

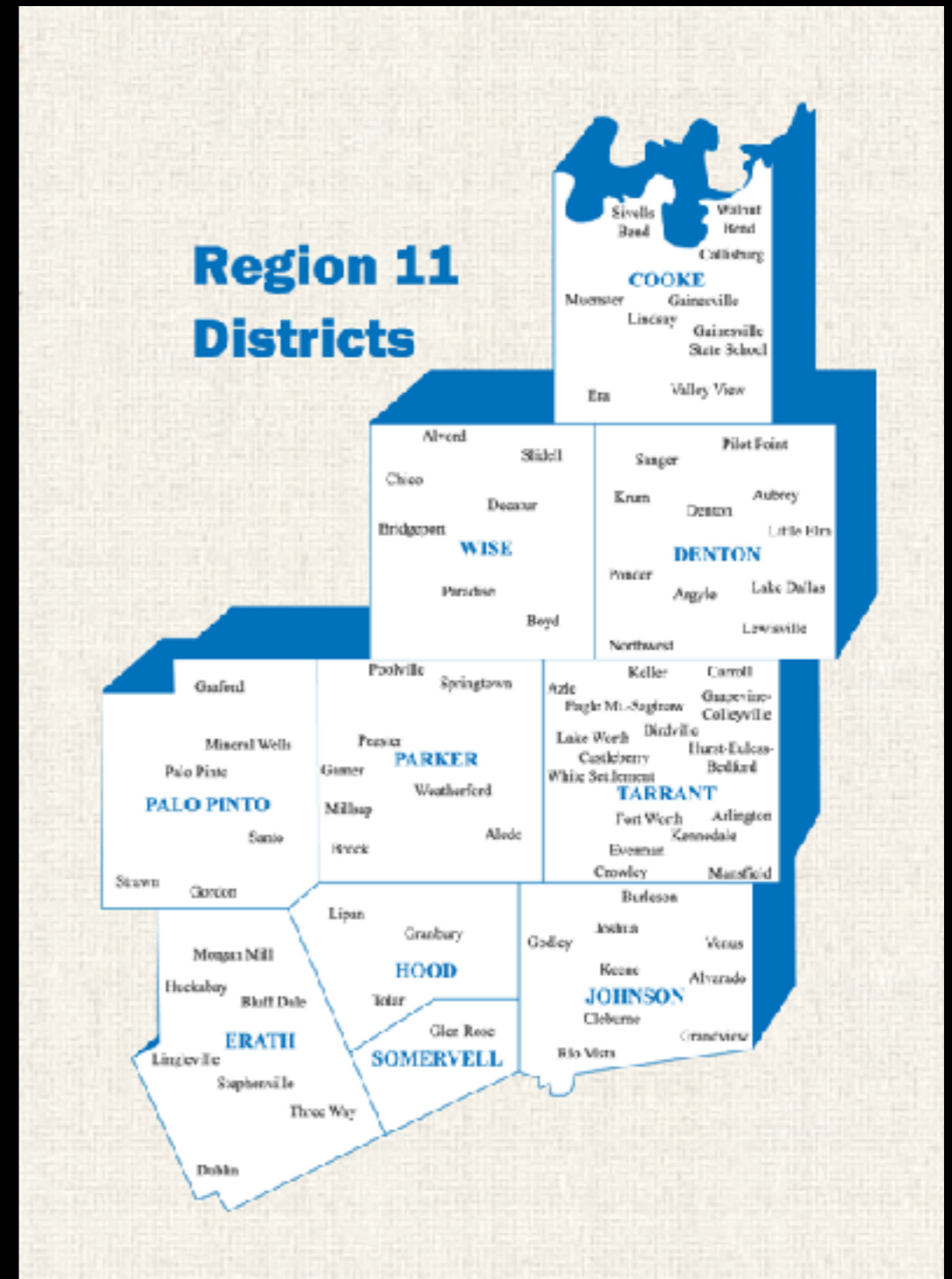
# FIBER II

Fiber Infrastructure for Broadband Enhancement in Region I I

ESC Region I  
August Technology Meeting  
Edinburg, Texas

# Who Is ESC 11?

- 10 Counties
- 77 School Districts (ISDs)
- 70+ Charters
- Roughly 600,000 Students
- Smallest - 40 Students
  - Bluff Dale
  - Three Way
  - Sivells Bend
- Largest - 80K Students
  - Fort Worth
  - Arlington
  - Denton
- **69%** Discount per E-Rate

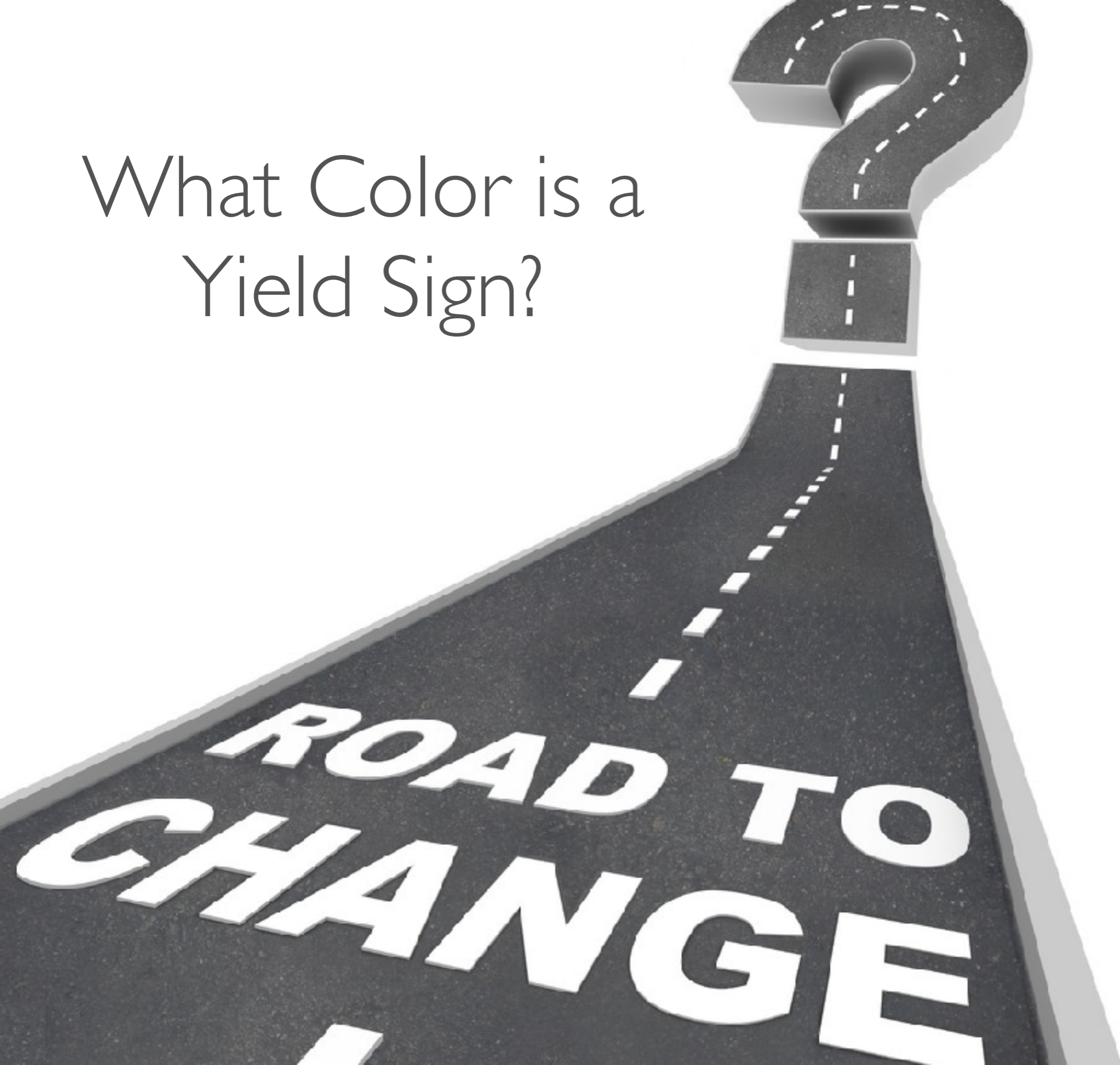




# WHY?

SB507 Storage  
Shared Services

What Color is a  
Yield Sign?



# What Color is a Yield Sign?



In road transport, a **yield** or give way **sign** indicates that each driver must prepare to stop if necessary to let a driver on another approach proceed. A driver who stops or slows down to let another vehicle through has yielded the right of way to that vehicle.

[Yield sign - Wikipedia](#)

[https://en.wikipedia.org/wiki/Yield\\_sign](https://en.wikipedia.org/wiki/Yield_sign)



[www.trafficsign.us](http://www.trafficsign.us)

ROAD TO  
CHANGE

# What Color is a Yield Sign?



Early design (1950-1956)



Second version (1956-1961)



Third version (1961-1971)



Modern design as agreed to in 1971

ROAD TO CHANGE



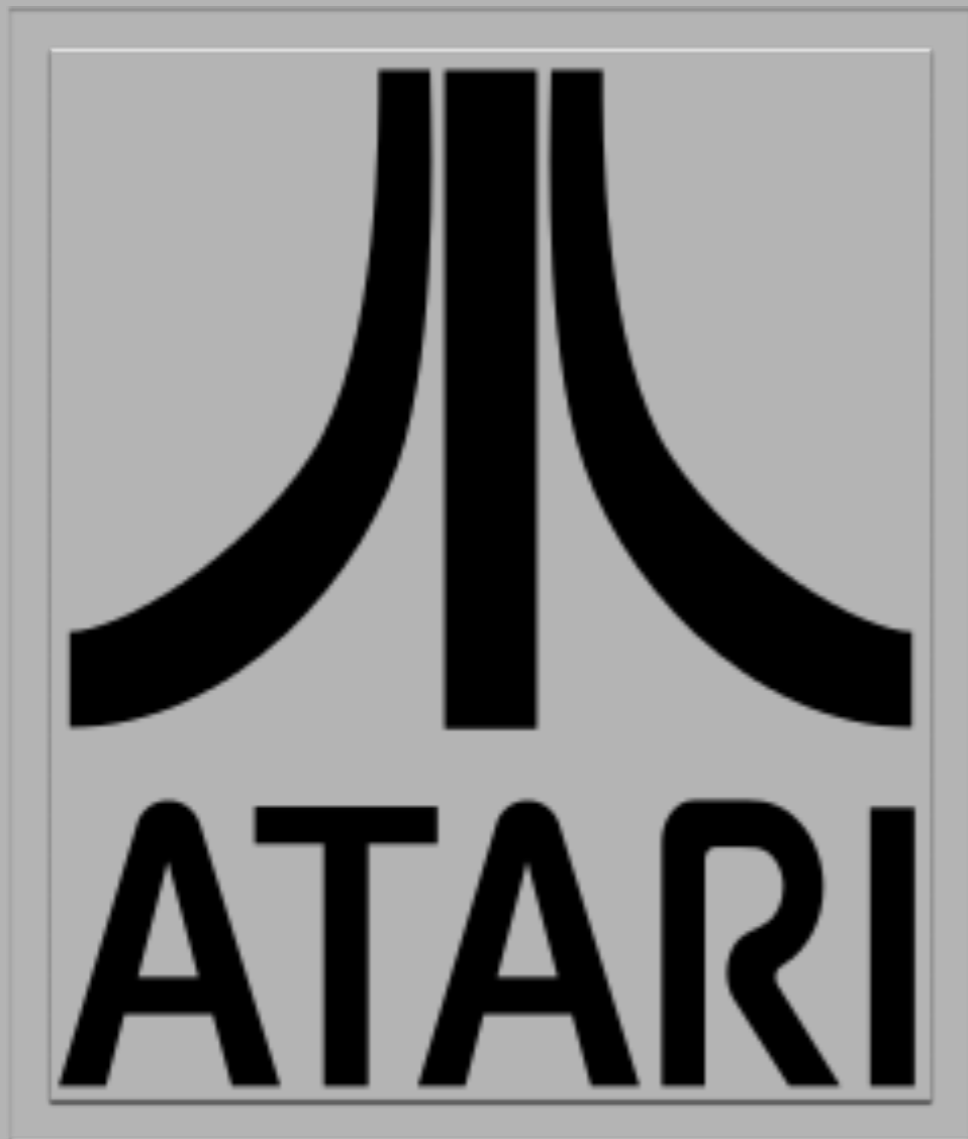
# OUR APPROACH

## OPTION 1

Circuits, Limitations  
EASY, COMMON

## OPTION 2

Dark Fiber, Flexibility  
HARD, UNKNOWN



“Everyone who’s ever taken a shower has an idea. It’s the person who gets out of the shower, dries off and does something about it who makes a difference.”

-Nolan Bushnell,  
Inventor of Atari and Chuck E Cheese

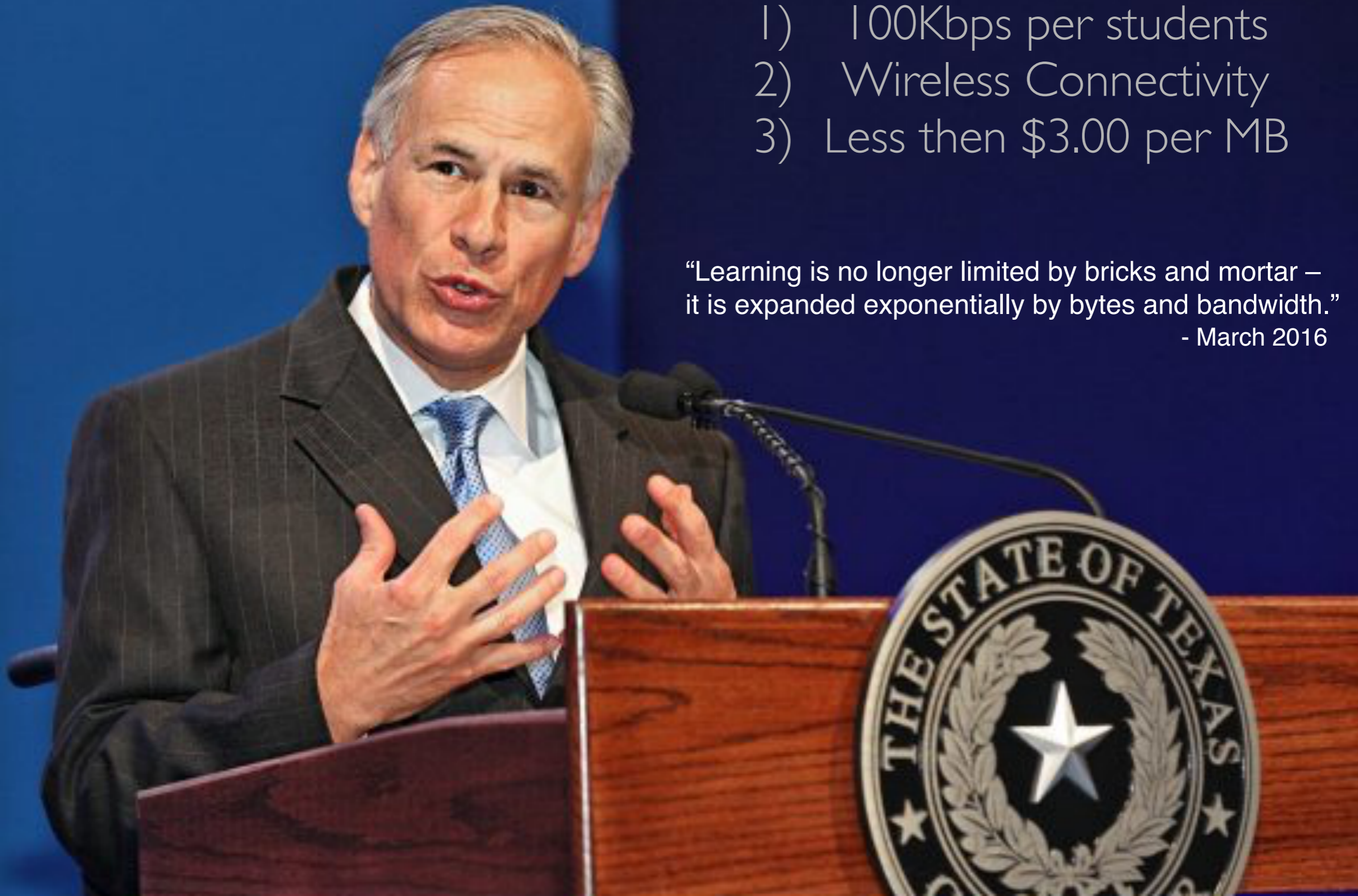


# Classroom Connection Initiative

- 1) 100Kbps per students
- 2) Wireless Connectivity
- 3) Less then \$3.00 per MB

“Learning is no longer limited by bricks and mortar – it is expanded exponentially by bytes and bandwidth.”

- March 2016



# ASSEMBLE THE TEAM

Chemical Engineers  
(VST Services)

Candy Shop  
(Education Superhighway)

ESC Staff

ESC Staff

ESC Staff

ESC Staff

ESC Staff

ESC Staff



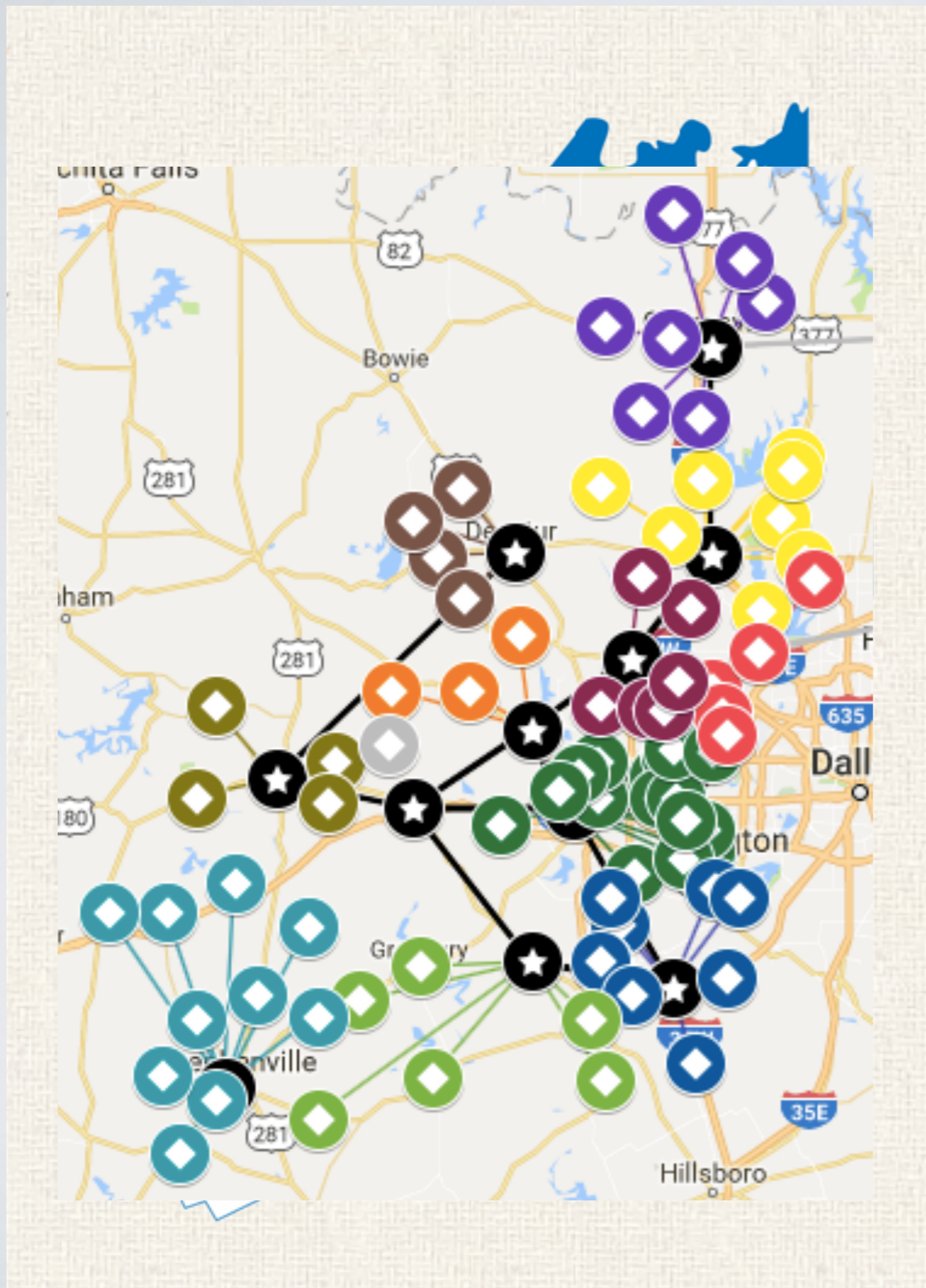
Ninjas  
(OneTel/Zayo)

Rocket Scientists  
(Cisco/Netsync)

Mad Scientists  
(Districts)

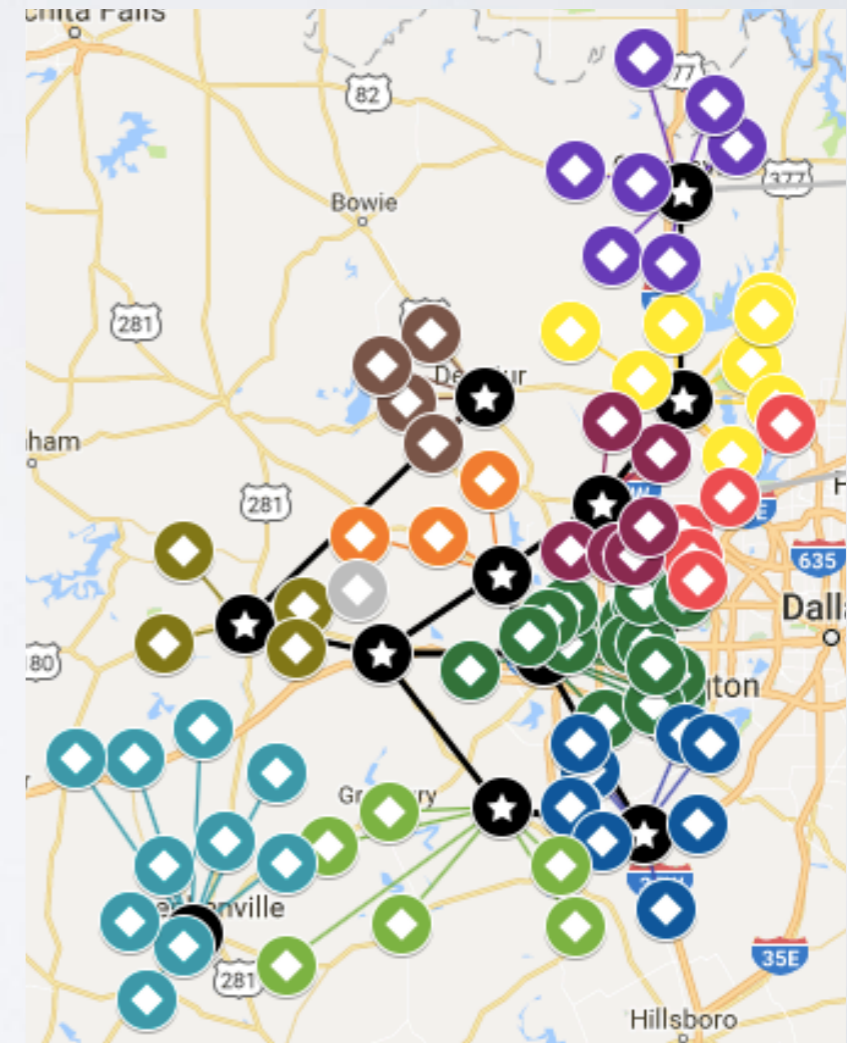
# FIBER I | Results

- 100Gb Backbone
- 10Gb Connections
- 11+ Hub Sites
- 53 Districts (Phase I)
- 200Gb Internet Access



# FIBER | Costs

- Special Construction for Dark Fiber
- Core and Hub Site Equipment
- End Point Equipment
- Monthly Recurring Charges for Fiber
- Monitoring Equipment/Services
- Managed Services
- Project Management
- E-Rate Services



# FIBER | | Costs

|                      |     |                                      |
|----------------------|-----|--------------------------------------|
| \$ 21,000,000        | -   | Special Construction for Dark Fiber  |
| 3,500,000            | -   | Core and Hub Site Equipment          |
| 640,000              | -   | End Point Equipment                  |
| 300,000              | -   | Monthly Recurring Charges for Fiber  |
| 75,000               | -   | Monitoring Equipment/Services        |
| 215,000              | -   | Managed Services                     |
| 100,000              | -   | Project Management                   |
| <u>+ 80,000</u>      | -   | E-Rate/Legal Services                |
| <b>\$ 25,910,000</b> |     |                                      |
| \$ 17,753,700        | 69% | E-Rate Eligible Discount             |
| 2,100,000            | 10% | State Match for Special Construction |
| <u>2,100,000</u>     | 10% | FCC to Match State                   |
| \$ 21,953,700        |     | <i>Total Discount</i>                |

**\$3,956,300 Total Buildout and Year 1**  
**\$238,700 Year 2+**

*\$238,700 Year 2+*

# FIBER II

Fiber Infrastructure for Broadband Enhancement in Region I I

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August Technology Meeting  
Edinburg, Texas

# FIBER |

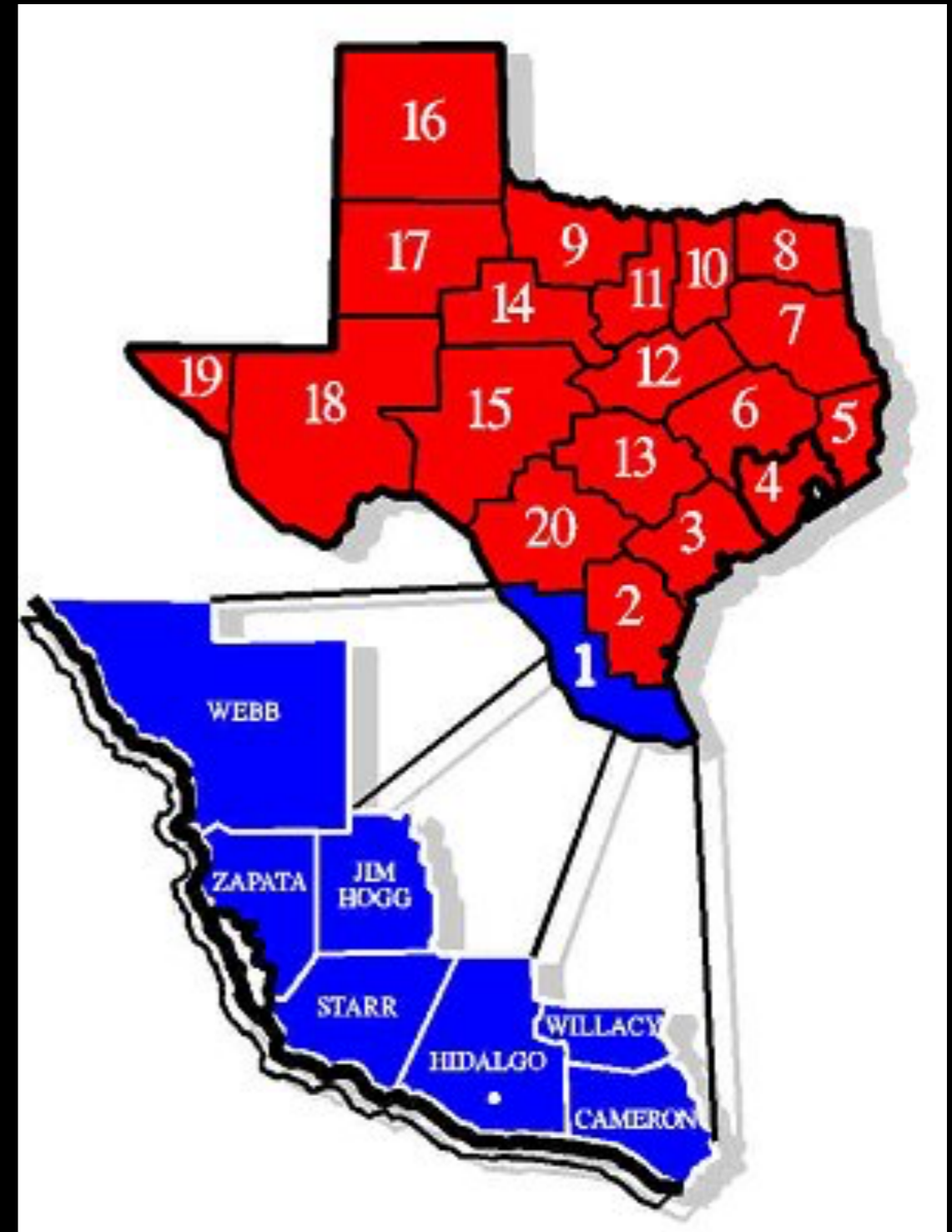
Fiber Infrastructure for Broadband Enhancement in Region I



ESC Region I  
August Technology Meeting  
Edinburg, Texas

# Who Is ESCI?

- 7 Counties
- 37 School Districts (ISDs)
- Roughly 425,000 Students
- Smallest - 250 Students
  - San Isidro
  - Webb
  - San Perlita
- Largest - 49K Students
  - Brownsville
  - United
  - Edinburg
- **89%** Discount per E-Rate





# FIBER | Costs

|                      |   |   |
|----------------------|---|---|
| \$ 21,000,000        | - | Special Construction for Dark Fiber       |
| 3,500,000            | - | Core and Hub Site Equipment               |
| 640,000              | - | End Point Equipment                       |
| 300,000              | - | Monthly Recurring Charges for Fiber       |
| 75,000               | - | Monitoring Equipment/Services             |
| 215,000              | - | Managed Services                          |
| 100,000              | - | Project Management                        |
| <u>+ 80,000</u>      | - | E-Rate/Legal Services                     |
| <b>\$ 25,910,000</b> |   |   |
| \$ 22,899,700        |   | 89% E-Rate Eligible Discount              |
| 1,155,000            |   | 5.5% State Match for Special Construction |
| <u>1,155,000</u>     |   | 5.5% FCC to Match State                   |
| \$ 25,209,700        |   | <i>Total Discount</i>                     |

**\$700,300 Total Buildout and Year 1**  
**\$84,700 Year 2+**

*\$84,700 Year 2+*



Direct Connections

Google, Microsoft, Amazon, etc.

Shared Services

Storage, Resources, Co-Location

Statewide Connectivity

Working with LEARN Network

Disaster  
Recovery

Phone

Wireless

Virtual  
Desktops

**WHAT  
ELSE  
CAN WE  
DO?**

# THE PROCESS

June 19 – August 1, 2017

Verify/Confirm Participation & Termination Address

Send Address Forms to Districts

August 1 – September 1, 2017

Prepare RFP Document – IA, Fiber, Network Eqpt

August 1, 2017

Create Region Consortium Entity Number

Send Letter of Agency Documents to Districts

September 1, 2017

District TAC Meeting Presentation – Estimated Cost

September 1-31, 2017

Districts add Consortium to E-Rate EPC Profile

October 1, 2017

Submit RFP

December 1-31, 2017

Review and Evaluate RFP Responses

January 1-31, 2018

Award Contracts

January 1-31, 2018

Update Member Districts with Final Cost Structure

GO/NO GO DECISION

# THE PROCESS

February 1 – April 1, 2018

Review and Prepare FCC Form 471

May 1, 2018

Submit FCC Form 471 (FY 2018)

June 1 – December 31, 2018

FCC Form 471 Review Process

January 1 – March 31, 2019

Estimated Approval Time Frame

April 1, 2019

Begin Implementation

May 1, 2019

Submit FCC Form 471 (FY2019) – MRC +  
any New District Adds

July 1, 2019

Begin Invoices to Member Districts

June 30, 2020

Complete Implementation