

May 2018

# Minnesota K-12 Connect Forward Initiative

Broadband Task Force Meeting



# Agenda

- 1** Initiative Progress + Highlights (25 min)
- 2** ESH + Federal Outlook (10 min)
- 3** K-12 Connect Forward Priorities (25 min)



# Progress + Highlights



# Background



House Senate Joint Schedules Legislators Committees Bills Law Multimedia Publications

THE OFFICE OF THE REVISOR OF STATUTES

Retrieve by number Statutes Statutes Laws Rules Court Rules Constitution Revisor's Office Search Law by Keyword

2017 Minnesota Statutes > ECONOMIC DEVELOPMENT AND PLANNING > Chapter 116J > Section 116J.39

116J.391

## 2017 Minnesota Statutes

116J.39 OFFICE OF BROADBAND DEVELOPMENT.

Statute 116J.39 charges the Office with reporting on:

*"information gathered from schools, libraries, hospitals, and public safety facilities across the state, determining the actual speed and capacity of broadband currently in use and the need, if any, for increases in speed and capacity to meet current or anticipated needs"*

## Questions we are trying to answer:

- What are K-12 schools currently buying and using for broadband connections?
- Are there gaps between what they need and what they have?
- Are we fully utilizing E-Rate funds?
- What role does the state TEA program play?
- Are our districts getting fair pricing?
- Are schools set for future needs?



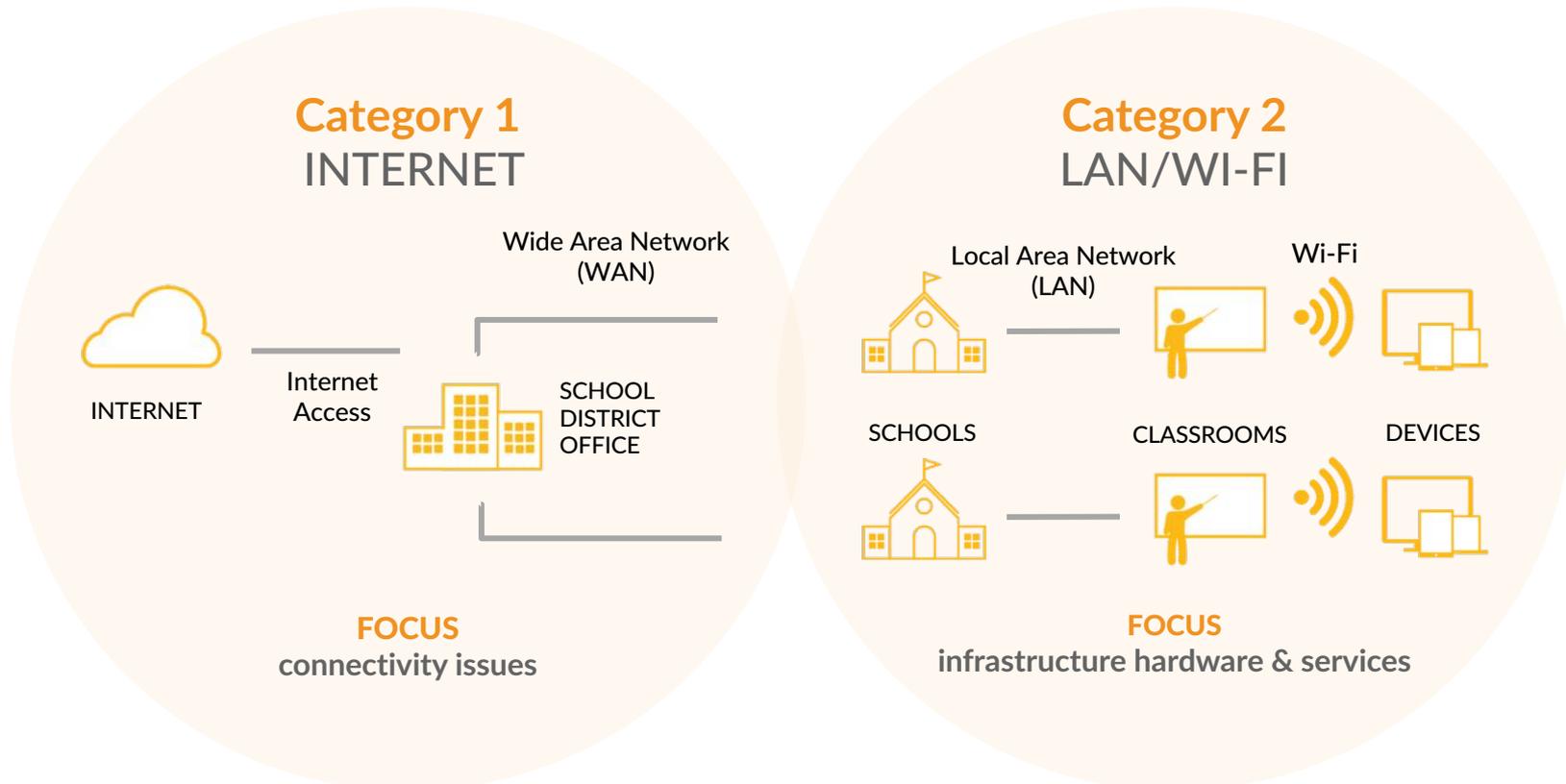
## K-12 Connect Forward Goal

To ensure that all students in Minnesota have access to scalable infrastructure, high-speed affordable bandwidth, and ubiquitous Wi-Fi for digital learning.

## Overview of E-rate

- ▶ The E-rate program is operated by the Universal Service Administrative Company (USAC) under the FCC
- ▶ \$3.9 billion is available annually for schools

E-rate funds K-12 broadband connectivity & infrastructure:



# E-rate Adoption

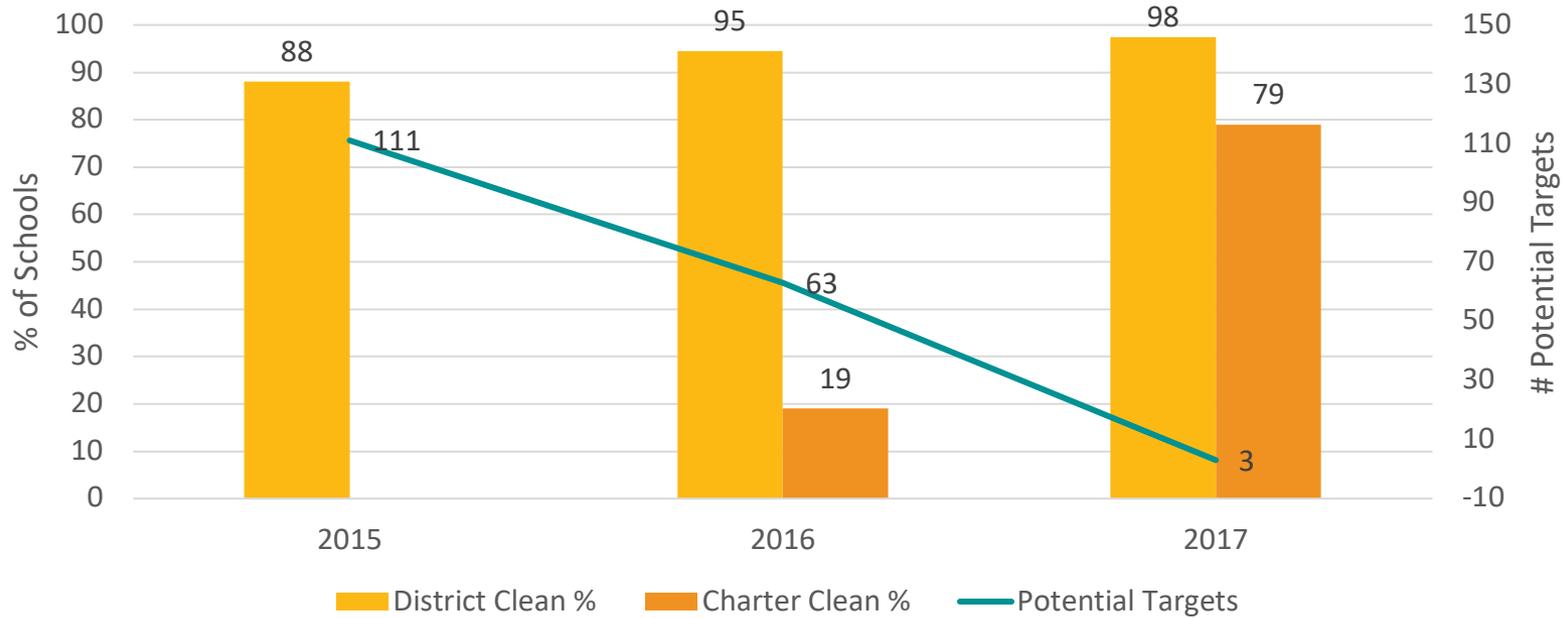
*FY2017 E-rate Applicants Across the United States*



<https://www.fundsforlearning.com/docs/2018/01/2017%20-%20E-rateTrendsReport.pdf?trends=2017trendsprt>

# Data Collection & Clarification

PRELIMINARY DATA



## Data Collection Methods

- ▶ E-Rate applications (Form 471)
- ▶ District surveys
- ▶ METN working group + direct calls with consortia
- ▶ MN Charter School Association outreach + survey

# Data Transparency: Price and Need



Upgrade Support

Compare Prices

Tools & Resources

State of the States

How me districts served by a specific provider State: Minnesota

Share List of Districts About the Data ? FAQ

FILTER BY: Service Provider: Start typing name... CAT1 470 Filed (112) Contract expiring 6/30/18 - 6/30/19 (267)

**42 school districts in Minnesota need bandwidth or fiber upgrades**

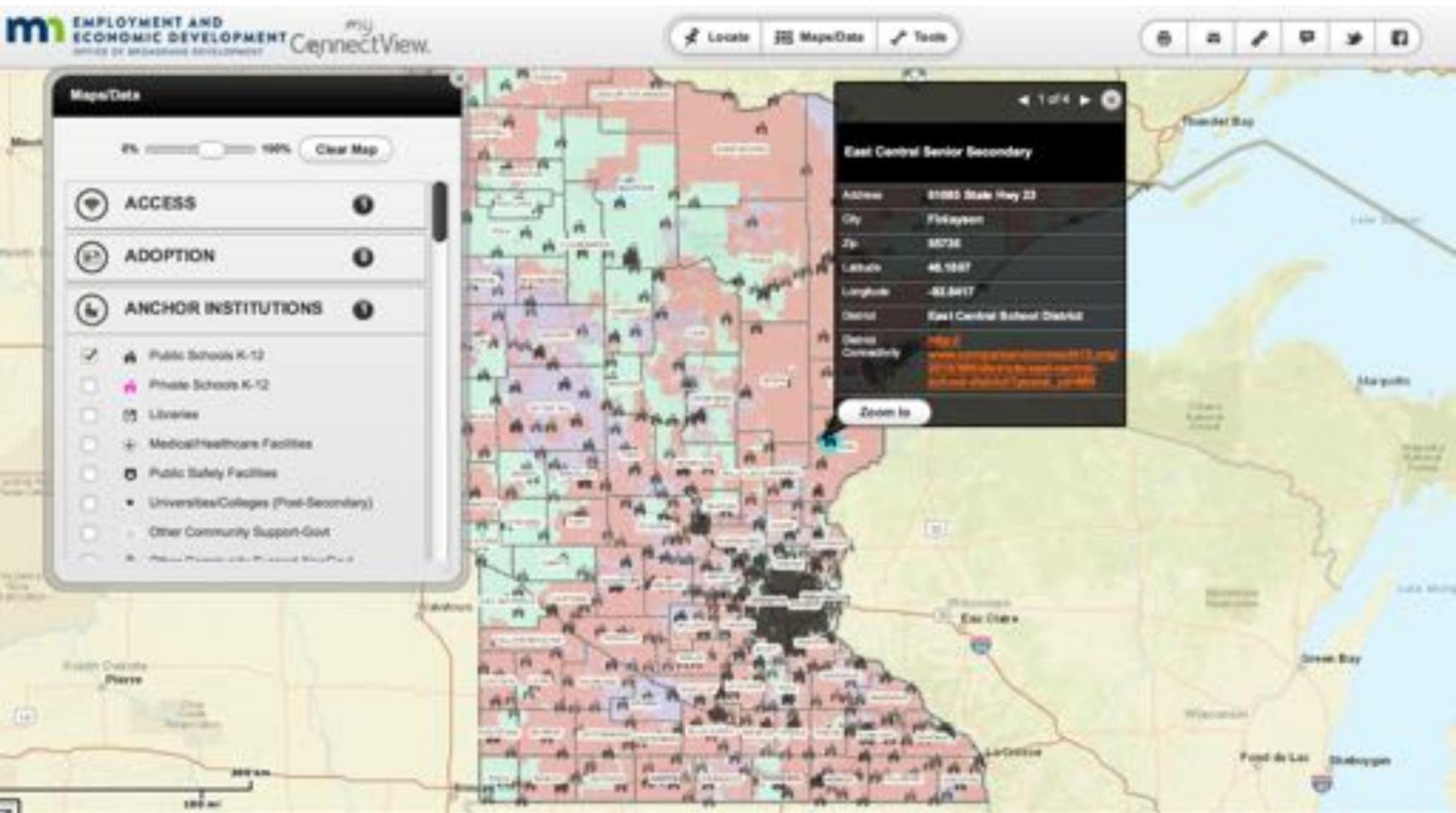
To make digital learning possible, the school districts on the map with yellow markers need a fiber upgrade or need to be upgraded to at least 100 kbps per student or 25 Mbps total bandwidth.



© Mapbox © OpenStreetMap Improve this map



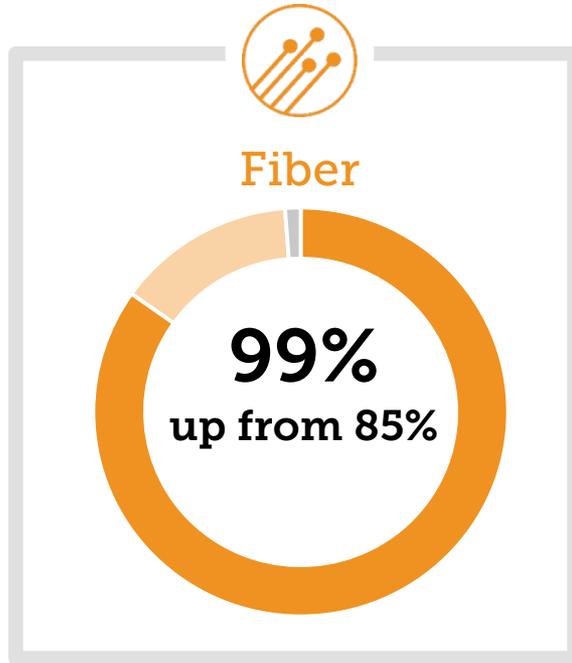
# Minnesota Broadband Maps



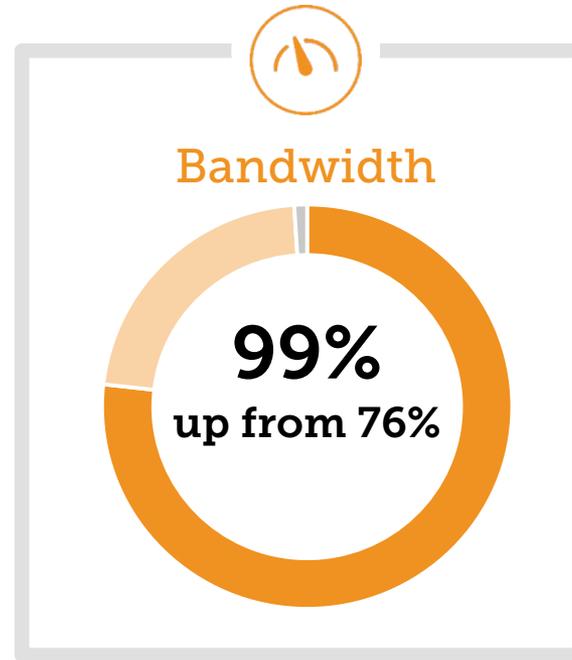
# Minnesota K-12 Connectivity

PRELIMINARY DATA

 % in 2015  
 % in 2018\*



Connect all schools to scalable infrastructure.

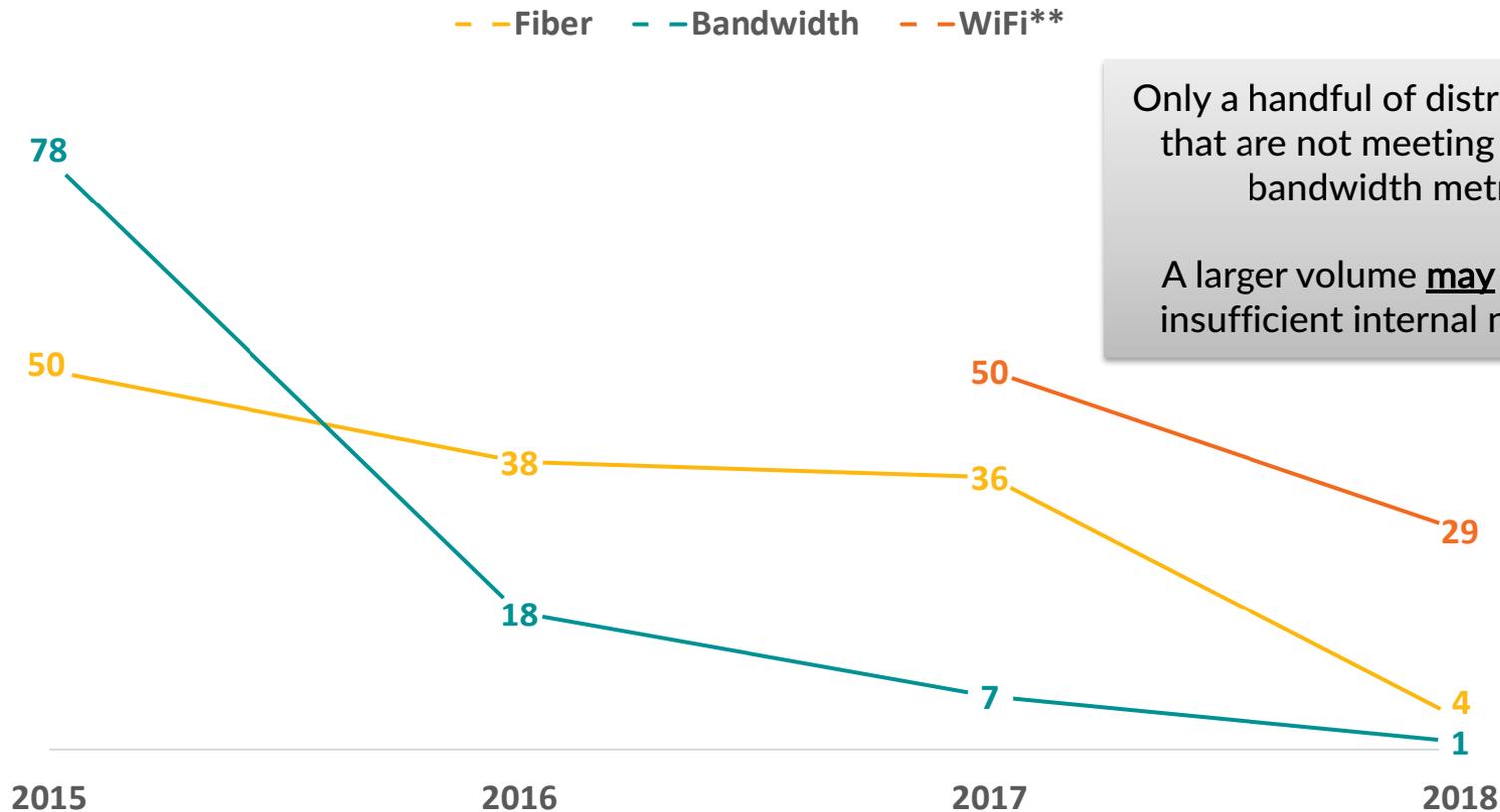


Help districts cost-effectively obtain enough bandwidth to at least meet the FCC-adopted minimum goal of 100 kbps per student.

\* 2018 data is an estimate based on preliminary review of this year's Form 471

# Minnesota School Districts are Closing the Gap

PRELIMINARY DATA



Only a handful of districts remain that are not meeting fiber and bandwidth metrics.

A larger volume may still have insufficient internal networks.

\* 2018 data is an estimate based on preliminary review of this year's Form 471

\*\* Number of districts with Wifi need represents districts that have not used Category 2 funds. Data not measured prior to 2017 E-rate cycle

# SWWC Consortium Fiber Upgrade

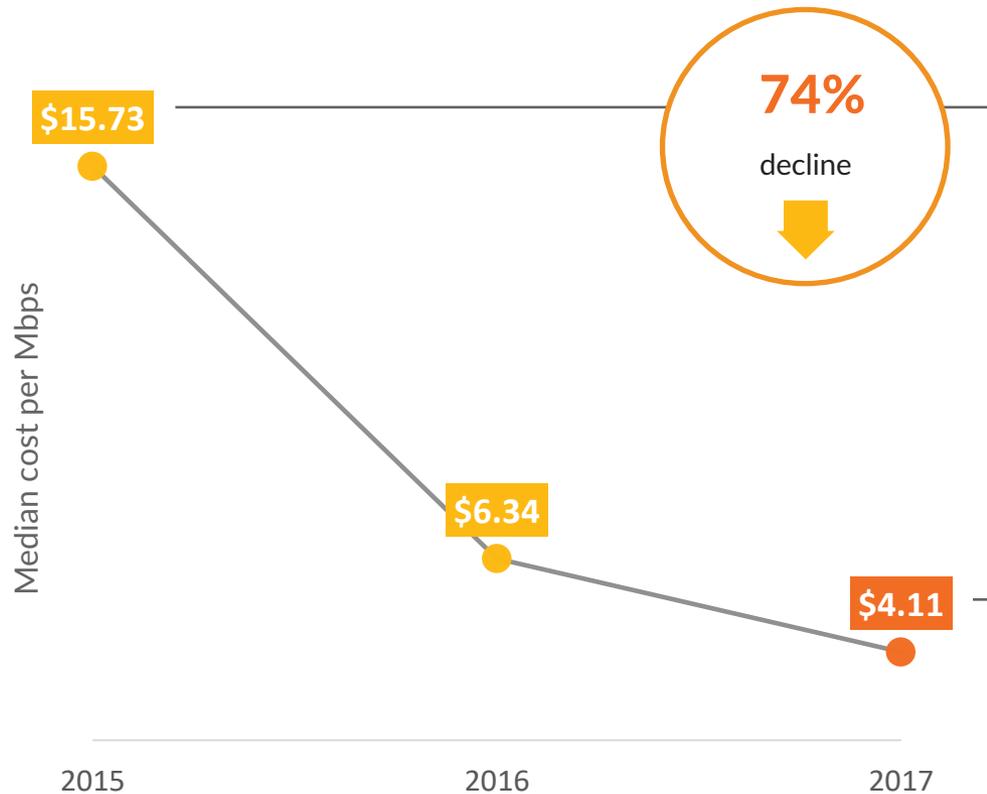
- ▶ 30+ school districts in the SWWC consortium represented nearly 100% of schools in the state with non-fiber connections
- ▶ Consortium ran successful procurement to upgrade all schools to fiber with local provider, SDN

## Upgrade impact:

	Before	After
<b>Technology</b>	Microwave	Fiber
<b>Avg. Bandwidth per District</b>	100 Mbps	1 Gbps
<b>Avg. Cost/Mbps</b>	\$18.40	\$1.40



# Broadband Affordability



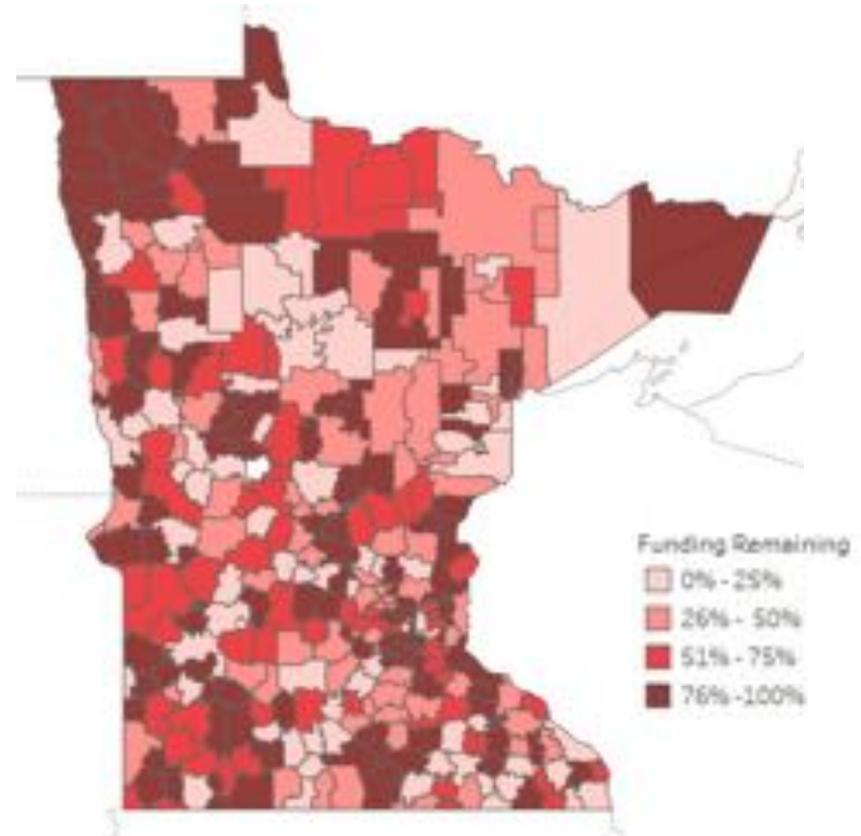
## To maintain momentum:

- ▶ Provider awareness
- ▶ Consortia support
- ▶ Data transparency

\* Price benchmarks were chosen because at least 30% of school districts nationally were purchasing those circuits at those prices in 2015

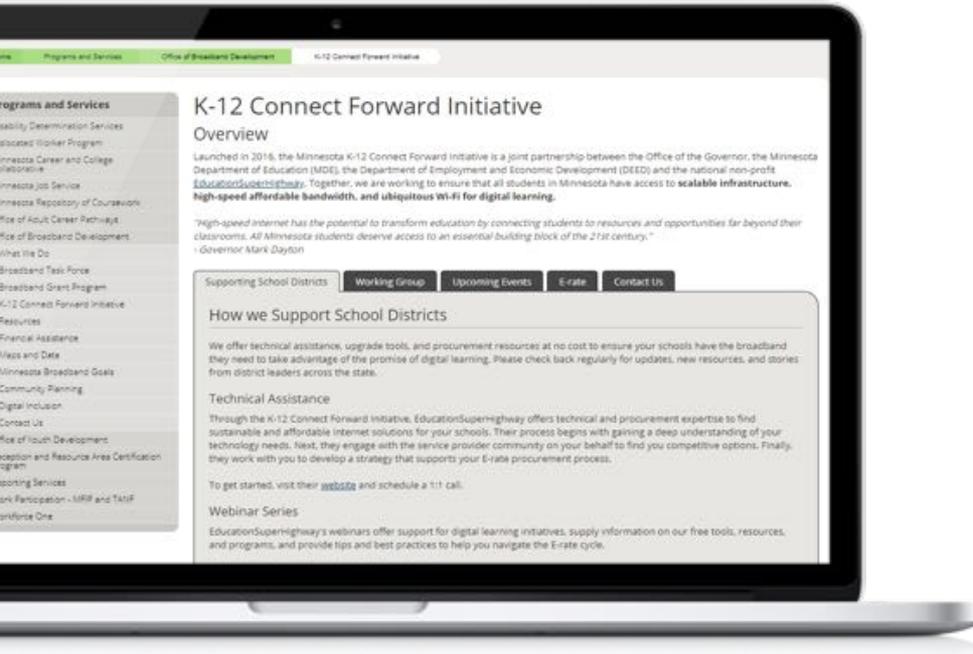
## Category 2 Support

- ▶ Identified districts that had **100% Category 2 funds remaining**
- ▶ Launched **marketing campaign** and conducted **targeted outreach** to build awareness of funding and eligible services
- ▶ Held 1:1 consulting calls with districts needing additional support to develop an **upgrade and procurement strategy**

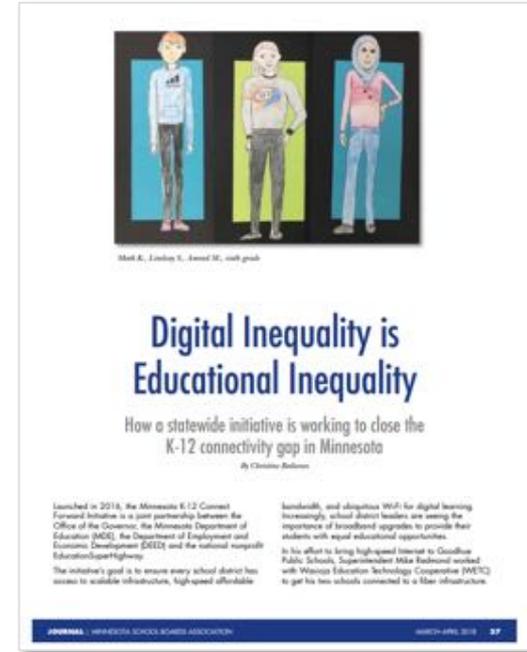


# Marketing and Communications

## K-12 Connect Forward Website



## MSBA Journal Feature



## Social Media Kit



## Charter School Survey

### Minnesota Charter School Broadband Survey

The Minnesota K-12 Connect Forward Initiative is continuing its support to MN K-12 schools in upgrading their Internet access for digital learning. The Initiative is a coordinated effort between the Office of the Governor, the Minnesota Department of Education (MDE), the Department of Employment and Economic Development (DEED) and the national non-profit EducationSuperHighway.



# ESH + Federal Outlook



## **ESH is on track to complete our mission by 2020**

**By 2020, all schools will have access to high speed Internet so that they can realize the promise of digital learning**

In the next two years, how can we ensure that:

- Schools continue to receive adequate funding through E-rate
- Schools have support to take action as digital learning needs evolve
- Schools have access to affordable and scalable broadband

## E-rate modernization has made digital learning a reality



**35.2 M**

More students gained access to the broadband they need in the last 4 years



**88%**

Of school report having sufficient Wi-Fi in their classrooms



**78%**

Decline in the cost of Internet access in K-12 schools

*But we still have work to do.*

**2,049** schools still need fiber

Bandwidth needs are growing 50% year over year in districts using digital learning. **Fiber is the only technology that can support this growing demand.**

# Red tape has led to delays and denials of fiber projects

DELAYS & DENIALS: 2016 AND 2017

Only  
**3** out of **279**  
 Fiber projects received  
 decisions by the Sep. 1 target  
 date in 2017

Fiber projects are

**7x**  
 more likely to  
 be denied

**56%**  
 of all denials were  
 for reasons without merit

Over  
**750K**  
 students  
 impacted

### See which schools in your state are impacted

66 applicants have had fiber projects unfairly denied

<b>Alabama</b> Dale County School District Tallapoosa City Board of Education	<b>Kansas</b> Haskell Unified School District 391 Kansas City Unified School District 500 Topeka Unified School District 507	<b>New Mexico</b> Bernalillo Public Schools Central Consolidated School District 22 Farmington Municipal School District 5
<b>Arkansas</b> Salton Public School District	<b>Massachusetts</b> Duxbury Public School	<b>New York</b> Rhinebeck Central School District
<b>Arizona</b> Douglas Unified School District 37 Maricopa Consolidated School District 10 Scottsdale Unified School District 5 Superior Unified School District 16	<b>Maryland</b> Calvert County Public Schools	<b>Ohio</b> Loudonville-Perryville School District
<b>California</b> Cerritos Consortium For Education Network IndioNet in California Los Angeles Unified School District Marinanna County Unified School District Florida Elementary School District	<b>Michigan</b> Saginaw Consortium Hamtramck Public School District Huron Valley School District Kalamazoo Public School Kent ISD Consortium Madison School District South Lyon-Canton School District	<b>Oklahoma</b> Norman School District
<b>Florida</b> School District Of DeSoto County	<b>Minnesota</b> Edina School District 36	<b>Oregon</b> Beaverton School District 48 Harney Education Services District
<b>Georgia</b> Dawson County School District Dunwoody Dunwoody School District	<b>Missouri</b> Berthou School District 024 Rockwell School District	<b>Pennsylvania</b> Carlisle Area School District
		<b>Texas</b> Orangehead Lone Star Independent School District Drowning Springs Independent School District Freer Independent School District Wylie Independent School District

### Who is being delayed and denied?

Red tape is stalling classroom connectivity across the country and the negative impact is ultimately felt by teachers and students.

This has impacted more than **750,000 students** across **32 states**

September 1<sup>st</sup> is the target date set by the FCC for USAC to issue funding decisions



# K-12 Connect Forward Priorities 2018 and beyond



**Moving forward**, what is essential to ensuring that all Minnesota students have the infrastructure they need?

## Some critical success drivers

### Data

Robust data on school level connectivity and cost can help various stakeholders in planning, procurement and policy (consortia, TEA, B2B, etc.)

### Consortia

School districts across the state have received a range of services and supports from consortia for over 20 years. What can be done to ensure that schools continue getting support with upgrades moving forward?

### Charters, BIE and other entities

About 50% of charter schools leverage E-rate today. Bureau of Indian Education (BIE) schools, libraries and other educational entities are also E-rate eligible.

### State Support

K-12 Connect Forward has partnered MDE, DEED, METN and other groups towards a common vision to ensure that all schools have the connectivity they need for digital learning. The state provides funding through Telecommunications Equity Aid (TEA) to help districts with connectivity. What are the right supports moving forward?

### Other?

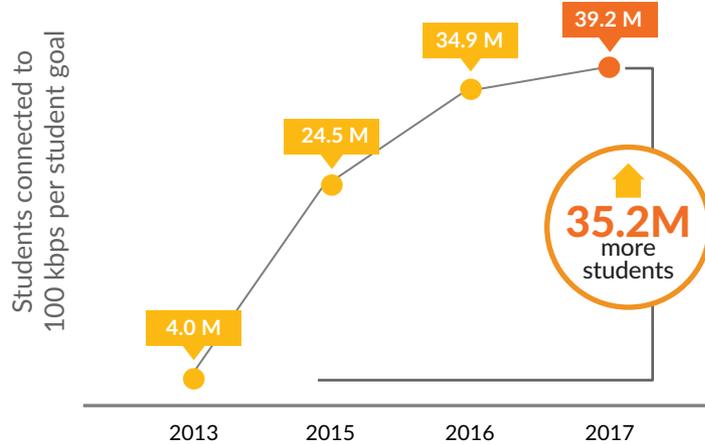


Thank you!

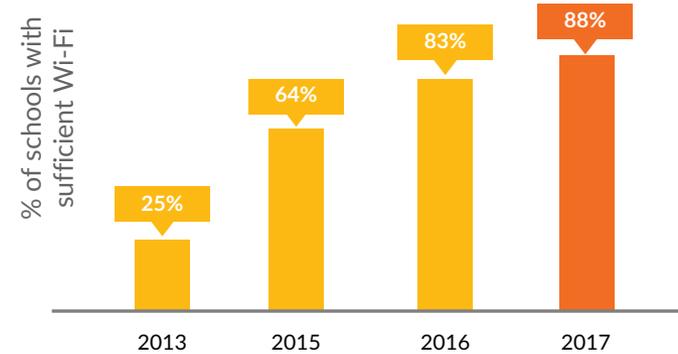


# Progress

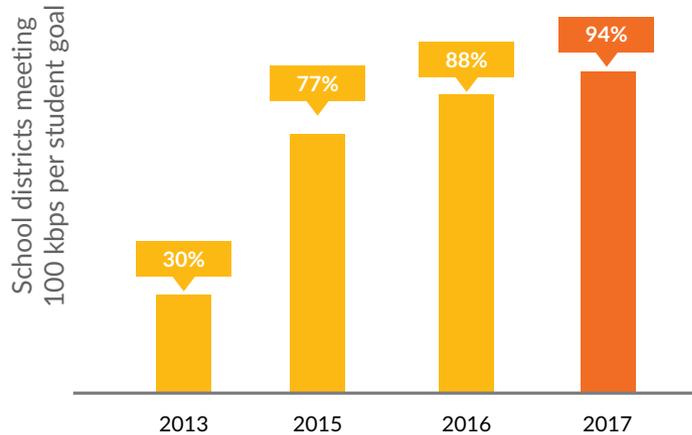
35.2 million more students gained access to the broadband they need in the last 4 years



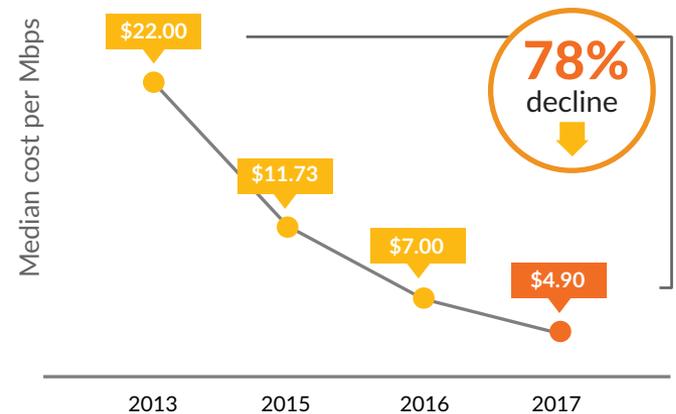
88% of schools report having sufficient Wi-Fi in their classrooms



97% of schools have the fiber-optic connections required to meet current and future connectivity needs



The cost of K-12 Internet access has declined 78% in the last 4 years



Source: EducationSuperHighway data analysis

# Annual E-rate Cycle

Upgrading your network is a year-long process. Get started early!

## E-RATE CYCLE

