OLD DOGS CAN LEARN NEW CONNECTIONS

INFRASTRUCTURE IMPROVEMENTS FOR LONG TERM SUSTAINABILITY
Vision for the future
Dan Endries, Ciena-- Moderator

Jarred Masterson, East Central BOCES

Denise Atkinson-Shorey, e-Luminosity
WHO IS EAST CENTRAL BOCES?

ECBOCES STAKEHOLDERS

• 20 School Districts
• Eastern Plains
• Size From 100 Students – 3,000 Students Each
• 4 Day School Week – Long Transportation
• Starts 30 miles east of Denver, runs 140 miles to Kansas border
• Approx. 15,000 sq miles
EAST CENTRAL BOCES HISTORY

- Background 20 Years Of Fiber
- Rural And Remote
- Distance Learning
  Teleconferencing
- Grants
- Partnerships
- Initial Service Level Agreement
  --Grad Students In A Jeep
EAST CENTRAL BOCES
LEGACY NETWORK

- 1 Gig Backbone
- IRU for Back Haul expiring
- Equipment 15 years old
- Some connections wireless
- Operator no longer in business
GROWING NEED AND LIMITED CAPACITY

- District Needs Increasing
- Network Speed Limited
- Contracts Expiring
- Operator Leaving
- Funding Decreasing
THE DECISION TO UPGRADE
A FRESH APPROACH

- New Application Process
- New Funding Options
- Looking For New Partners
- Minimize District Impacts
THE DECISION TO UPGRADE
TECHNICAL CONSIDERATIONS

The First Attempt
Engineering
Full Fiber
Higher Capacity Optics
THE DECISION TO UPGRADE FUNDING

New Interest from Providers
The Price Tag
Match Funding From Districts
E-rate Denial
REGROUP AND TRY AGAIN

- Adjust Based On Learnings
- Dark Fiber Lease
- New Optics (100GE)
- Grant Match
- Erate - Successful Approval
CURRENT NETWORK

- 100 Gig Backbone
- 10G to remote districts
- 1G lit services
PARTNERS

Fiber – AES, Plains Tel
Lit Services – ESRTA
Backbone – CDOT
Funding Match – BEST
Funding – E-rate
Optics And Network Operations – Ciena
Consulting – e-Luminosity
Support And Financing Assistance – Telamon
WHAT THE FUTURE CAN BRING?

District Opportunities

• Remote Learning For Students
• Improved Cloud Services
• Reliability, Security And Options For Growth

Community Partnerships

• After School Services For Students
• Opportunity For Local Community
• Economic Growth In The Region
CONTACT INFORMATION

Dan Endries  Dendries@ciena.com
Jarred Masterson  Jarredm@ecboces.org
Denise Atkinson-Shorey  Denise.Shorey@e-luminosity.net