data Assets</b>	Any object within Open Data including datasets and tools
<b>Use case</b>	When or why someone would utilize a process
<b>Aggregated</b>	Grouped numbers or values
<b>Filter</b>	Feature to remove unwanted information, leaving the user with only the information they want to view
<b>API</b>	An application programming interface (API) allows two applications to communicate with each other usually via code written in a programming language