



Lessons "LEARNed": NSF CC* Grants

Mary Goldie and Amy Schultz

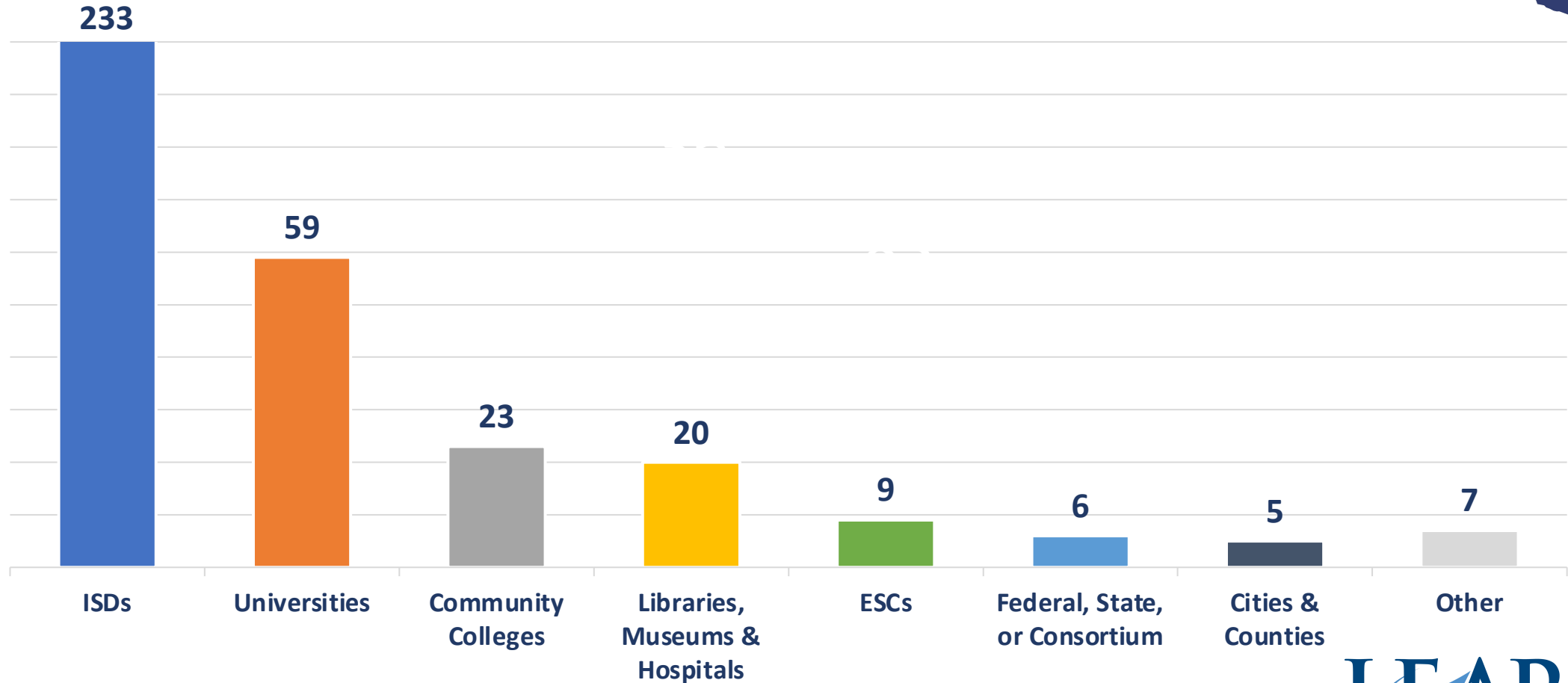
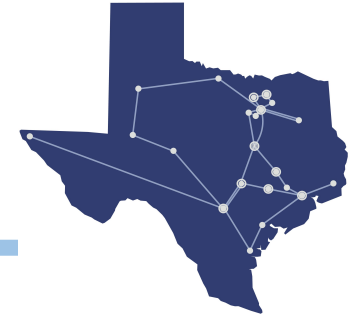
10/18/2021

Our History

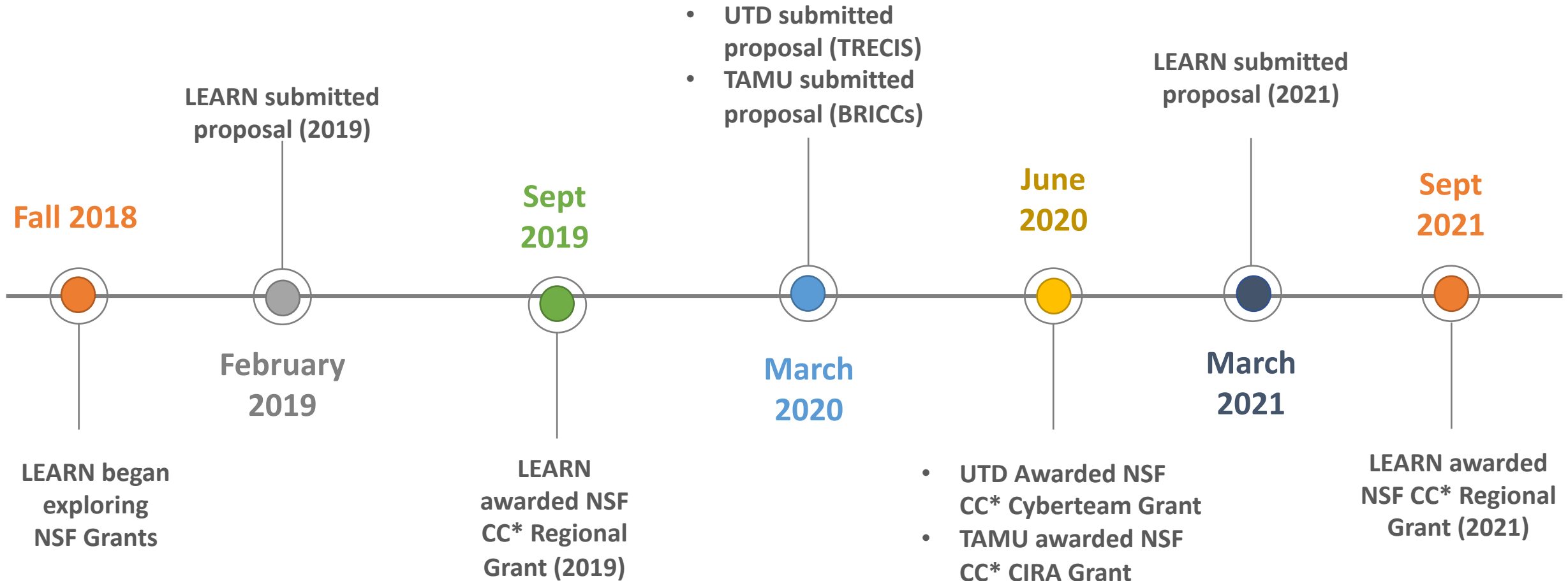


- LEARN was established in 2003 by the Texas Legislature to help build a high-speed fiber optic network for research, education, healthcare, and public entities to serve the state of Texas
- LEARN is a 501(c)3 private organization
- First passage of light on the LEARN network was between College Station and Houston in 2005

LEARN Members Served



Timeline of NSF Grants at LEARN





NSF Award #1925553



CC* Regional: Accelerating Research and Education at Small Colleges in Texas via an Advanced Networking Ecosystem Using a Virtual LEARN Science DMZ



October 1, 2019 – September 30, 2022



PI: Akbar Kara, LEARN



Co-PIs:
Ryan Fitzgerald, South Plains College
Curtis White, St. Mary's University
Amy Schultz, LEARN



\$957,000 awarded

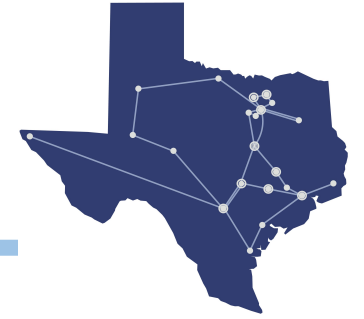


Midland College
McLennan Community College
South Plains College
South Texas College
St. Mary's University
Trinity University



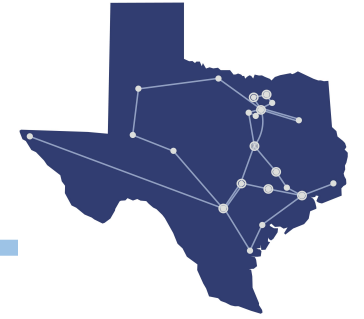
ESnet
Internet2
Texas Advanced Computing Center
The Quilt

2019 NSF Grant Achievements - Technology



- Data Transfer Nodes
- Customer Premise Equipment
- Science DMZ
- Six campuses receive R&E Connectivity/Services
 - 1G CDR on 10G burstable port
 - Peering/Caching
 - DDoS
 - Blended Commodity Internet

2019 NSF Grant Achievements - Training



3 Workshops
From National
Leaders



16 Monthly
Training Meetings
from LEARN



1:1 Training as
Needed

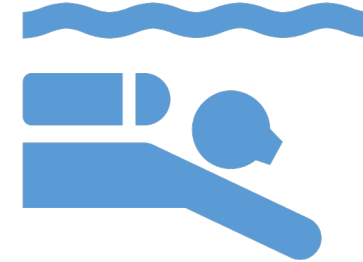
2019 NSF Grant Achievements - Outreach



5 Presentations
from Industry
Leaders



Campus
Engagement
Events



EPOC
Deep Dives
(Planned)



NSF Award #2126248



CC* Regional: LEARN Extending & Accelerating Participation in Science (Texas LEAPS)



October 1, 2021 – September 30, 2023



PI: Akbar Kara, LEARN



Trinity Valley Community College
Texarkana College
Texas Lutheran University

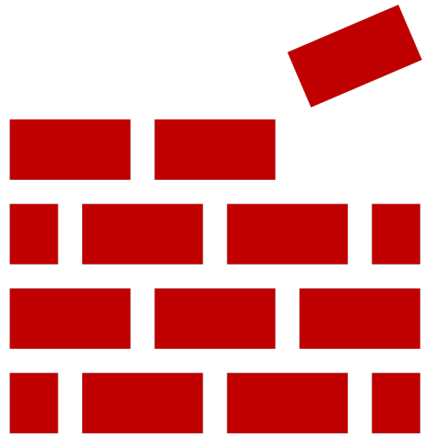
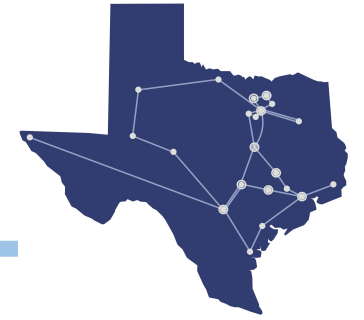


Co-PIs:
Lonie Packer, Trinity Valley Community College
Dr. Catherine Howard, Texarkana College
Amy Schultz, LEARN



\$890,000 awarded

2021 NSF Grant Planned Achievements



2019 NSF Grant

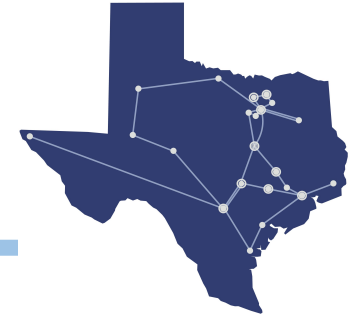
NSF CC* Award Number 1925553



2021 NSF Grant

NSF CC* Award Number 2126248

TRECIS/BRICCs Achievements



- Raise awareness of TRECIS/BRICCs grants and their resources amongst the LEARN community
 - Grants promoted on LEARN's social media, website, at LEARN Board meetings, and in LEARN's Annual Report
- Coordinate introductions between TRECIS/BRICCs and potential community partners
 - TADC
 - LEARN NSF grant participating campuses

TRECIS Achievements



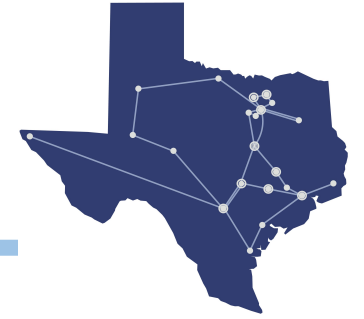
- LEARN assisted in connecting TRECIS components to the Arlington Regional Data Center (ARDC)
- In the future, LEARN will be involved with network monitoring, figuring out how to do research stack with the Kubernetes clusters, setting up a chain with dev ops tools, and Gitlab pipelines

BRICCs Achievements



- Assist with coordination for the BRICCs workshop, making connections & interviewing CIOs
- In the future, LEARN will be involved with BRICCs efforts to disseminate knowledge amongst community college groups about the NSF grant proposal process and CI-adoption strategies

Lessons "LEARNed"



- **Technical Deployment**

- 1 device for circuit termination + packet switching + performance measurement
- Original plan called for one DTN; ended up using two DTNs
- Every campus connected to LEARN at different times
- COVID-related delays

- **Training**

- Question of how to train faculty to utilize the technology
- Re-engaging faculty that provided network use cases

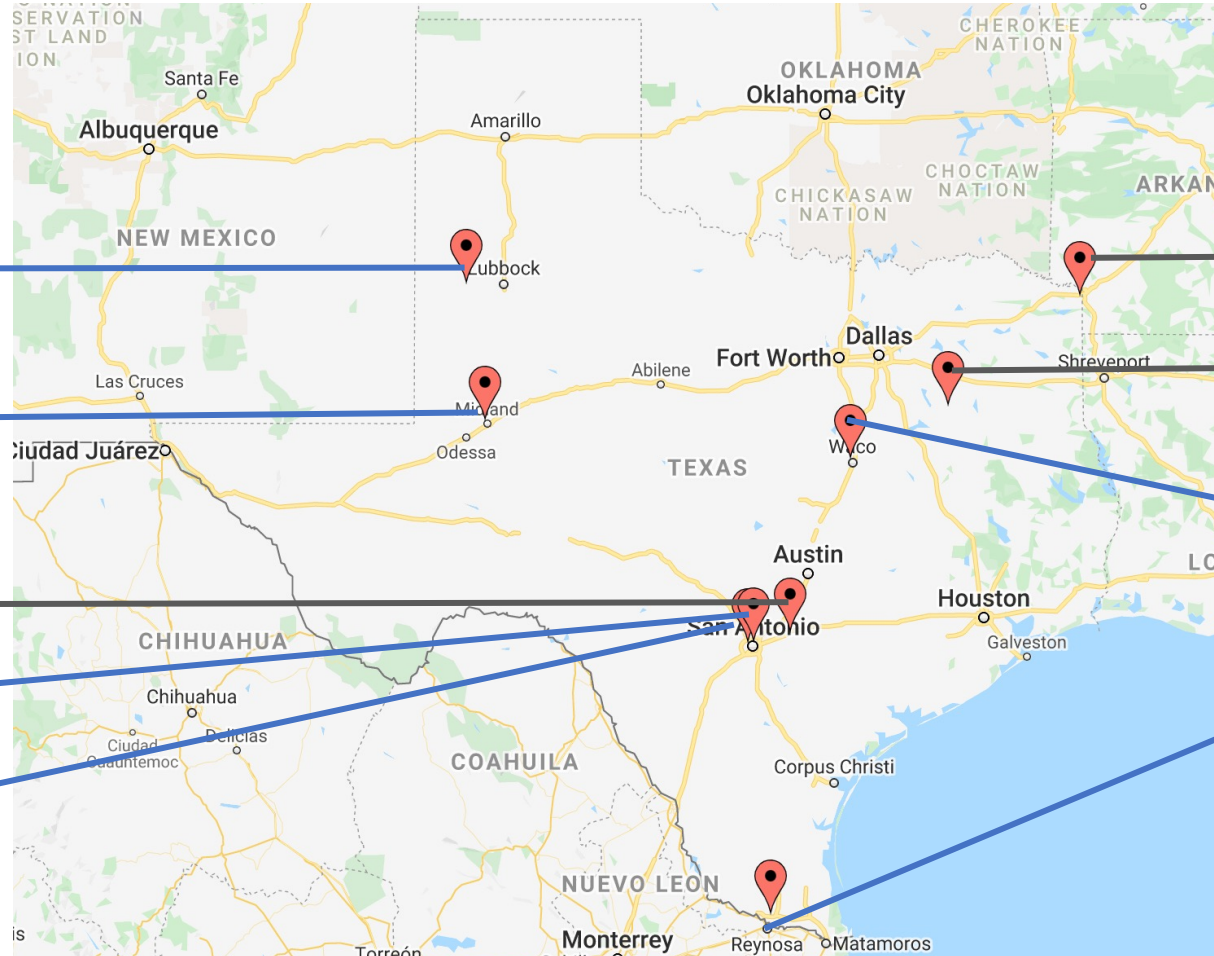
Lessons "LEARNed"



- Outreach

- Commitment to grant and involvement varied campus to campus
- COVID, inner institutional impacts to grant engagement
 - Move to virtual offerings; inability to conduct campus engagement in-person
 - Campus COVID protocols varied from institution to institution
- IT and faculty departments not aligned

Grant Participating Institutions



South Plains College

Texarkana College

Midland College

Trinity Valley Community College

McLennan Community College

Texas Lutheran University

Trinity University

South Texas College

St. Mary's University

LEARN CONFIDENTIAL

2019 Participating Campuses (NSF Award 1925553) 2021 Participating Campuses (NSF Award #2126248)



Thank You!

Amy Schultz

Chief Relationship & Engagement Officer

LEARN

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Mary Goldie

Manager of Administration Membership and Outreach

LEARN

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