

Categories have been arranged to align with CEN's [Strategic Plan](#).

1. Provide Value

- DDoS Mitigation Summary Review

- 2023-2024 Academic Year (August 1, 2024 – June 1, 2024)

Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of Largest TMS Mitigation	Duration of Longest TMS Mitigation
75 ↓66.67%	1.31 TB ↓89.25%	8.59 TB ↓63.22%	4.79 TB ↓15.29%	142.93 Gbps ↓7.58%	4d 1h 29m ↑1318.13%

Bottom row indicates increase or decrease from prior period (October 01 2023 6:58 - August 01 2024 4:00).

- 2024 Calendar Year (January 1, 2025 – June 1, 2024)

Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of Largest TMS Mitigation	Duration of Longest TMS Mitigation
42 ↑27.27%	177.57 GB ↓84.35%	1.89 TB ↓71.73%	1.08 TB ↓77.41%	90.82 Gbps ↓36.46%	4d 1h 29m ↑13684.17%

Bottom row indicates increase or decrease from prior period (August 01 2024 8:58 - January 01 2025 5:00).

- CT Library Fiber Consortium: Fiber to the Library - Internal Connections (FTTL-IC)

<https://ctedunet.net/fttl-ic/>

- Program complete! All work completed March 25, 2025; invoicing completed on May 16, 2025.
 - Overall, \$1.65M was invested in the libraries' assessments and infrastructure upgrades, helping improve internal network infrastructure with updated switches, wireless access points, firewalls, wiring, uninterruptable power supplies, data racks, and more. The program outcomes combine CEN's dedicated fiber Internet access with newly improved local area network infrastructure that resulted in faster, more reliable access to library resources and programs for patrons.

Program recap across all phases is as follows:

- Phases 1 and 2 were administrative with a call for applications and State Library approvals of applicant respectively. 41 Libraries responded and were approved.
 - Phase 3 - Assessments. All 41 libraries received network infrastructure assessments and recommendations for upgrades. Assessments took place with the library director and IT support staff. Reports were generated with rank ordered recommendations for improvements including budget. 5 Libraries implemented recommendations on their own and did not progress to subsequent phases.
 - Phase 4 – State library authorized funding for 36 libraries to proceed with recommendations made in assessment reports.
 - Phase 5 – Infrastructure improvements. Award contracts were executed and funds released to individual libraries for equipment and labor to remediate issues identified. CEN, and our subcontractor Novus Insight, worked with each library to review equipment lists, update as needed, initiate purchases, schedule work dates, and implement infrastructure improvements.
 - Phase 6 – Program completion, final invoicing, and close out.
 - Participating Libraries and Awards

Library Participant	Assessment Award	Infrastructure Award	Total Award
Beacon Falls Public Library	\$4,571.00	\$15,988.50	\$20,559.50
Berlin-Peck Memorial Library	\$6,839.00	\$59,444.00	\$66,283.00
Bethel Public Library	\$6,839.00	\$7,841.90	\$14,680.90

Booth & Dimock Memorial Library	\$5,713.75	\$17,363.50	\$23,077.25
Burlington Public Library	\$5,713.75	\$26,895.00	\$32,608.75
Burnham Library	\$4,571.00	\$31,837.30	\$36,408.30
Canterbury Public Library	\$4,571.00	\$21,697.50	\$26,268.50
Chaplin Public Library	\$4,571.00	\$18,667.00	\$23,238.00
Chester Public Library	\$4,571.00	\$17,593.40	\$22,164.40
Cragin Memorial Library	\$6,839.00	\$19,519.50	\$26,358.50
Derby Public Library	\$5,713.75	\$60,791.50	\$66,505.25
East Hartford Public Library	\$11,410.00	\$49,885.00	\$61,295.00
Enfield Public Library	\$6,839.00	\$78,490.50	\$85,329.50
Ferguson Library + Branches *	\$39,838.75	\$125,339.50	\$165,178.25
Hall Memorial Library	\$6,839.00	\$16,441.70	\$23,280.70
Kent Library Association of Kent	\$4,571.00	\$10,450.00	\$15,021.00
Killingworth Library Association	\$4,571.00	\$8,373.20	\$12,944.20
Library Association of Warehouse Point	\$5,713.75	\$33,572.00	\$39,285.75
Licia & Mason Beekley Community Library	\$5,713.75	\$43,215.70	\$48,929.45
Middlebury Public Library	\$6,839.00	\$49,668.30	\$56,507.30
Minor Memorial Library	\$4,571.00	\$23,300.20	\$27,871.20
New Haven Free Public Library	\$45,535.00	\$86,075.00	\$131,610.00
Norfolk Library	\$4,571.00	\$28,006.00	\$32,577.00
Portland Public Library	\$5,713.75	\$51,997.00	\$57,710.75
Prospect Public Library	\$4,571.00	\$43,007.80	\$47,578.80
Public Library of New London	\$6,839.00	\$14,440.80	\$21,279.80
Ridgefield Library Association	\$14,231.88	\$32,972.50	\$47,204.38
Russell Library	\$14,231.88	\$38,263.50	\$52,495.38
Scotland Public Library	\$4,571.00	\$12,226.50	\$16,797.50
Sherman Library	\$5,713.75	\$9,608.50	\$15,322.25
Stonington Free Library	\$4,571.00	\$13,348.50	\$17,919.50
Thomaston Public Library	\$5,713.75	\$43,004.50	\$48,718.25
Wallingford Public Library	\$19,928.13	\$56,369.50	\$76,297.63
West Haven Public Library	\$10,276.25	\$78,318.90	\$88,595.15
Willington Public Library	\$5,713.75	\$19,833.00	\$25,546.75
Wolcott Public Library	\$5,713.75	\$51,628.50	\$57,342.25
Clark Memorial Library**	\$4,571.00	0	\$4,571.00
Hotchkiss Library of Sharon**	\$4,571.00	0	\$4,571.00
Howard Whittemore Memorial Library**	\$5,713.75	0	\$5,713.75
Stafford Library**	\$5,713.75	0	\$5,713.75
Westport Library**	\$17,088.75	0	\$17,088.75
			\$0.00
Totals	\$352,963.64	\$1,315,475.70	\$1,668,439.34

*Ferguson Library assessment included all branch libraries. Infrastructure improvements were performed on the main library only.

**Library received assessment and implemented improvements on their own. Many used ARPA-SLFRF funds as part of their town remediation plan.

- Quote from Kate Byroade, Library Director, Cragen Memorial Library, Colchester, CT.
"We're very pleased with the recent upgrades to our Internet connections at the library. We have been able to replace two switches and a firewall to fully utilize our CEN hand off-meaning that our patrons who use our public computers and our free public Wi-Fi get faster, smoother access to the resources they need, especially in a community with gaps in internet and cellular access. I often see people working on their laptops outside the library late at night and I am so glad that we can get them connected to school, training, and work."
- New Member-Customers since the last Commission meeting (in order of turn up)
 - Sprague Town Hall
 - Wolcott Town Hall
 - Whitneyville Branch Library
 - Brundage Community Branch Library
 - Roxbury Fire Department
 - Trumbull Library
 - Miller Memorial Library
 - Sharon Town Hall
 - Burlington Town Hall
- New *connections* to existing CEN members since the last Commission meeting
 - Motor Vehicle Network, responsible for WiFi at DMV locations (correction from last report)
 - New Milford Town Hall – Moved from PSDN to CEN direct connect
 - Essex Town Hall- Moved from PSDN to CEN direct connect
 - Guilford Town Hall - Moved from PSDN to CEN direct connect
 - Brookfield Town Hall - Moved from PSDN to CEN direct connect
 - Newtown Town Hall - Moved from PSDN to CEN direct connect
 - Southington Town Hall - Moved from PSDN to CEN direct connect
 - Glastonbury Town Hall - Moved from PSDN to CEN direct connect
 - Southbury Town Hall - Moved from PSDN to CEN direct connect
 - Madison Town Hall - Moved from PSDN to CEN direct connect
 - CT Metropolitan Council of Governments (MetroCOG)
 - Roxbury Town Hall – Moved from PSDN to CEN direct connect
 - Department of Transportation (DOT) - *CEN is providing transport connectivity to DOT Headquarters and 62 Maintenance facilities and garages over a period of two years. Sites will be listed as they are completed. 61 sites are complete as of this report.*
 - Newington Central Files
 - Simsbury Maintenance Garage
 - Litchfield Maintenance Garage
 - Wolcott Storage Garage
 - Avon Maintenance Garage
 - Norfolk Maintenance Garage
 - Thomaston Maintenance Garage
- Exiting Member-Customers since the last Commission meeting disconnecting (in order of turn down)
 - Paier College (closed)

Current Member Organization Count = 700

*Effective 12-1-21 member count processes are adjusted to reflect multi-site organizations as one member throughout the community.

2. Ignite Innovation

- PerfSONAR Servers
 - perfSONAR is the **performance Service-Oriented Network monitoring Architecture**, a network measurement toolkit designed to provide federated coverage of paths, and help to establish end-to-end usage expectations, ensuring friction free use of networks for scientific applications. This open-source infrastructure helps to identify and isolate problems as they happen, making the role of supporting network users easier for engineering teams, and increasing productivity when utilizing network resources.
 - Scope is to install 100Gbps PerfSONAR servers at the hub and extranet sites to provide independent tooling for measurement of capacity and throughput helping ensure the highest quality of network experience for the membership and will make these available to the community to run diagnostics from any member site.
 - June Update - 25 of 30 devices installed; projected completion is end of summer 2025.
- eduroam <https://www.eduroam.us/>
 - Goal is to address digital divide issues impacting Internet access and provide a more seamless and secure network access experience for students, faculty and staff at learning institutions and affiliate locations.
 - CEN's application for the Internet2 eduroam [Support Organization](https://internet2.edu/internet2-announces-new-eduroam-support-organizations/) program was accepted and will be one of 5 across the country. <https://internet2.edu/internet2-announces-new-eduroam-support-organizations/>
 - eduroam Support Organization (eSO) contract agreement between CEN and Internet2 is complete. New CEN member organizations can be onboarded at will without signing an I2 agreement. CEN has a member subscriber agreement for new eduroam subscribers and will work with the early adopters to convert their I2 based agreements to CEN based agreements.
 - Current subscribers and users: New Haven Public Schools, Darien Public Schools, Suffield Academy, Waterbury Public Schools, Middletown Schools, Choate Rosemary Hall, and ACES. Achievement First schools in process.
 - eduroam is a grant eligible activity in the ARPA Community WiFi program.
- Grant Activity
 - CT State and Local Cybersecurity Grant Program (SLCGP) administered by Department of Emergency Management and Homeland Security (DEMHS)
 - Applied for round 1 funding in July. Grant application included improving cybersecurity awareness across the community via subsidies to CyberNutmeg and leading cooperative purchasing activities through a dedicated product manager who will coordinate activities.
 - *Notice of Selection received in November, partial award pending.*
 - Broadband Equity, Access, and Deployment (BEAD) program administered by CT Department of Energy & Environmental Protection (DEEP), Office of Telecommunications and Broadband (OTB)
 - CEN was pre-qualified, one of ten providers.
 - OTB Published Eligible CAI list December 18, 2024; Guidance on applications mid-January
 - DAS - CEN submitted a \$32M grant application on Feb 25, 2025
 - Our application is exclusively focused on connectivity to community anchor institutions (CAIs). Of the ~1500 eligible CAI locations published under BEAD, CEN has proposed connecting 263 of them across 91 municipalities, with 20-year IRU Fiber, and 100G capable devices. Breakdown of the 263 is as follows:
 - 223 K-12 School Buildings
 - 20 Healthcare Facilities

- 16 Libraries
- 3 Municipal Government Offices
- 1 Community Center
- For every entity that gets connected, they would receive enterprise level, high speed, high-capacity broadband connectivity, with dedicated bandwidth, excellent service, and affordable expandability through the period of performance and beyond.
- We are optimistic about our application and will keep an eye out for responses from DEEP OTB as it moves to review.
- These grants take a huge effort to assemble, and many helped contribute to this one. Timing was tight to respond and prepare the applications, from when the CAI list was published, and program application guidance was published (6 weeks).
- Passed through curing and in negotiations on potential sites.

3. Foster Collaboration

- EDAC - Engagement and Development Advisory Council
 - Co-Chairs: Karen Skudlarek, UCONN; Cathie Drury, Coventry Public Schools
 - Annual Member Conference, *CEN Connect 2025* May 7-8, 2025, at CT Convention Center
 - Celebrated 25 years of service!
 - Day 1: 16 Long-form workshops, poster sessions, vendor exhibition, after-hours social event at CT Science Center for all attendees
 - Day 2: Traditional format, AM welcome and keynote, all-day vendor exhibition, poster sessions, 4 blocks of parallel sessions, happy hour
 - Event Site: <https://events.ctedunet.net/>
 - Event Stats:
 - Registrations: 931
 - Attendees: 850
 - Sponsors: 67
 - Speakers: 103
 - Event Survey Results

• Date: 4.65/5 • Venue: 4.79/5 • Registration Process: 4.68/5 • Website & Mobile App: 4.5/5 • Keynote Speaker: 4.54/5	• Breakout Sessions: 4.37/5 • Poster Sessions: 3.88/5 • Meals: 4.6/5 • Networking: 4.6/5 • Swag: 4.6/5
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 - Historical Comparison of in-person annual conferences

	2025 (2 Day)	2024 (2 Day)	2023 (1 day)	2022 (1 day)	2019 (1 Day)	2018 (1 Day)
<i>Registered</i>	931	844	705	612	673	568
<i>Attended</i>	850	755	637	515	613	486
<i># of Sponsors</i>	67	76	65	43	59	47
 - Member Trainings
 - Artificial Intelligence (AI) Seminar Series 'AI for the CEN Community'
 - Jan 2025 - Dec 2025

- <https://events.ctedunet.net/event/3380bb19-b3df-4ef7-9da8-80c5f634dffd/seminars-quarterly->
- Multipart series on AI in partnership with Isidore 'Izzy' Sobkowski. Mr. Sobkowski is a recognized global leader with over 45 years of hands-on experience with advanced AI solutions and holds a US Patent for Ethical Artificial Intelligence. His experience spans R&D, sales, marketing, intellectual property, and technology delivery with a demonstrated history of successful ideation and deployment of high-tech projects and businesses including Chief Digital Officer of Stamford, CT; Artificial Intelligence Specialist at the US Patent and Trademark Office; CIO of NYC Health and Human Services; Global Technology Strategist at Microsoft; Artificial Intelligence Lead for Surveillance and Compliance at New York Stock Exchange; and AI Division Vice President at Computer Associates. Mr. Sobkowski won the Microsoft Award for Best Product of the Year for AI and has achieved the coveted upper right-hand position in Gartner's Magic Quadrant for a company he founded, Professional Help Desk and for his underlying AI technology called Experience-Based Reasoning (EBR).
 - Seminar 1: Foundations of AI
January 21, 2025 @ 11AM - 12:30PM
 - Seminar 2: Ethical and Social Implications of AI
April 8, 2025 @ 11AM - 12:30PM
 - Seminar 3: Strategic Implementation of AI
July 8, 2025 @ 11AM - 12:30PM
 - Seminar 4: Future Trends and Practical Applications
October 14, 2025 @ 11AM - 12:30PM
- SMAC- Service Management Advisory Council
 - Co-Chairs: Ken Sayers & Jonathan Garbutt
 - Council meetings scheduled for 10/2, 12/13, 3/11
 - Committee members are organizing around aggregated services available for members.
 - Unified Communications - RFP team comprising DAS procurement and SMAC members developed SoW and SLA for RFP publication in the next 1-2 months
 - Security Services - building new survey feedback for the community to help provide priority and direction for the committee and CEN to pursue.
 - Pricing and Port based model - with the new platform being built, will solicit feedback from council and community on port speed and pricing options moving forward.
 - CIPA filtering - on hold, discussing options.
 - Services Reviews: Walk through of services to review service life cycles will continue:
https://ctedunet.net/wp-content/uploads/sites/2510/2021/12/2020-10-20_CEN_Service_LifeCycle_Process23.pdf
- Connecticut Higher Education Roundtable on Information Security (CHERIS)
<https://ctedunet.net/cheris/>
 - Co-Chairs: Owen Brandt, ECSU; John Schaeffer, Conn College
 - Forum of Higher Education IT security professionals that meets quarterly to collaborate on IT solutions, discuss best practices, and share security challenges.
 - No updates
- Cyber Nutmeg <https://ctedunet.net/cybernutmeg/>
 - Cyber Nutmeg 2025 Planning is underway. Partnership with CTNG will continue in 2025 as we look to build on recent successes and continue to focus on improving cybersecurity awareness, threats, and defenses for community anchor institutions.
 - Date: Oct 10, 2025
 - Venue: CCSU

4. Promote Advocacy

- Outstanding Leader Awards - Call for nominations (<https://ctedunet.net/cola/>)
 - 'CEN Members play a key role in the success of our community. To acknowledge those contributions, CEN presents the Outstanding Leader Awards annually to any individual from a CEN member organization who has provided extraordinary leadership, energy, ideas, and achievements for the advancement and development of the CEN community, its products and/or services, and/or its foundational mission, vision, and values.'
 - Non-CEN Members, such as R&E members, vendors, or resellers, may be considered on an individual case basis
 - Awards presented at the 2025 CEN annual conference. Recipients include:
 - Cathie Drury, Coventry PS
 - Jason Healy, Suffield Academy
 - Michael Mundrane, CSCU
- Internet2 Trusted Infrastructure Platform
 - Director Kocsondy is co-chairing a meeting series for network connector principals across the country to further develop plans, goals, and strategies for Internet2's 'trusted infrastructure platform' helping further secure the national R&E backbone. Goals of the program are:
 - Support National and Global Research
 - Initiate National Peering and Routing Optimization
 - Deliver Network Transparency
 - Enhance Routing Integrity for the US and Global R&E space
 - Leverage Network Automation and Self-Provisioning
 - I2 convened a 2-day retreat in late March to discuss and finalize plans. Kocsondy and Derek Masseth, of Sun Corridor Network and Internet 2 board member, co-facilitated the meeting series to help bring shape to the program goals and strategies. Finalized documents are in process to share back to the Internet2 Connector Principals and community at large.

5. Enhance Core Resources

- CEN Staff
 - CEN currently has 15 full-time staff members, 3 part-time student workers, 3 contracted project specialists, and 1 special payroll.
 - Upcoming Searches
 - Network Engineer – Repost
 - Cyber Security Engineer – interviewing
 - Cybersecurity Analyst - 2 positions - interviewing
 - GIS Specialist – cancelled
 - Member Services Coordinator - candidate selected, offer pending
- In partnership with the Northeast Research and Education Network (NEREN)
 - CEN is part of a collaborative effort to connect the Massachusetts Green High Performance Compute Center (MGHPCC) to the NEREN backbone. This connectivity will help CT based researchers and their institutions by providing high throughput connectivity and access to resources at the MGHPCC and beyond. Components include:
 - Optical node install to integrate MGHPCC into NEREN fabric
 - Optical node installation in Lee, Mass on schedule to add east-west resilience to MGHPCC

- New service with Internet 2 to set up an 'Exchange' for NEREN partners to aggregate services in the region fostering collaboration and cost control.
- Status: NEREN optical node installation at MGHPCC in complete. Lee Mass node and fiber target completion in winter 2025 timeframe.
- CEN Connect (ARPA-CPF) Project Updates
 - CENConnect is a program that provides direct investment in middle-mile broadband infrastructure in support of Connecticut's municipalities, schools, colleges, universities, libraries, healthcare, open access, and cultural arts institutions, through upgrades and expansion of the CEN (<https://ctedunet.net/cen-connect/>). In addition, the program offers grant funding opportunities to attach to the CEN platform for Community Wi-Fi access to CT citizens in need. Program funding is made available as part of Governor Lamont's Connecticut Plan for the American Rescue Plan Act. Federal funding agency is the US Department of Treasury.
 - Next Generation Infrastructure (NGI)
 - Scope: Comprehensive upgrade of the CEN equipment infrastructure bringing 400G backbone and handoff options of 1G, 10G, 25G, 40G, 100G, and 400G to every member location.
 - Site survey / audit of every service location - Complete May 31, 2024
 - Network Lab / Automation / Orchestration build out – Complete
 - Optical Upgrades – 100% complete as of November
 - Packet Upgrades – 20% complete as of this report
 - 400G backbones are up between the hub and core locations.
 - Scheduling and installation of new devices at member site locations taking place now through mid 2026.
 - Connecting Connecticut's Communities Initiative (C3I)
 - Target Member Communities: Libraries, Municipalities, COGS, and Charter Schools
 - Scope: Expand network services to target members/sites with free fiber build
 - Current progress update:
 - 184 total potential participants
 - 101 commitments (signed agreements), 83 declined formally or by inactivity
 - For those who have declined, the US Treasury has approved reallocation of funds to committed participants to connect more facilities.
 - 140 additional sites requested and being assessed for eligibility against grant criteria. Currently 90 are deemed eligible and are being quoted (e.g. Community Centers, and/or other municipal facilities)
 - Community WiFi <https://ctedunet.net/cwifi/>
 - Scope: \$10M Grant funds to expand WiFi to communities in need, expand 'eduroam' adoption / use.
 - The application window for Round 1 closed on 3/13/2025
 - 15 completed and submitted applications
 - 19 towns and 34 organizations represented in the above 15
 - Total of \$2,750,000 in funding requested
 - We are finalizing the application reviews and expect award letters to go out week of 6/2/2025
 - Round 2 Application window opened April 15, 2025, and closes June 30, 2025
 - We held two additional virtual information sessions describing the program and providing an opportunity for question and answers.



- We held a workshop for grant applicants at the CEN Connect Conference
- Important timeline information
 - 6/30/2025 Round 2 application deadline, rolling reviews and awards
 - 7/1/2026 Substantial Completion for all Sub awardees
 - 9/30/2026 Close Out and Final Documentation
 - 12/31/2026 All funds fully expended and invoiced. No extensions.
- Note: US Department of Treasury and OPM approved the use uncommitted funds may be used to support the CEN Connect - NGI or C3I programs in support of 'broadband for public spaces.'