



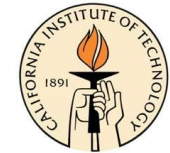
Broadband Infrastructure Grant (**BIG**) Program

*Getting started with your CENIC connection
Conditions and Expectations for Participation*

CENIC is a 501(c)(3) with the mission to advance education and research statewide by providing the world-class network essential for innovation, collaboration, and economic growth.

Charter Associates:

- California K-12 System
- California Community Colleges
- California State University System
- Stanford, Caltech, USC
- University of California System
- California Public Libraries
- Naval Postgraduate School



20,000,000 Californians use CENIC



- **8,000+** miles of optical fiber
- Member sites in all 58 counties connect via fiber directly into CENIC's CalREN backbone
- Over 12,000 sites connect into CalREN

- A **non-profit** chartered & governed by its members
- Collaborates with over **750 private sector partners** and contributes > **\$100,000,000** to the CA economy
- **24+** years connecting California to the world

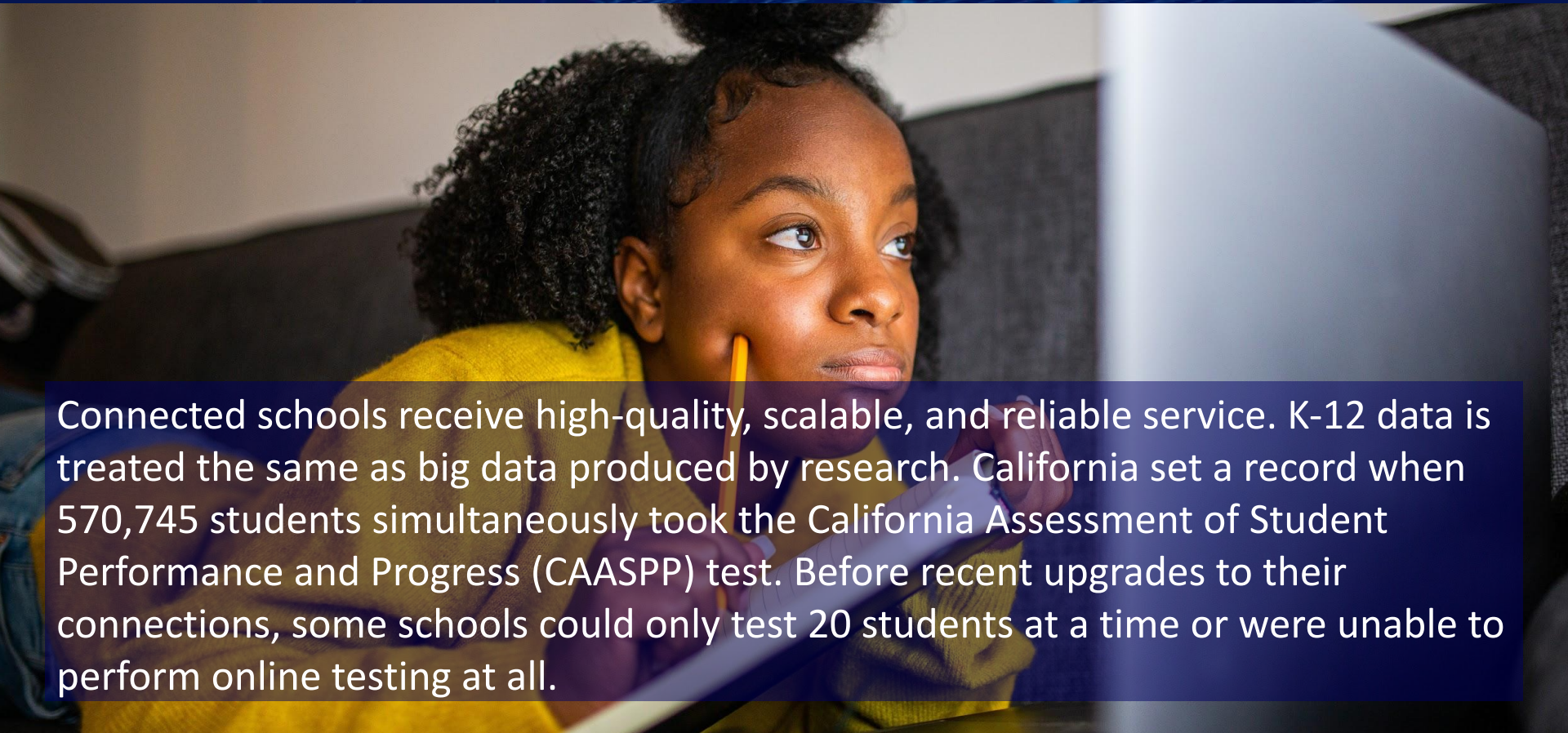
CENIC Benefits to California Institutions

CENIC's California Research and Education Network (CalREN) is a multi-tiered, high-performance network serving the majority of research and education institutions in the state. Each year, 20 million Californians use CalREN at 12,000 member institutions.

By using CalREN broadband, CENIC member institutions enjoy supremely reliable, efficient, and cost-effective access as well as these benefits:

- Unlimited broadband use - no monthly data cap!
- Access to a state-of-the-art network
- Network design expertise for your BIG connection
- Excellent access to Cloud and content services
- Scaling services to the need
- Federal and state subsidy assistance
- Lower costs on circuits & equipment by leveraging CENIC's high volume purchasing power

K-12 Online Learning & Testing



Connected schools receive high-quality, scalable, and reliable service. K-12 data is treated the same as big data produced by research. California set a record when 570,745 students simultaneously took the California Assessment of Student Performance and Progress (CAASPP) test. Before recent upgrades to their connections, some schools could only test 20 students at a time or were unable to perform online testing at all.

K12 Broadband Projects

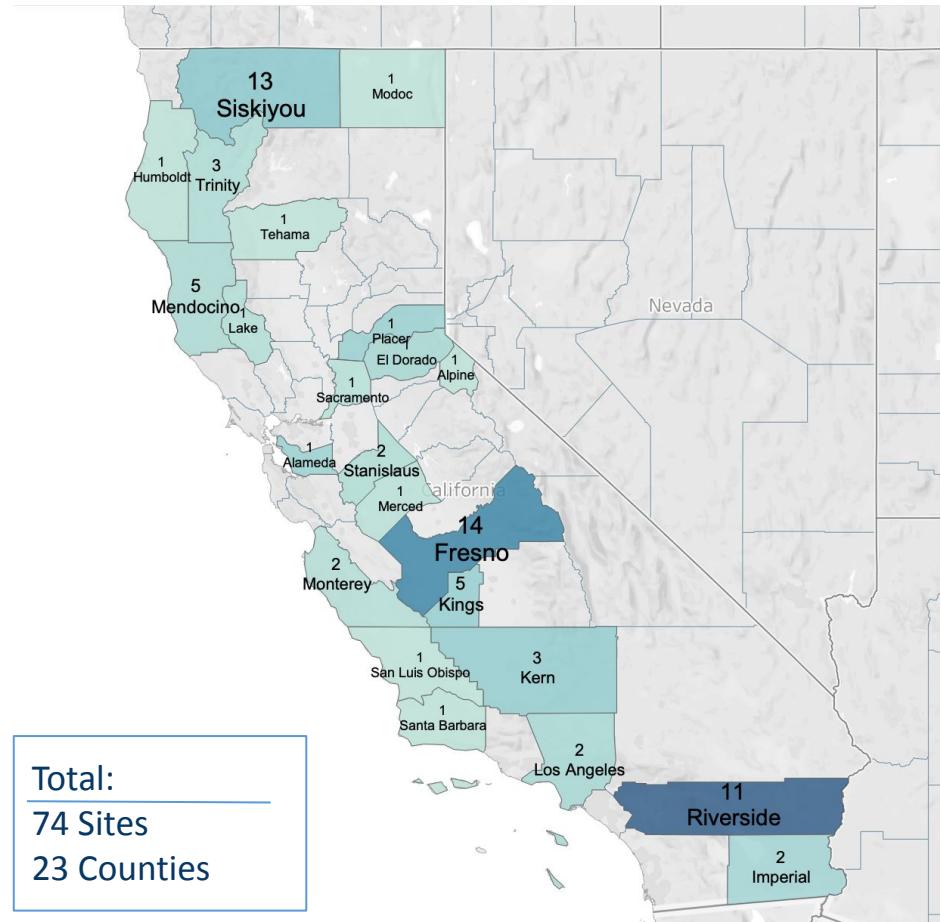
Kim Lewis, CENIC Director of Government Relations

The Broadband Infrastructure Grant (BIG) project was funded to identify and implement fiber broadband to the most poorly connected school sites in California in order to enable digital learning opportunities for students.

Eligible Schools:

- Offer K-12 instruction
- Lack fiber broadband
- Meet CDE's definition for public schools

Sites Included on Request for Proposal (RFP)



Broadband Infrastructure Improvement Grant (BIIG) & Broadband Infrastructure Grant (BIG)

BIIG (2015-2021)

Administered by ICOE through the K-12 High-Speed Network (K12HSN) program, with implementation by CENIC through contract with ICOE

- Funded broadband for public K-12 sites with insufficient capacity to administer annual statewide online testing (CAASPP)
- Funding
 - BIIG 1.0 - 165 sites
\$26,689,000
 - BIIG 2.0-2.5 - 265 sites
\$50,000,000

BIG (2020-2024)

Administered and implemented by CENIC, in consultation with the Department of Education (CDE), Department of Finance (DOF), and State Board of Education (SBE)

- Funds fiber-based broadband solutions for public K-12 sites lacking broadband fiber connections (not tied to CAASPP)
- Funding
 - \$7,500,000 (current)
 - \$5,200,000 (FY 2021-22)*
- Focus on fiber to the school to deliver reliable, scalable broadband

BIG AWARD BENEFITS

The California Department of Finance (DOF) and State Board of Education (SBE) approved prioritization of projects based on lowest per student cost to deliver fiber-based broadband, thereby connecting the largest number of schools and students with available funds. Some schools are co-located, allowing them to share a single connection.

- **Special Construction:** BIG pays the one-time costs of delivering fiber-based circuits into schools
- **Site Readiness Cost:** BIG provides technical resources and pays for work required at the school site to connect the new broadband circuit
- **Equipment:** BIG purchases and installs network equipment at the school to connect the new circuit
- **On-site Integration Assistance:** Through BIG, schools may procure additional on-site technical support to integrate broadband into their local networks
- **Monthly Recurring Costs (MRC):** Monthly recurring carrier costs will be billed directly to CENIC and paid through the grant for 6-18 months, depending on date of installation
- **E-rate Assistance:** CENIC filed for E-rate for all BIG circuits and will provide E-rate consultation to BIG schools to facilitate continued E-rate and CTF discounts when schools assume monthly recurring costs

OTHER COSTS TO BE CONSIDERED

Ongoing service provider costs will be listed in the Memorandum of Understanding. BIG has limited funds, and additional costs to the school that must be considered are:

- **Ongoing support or connection fees from the County or District:** Depending on the policies of the county or district, there may be annual or monthly fees for ongoing support of the connection.
- **Upgrades to other equipment to accommodate additional bandwidth:** Certain local network equipment is bandwidth restrictive and is generally not covered by the grant funds.
- **Additional configuration support:** BIG professional services will assist in integrating the new connection, but there is potential for other configuration or installation costs or improvements that fall outside the scope of BIG funding.
- **Ongoing troubleshooting:** After integration, CENIC will provide the service provider with a Letter of Authorization, allowing the site to call into the service provider directly for support. The site may be responsible for troubleshooting when experiencing issues or outages.

The background is a dark blue gradient with a complex network of thin, glowing blue lines and dots of varying sizes, creating a sense of digital connectivity or data flow.

Site Determination: Identifying BIG sites

Jaime Augst, CENIC Research Specialist

Site Prioritization & Validation Process

Phase 1
1276 Sites:

Phase 2
426 Sites:

74 Final Sites
Sites submitted Letters of Agency (LOA) for inclusion on the Request for Proposals (RFP) and Form 470 that was posted in December 2020

-105
Sites lacked validation from K12HSN node sites

-184
Sites already connected to fiber broadband

-161
Sites did not serve the K-12 student population

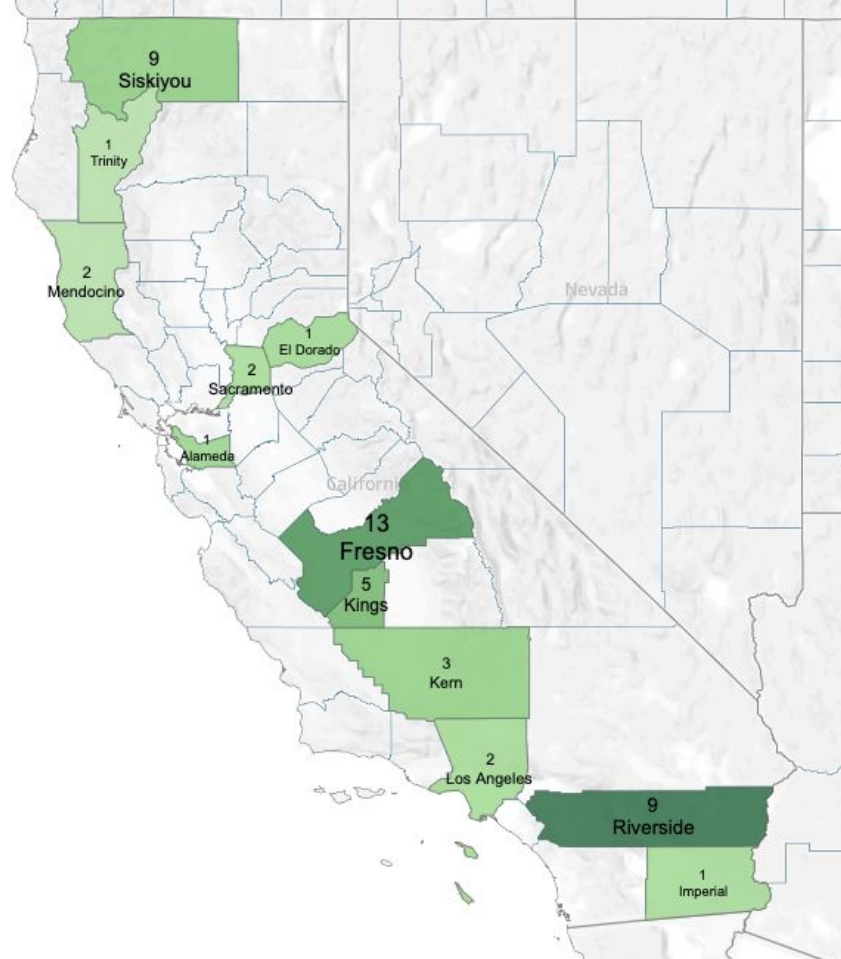
-481
Sites not run by districts with an elected school board or superintendent

-29
Sites were not considered a traditional program by the CDE

-70
Sites were co-located with a fiber connection, or closed

+7
New sites were identified for inclusion

-179
Sites received BIIG funding



BIG Sites that Received Valid Bids

Of the 74 sites that were on the RFP:

49 Sites identified for eligibility in the program

- 42 Individual circuit bids in RFP
- 7 Sites co-located with another site

17 Sites in the RFP did not receive bids

8 Sites were removed from consideration

- 4 Sites were identified by bidders as having existing fiber services
- 4 Sites noted services was not needed after the RFP was posted

16,580 students* at the 49 eligible sites

*Based on 2019-20 enrollment figures reported to CDE

Steps to Getting Connected

Susan Swank & Stella Kwon
CENIC Program Managers

BIG Recipients: Your Next Steps

To receive new fiber-based broadband connectivity through the Broadband Infrastructure Grant (BIG), awardees will be required to complete the following steps:

1- Memorandum of Understanding (MOU): CENIC will provide an MOU which awardees must sign, agreeing to cover specified monthly recurring cost (MRC) of the service by transferring the contract from CENIC to the school, typically 6 to 18 months after start of service, through a process known as supersedure.

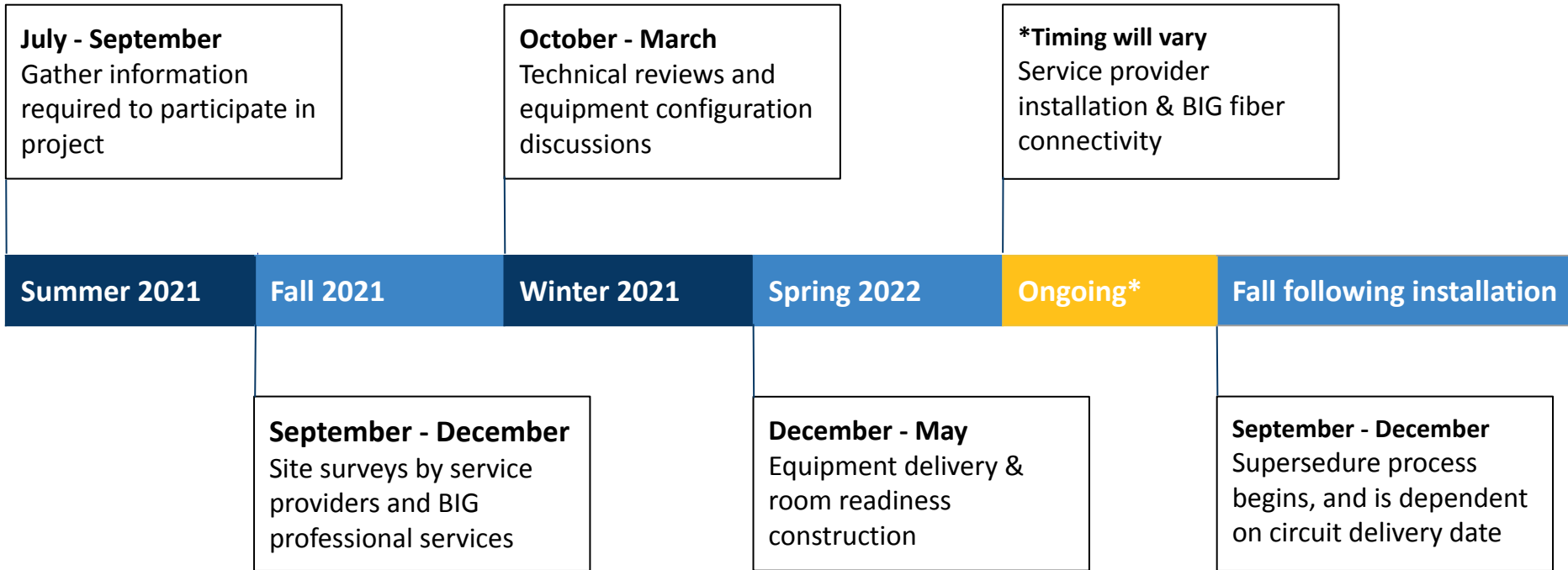
2- Contact and Site Information: Eligible sites must complete CENIC's survey to provide contact information, as well as additional site-specific information.

3- Communication: Awardees will need to communicate regularly with the BIG project team to schedule on-site activities and share project updates.

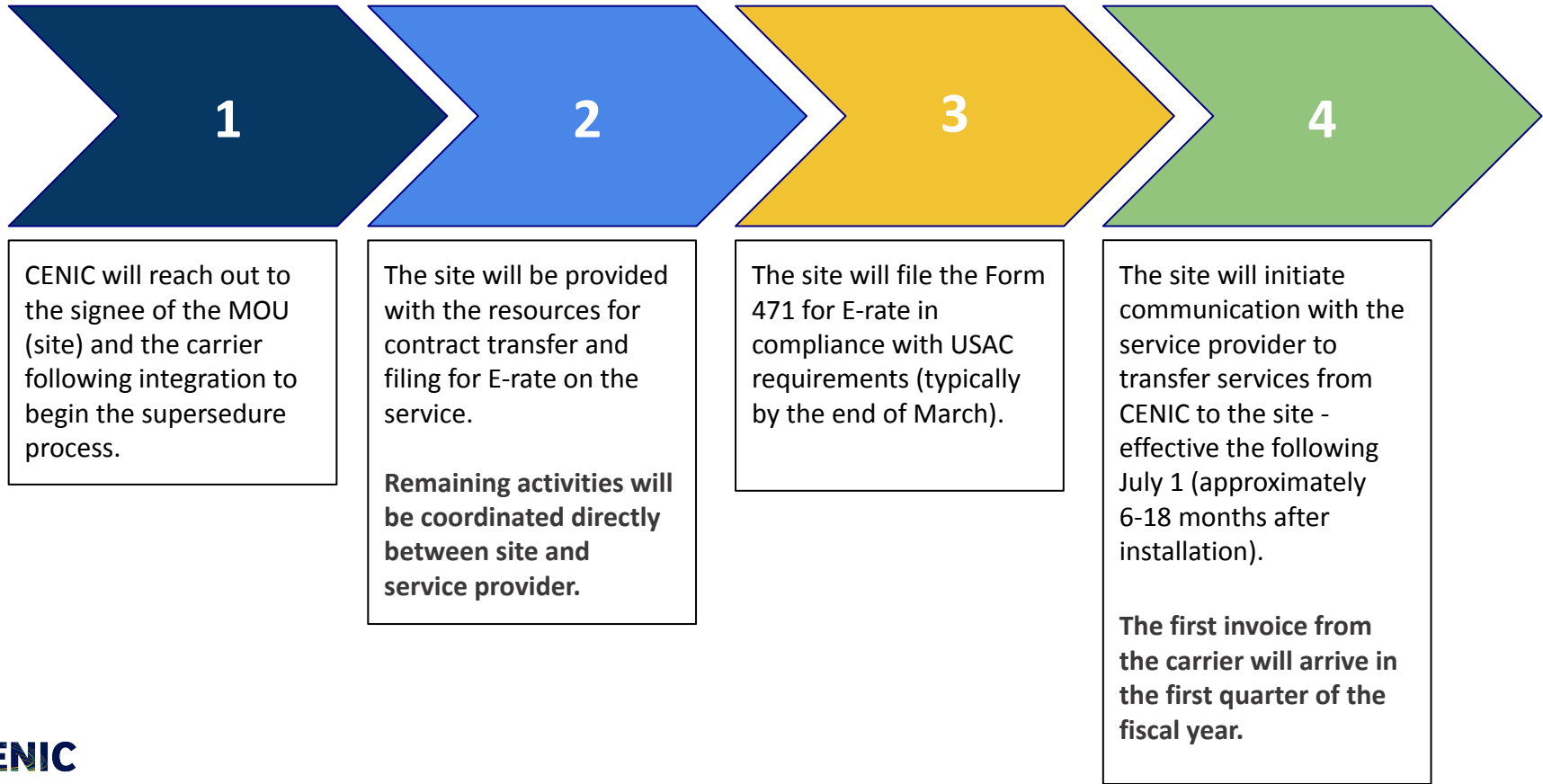
- *Communication may include CENIC staff, consultants, contractors, service providers, and district and COE IT staff. Please be sure to "cc:" all parties on BIG-related communications.*

Thank you for your diligence completing these important steps.

Next Steps & Connection Process



Supersedure Process: Transferring Responsibility for Payment



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Question & Answer

FAQ

If a site already has fiber, is it still eligible to receive funds? If the school’s external connection from a commercial service provider is fiber-based, the school is not eligible to proceed with connectivity through the BIG project, regardless of the current bandwidth. Please note that some schools have mistakenly identified their connections as “fiber” when the connections are actually copper-based. These sites remain eligible for BIG.

If other sites in the district need fiber broadband assistance, will they be eligible for grant funds? We are collecting information on additional sites with low or no network connectivity and continue to explore opportunities to connect them, based on availability of funding and resources to support future projects. Please bring these sites to our attention.

Do I need to fill out anything to participate? Yes, awardees must complete and sign a Memorandum of Understanding, committing the school to pay ongoing monthly recurring costs and providing site contact information, along with other information requested in our survey form.

When will I know my costs and how were those costs determined? Ongoing costs will be listed in the MOU and are based on quotes from service providers who responded to CENIC’s RFP.



Future webinar dates:

- **Monday, July 12, 2021 at 2:00 PM**
- **Wednesday, August 11, 2021 at 10:00 AM**
- **Thursday, September 16, 2021 at 11:00 AM**



For additional information, please contact:

bigprogram@cenic.org

Susan Swank
Stella Kwon
Dave Wills
Jaime Augst

Resources

BIG School Site Eligibility Survey: <https://forms.gle/6nByrXtkKnads6jZ9>

Learn More about CENIC: cenic.org

Read more stories about CalREN and how CENIC members use the network on our blog: cenic.org/blog

Glossary of Broadband Terms:

<https://docs.google.com/document/d/1MydomzKUdparIhOmfUePs2iy4IOUZVxVdNEVbbS11ac/edit?usp=sharing>

Blog Posts & Presentations

- [Broadband for Every California Household: One Gigabit or Bust!](#)
- [Understanding Network Impacts of Increased Online Learning](#)
- [Broadband in K-12 Schools Boosts Teaching Practices and Learning Outcomes](#)

Social Channels:

- **LinkedIn:** <http://www.linkedin.com/company/cenic>
- **Twitter:** <http://www.twitter.com/CENICnews>
- **YouTube:** <https://www.youtube.com/channel/UCusC8odlj2ukhXYIfaAGobQ>

The background is a solid dark blue color. It features a complex pattern of thin, white, curved lines that sweep across the frame from the top-left towards the bottom-right. Interspersed among these lines are numerous small, semi-transparent white dots of varying sizes, some appearing as bright points and others as faint glows. The overall effect is that of a dynamic, flowing network or a stylized representation of motion.

Thank You