

May 14, 2019

Broadband for Montana Schools Program

Retrospective and Planning Meeting



Agenda

- 1 Welcome (10 mins)
- 2 Initiative Progress + Highlights (35 min)
- 3 Planning for next cycle (1 hour)
- 4 Programs + Milestones (1 hour)



Welcome



EducationSuperHighway Team



Ellen Goldich, Program Manager



Evan Shea, Consultant



Tess Zaretsky, Consultant



Alyssa Cubello, Marketing
Manager



Yubana Pulido, Business
Analyst



Coree Kelly, Senior
Network Consultant

EducationSuperHighway Sunset



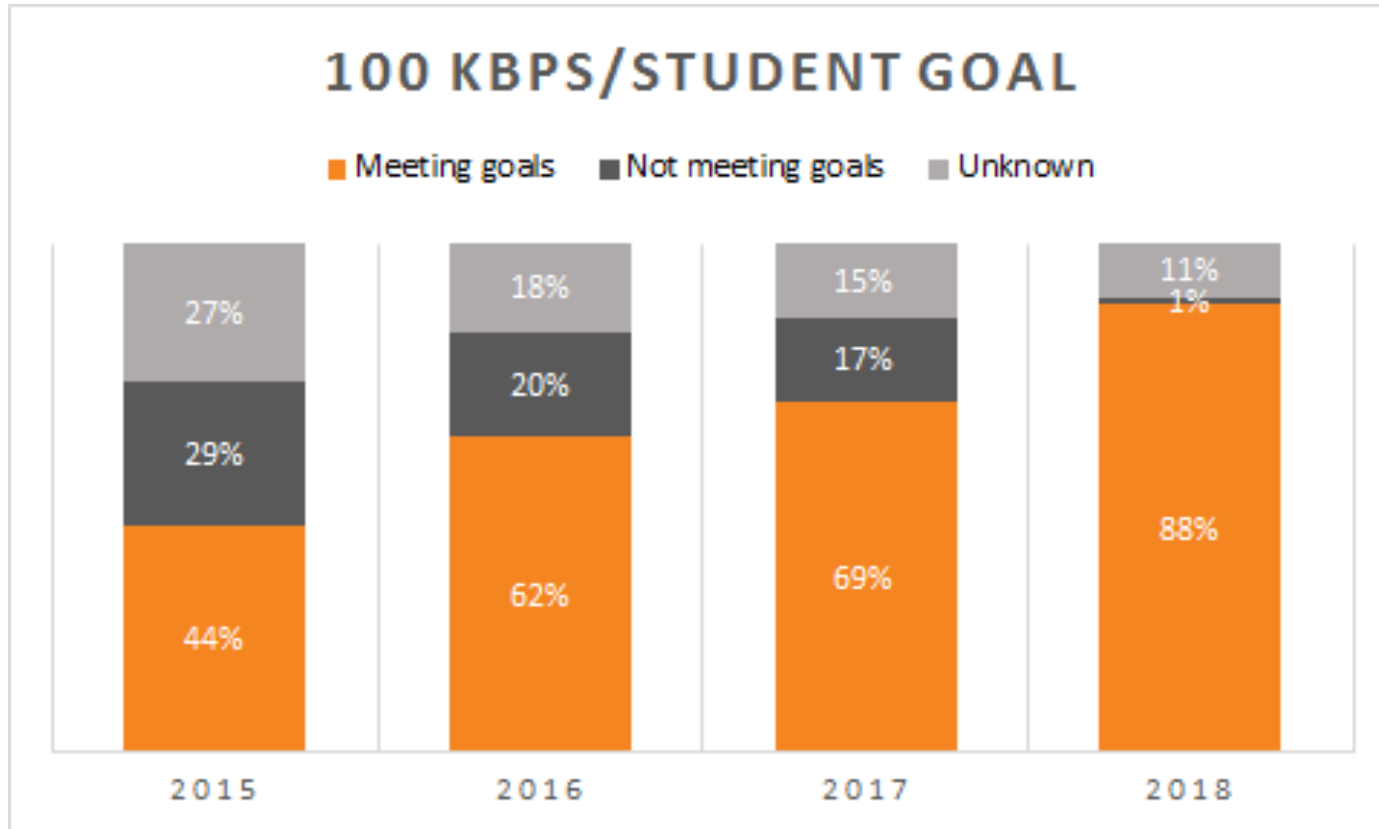
As we approach our end goal, EducationSuperHighway will be sunsetting in August 2020. Our goal has always been to increase access to high-speed internet and decrease the digital divide in America's public schools. With the support of state and national partners including all of you, we are on track to reach 99% of public school broadband connectivity in 2020.



Initiative Progress & Highlights



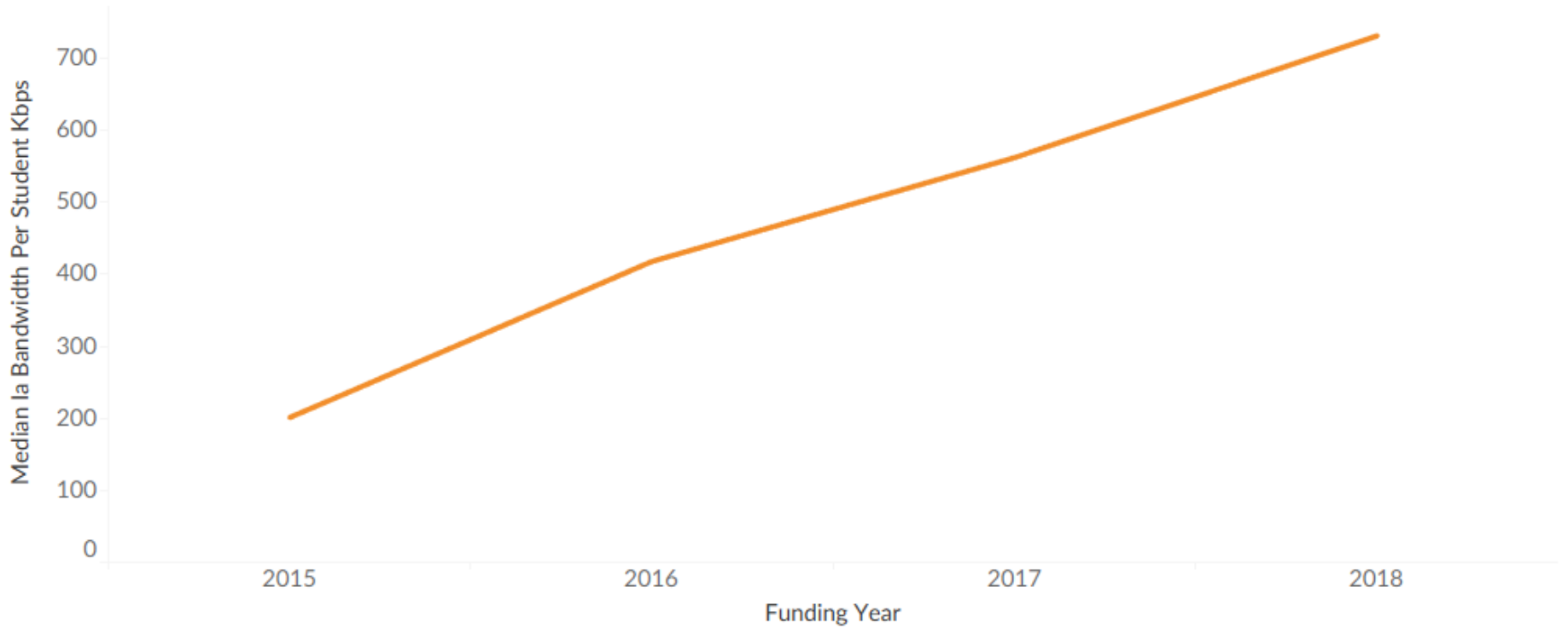
Bandwidth Progress in Montana Since 2015



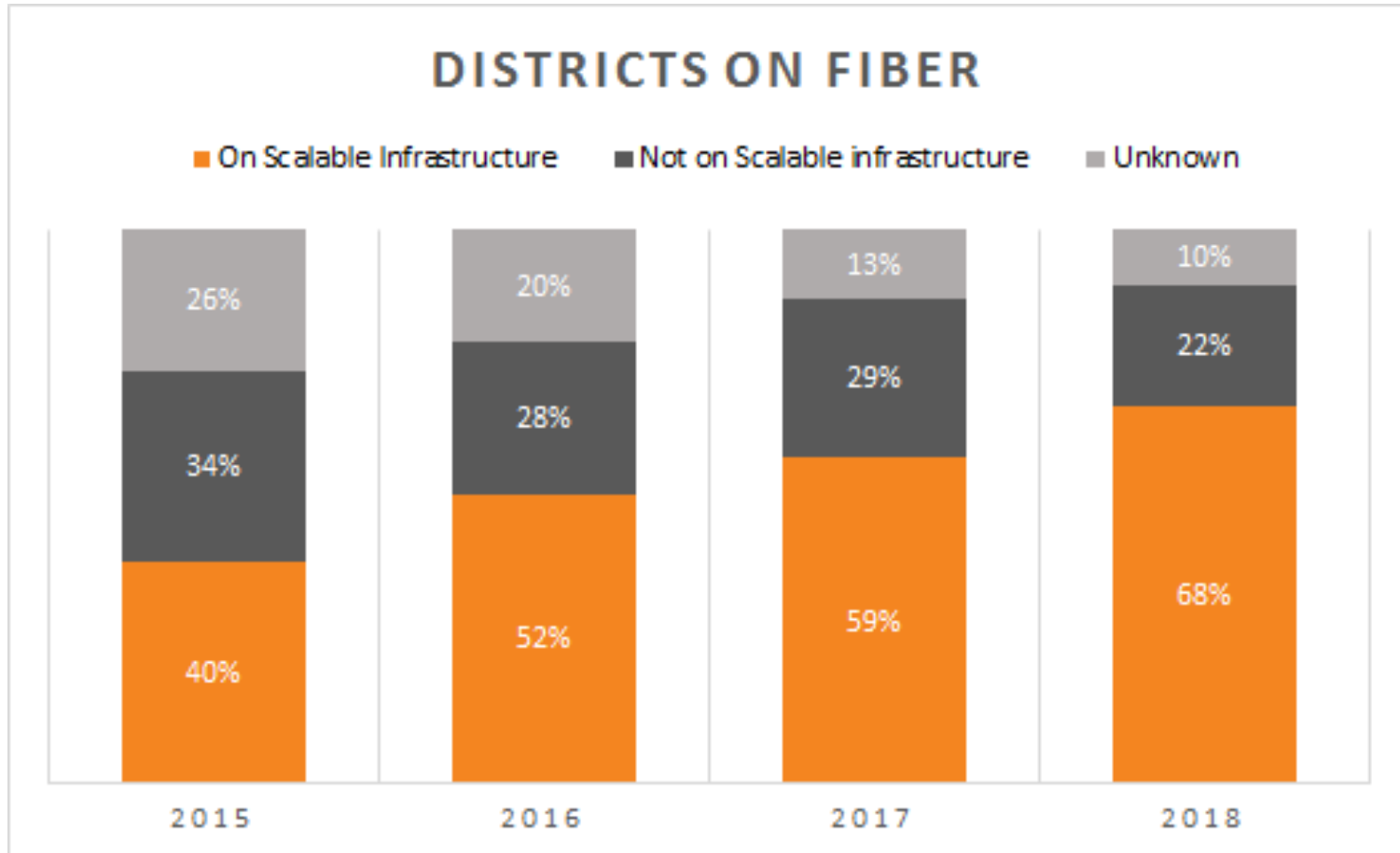
As of 2018 data, 88% of schools with known connectivity data are meeting 100 Kbps

Bandwidth Demand for Montana Schools continues to grow steadily

Median Bandwidth per Student



Fiber Progress in Montana Since 2015

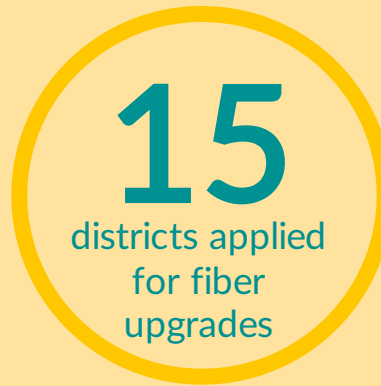


As of 2018 data, 68% of schools with known connectivity data are on scalable infrastructure

Montana's Progress This Year

Scalable Infrastructure Upgrades

- *3,524 more students will have access to scalable broadband*
- *5,481 students remain on insufficient infrastructure*



Note: 2019 data is an estimate based on preliminary review of this year's FCC Form 471

We visited 42 districts in the past year!



Additional Roadshow Photos



Success Stories



Canyon Creek School District

- 60% E-Rate Discount
- Will increase bandwidth 6.6x from 150 Mbps Fixed Wireless to **1 Gbps fiber**
- Were paying \$1500/month pre-discount and will pay \$2852/month pre-discount
- Total construction cost \$0

“We never knew we could get such affordable fiber for our district!”



Roberts K-12 School District

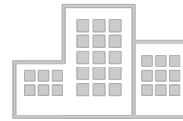
- 70% E-rate Discount
- Will increase bandwidth 10x from 20 Mbps DSL to **200 Mbps fiber**
- Were paying \$158/month pre-discount and will pay \$965/month pre-discount
- Total construction cost \$0

“We had fiber to our door for years and now we can use it!”

The consortium helped Bitterroot Valley school districts upgrade to fiber

CONSORTIUM APPLICATION:

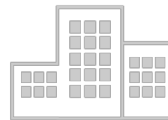
1. Consortium lead coordinated all three applications
2. Combined E-rate discount made upgrade affordable
3. Multiple site bid appealed to providers



Woodman School District



Victor School District



Lone Rock School District

Consortium Upgrade

- 50% decrease in cost for Woodman
- Fiber to all sites
- Provider: Spectrum

Independent upgrade

- Fiber directly to school
 - Cost effective individual quote
- Provider: CenturyLink

Category 2 Program



Key messages:

Are you aware of your remaining CAT2 budget?
Are you aware CAT2 funding is not guaranteed post 2019?
Do you need ESH's help to use your CAT2 funds?

OUTREACH



AWARENESS CALLS

Calls to every Montana school district with funds set to expire during the 2018-2019 school year.

PROGRAM SUPPORT



NATIONAL WEBINARS

Live and on-demand webinars from our network consultants on how to make best use of C2 funding.



DIRECT SUPPORT

On-site visits and one-on-one phone calls to for schools that needed additional support.

Category 2 Program Results



- 27 school districts will be upgrading their internal network equipment using Category 2 funds that were set to **expire** this year
- 97 **total** districts applied for Category 2 upgrades
- After these upgrades are completed, **83,274 more students** will have access to upgraded internal infrastructure

Alberton School District's Category 2 Upgrade



BEFORE

- Had never used C2 funding
- Fiber to the school, but poor Wi-Fi in the classroom
- Chromebooks, purchased to rollout a 1:1 program, sitting in boxes


AFTER

- \$30,000 budget leveraged for the first time this school year
- New switches, access points, and cabling to help put their chromebooks to use

In addition to virtual outreach, Network Consultant Coree Kelly visited school districts such as Alberton to assist them in the Category 2 upgrade process.

Broadband for Montana Schools Success

E-rate Consultants

- 
- A circular icon with a grey background and a white folder shape in the center. The folder has a tab on the top left and the text "E-rate" written on it in a light grey font.
- \$225K allocated for school districts to take advantage of E-rate consultants
 - *How many invoices has the Commerce Department received so far for consultant funding?*
 - *When is the deadline for consultants to send in final invoices?*

HB 390 Matching Funds

- Based on E-rate applications, 21 school districts are eligible for state match
 - 2 districts applied for \$57,500 in special construction
 - 19 districts applied for \$25,500 in other eligible non-recurring charges
- Estimated potential utilization: ~\$83,000



Remaining Work



Map of confirmed and potential districts in need of fiber



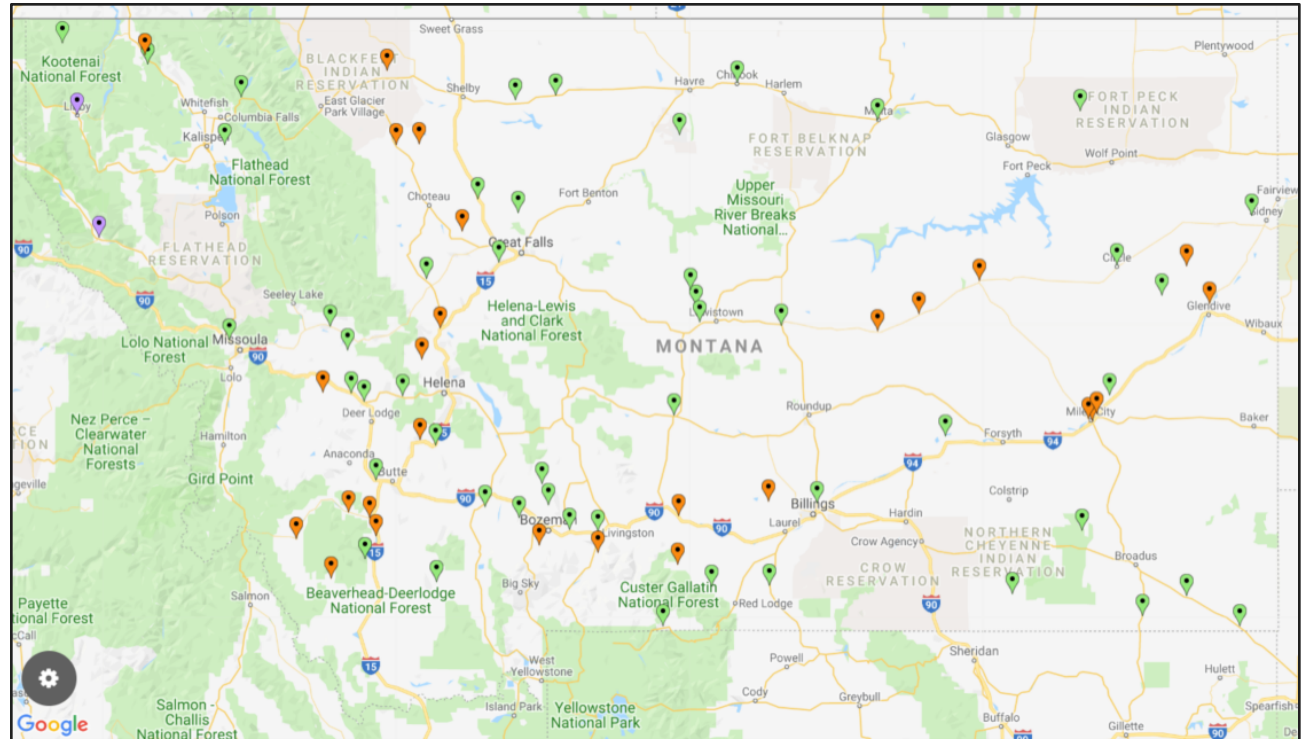
50 Fiber Targets



27 No Data



2 Potential Targets



Note: 2019 data is an estimate based on preliminary review of this year's FCC Form 471

Structural Barriers in Montana



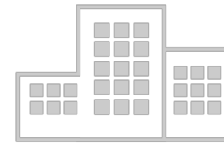
Unaffordable recurring costs

Small schools with limited funds for connectivity upgrades need to increase budget by 5-10x for fiber



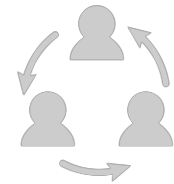
High one-time costs

High build costs to serve a small number of students are often unaffordable for districts below 80% discount



Service Providers

Lack of competition in most areas, with some providers refusing to participate in E-rate funded construction projects



Human Capital

School district personnel are sometimes not tech-savvy, don't understand benefits or requirements

Moving forward, how can we address these structural barriers to ensure all Montana students have the broadband infrastructure they need?

Unaffordable One-Time and Recurring Costs



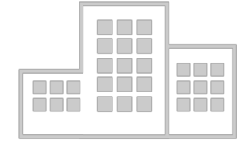
What has worked so far

- *One-Time Cost*: House Bill 390; CenturyLink lowering special construction costs
- *Monthly Recurring Cost*: Connectivity data empowers districts to advocate for better monthly pricing

Potential solutions moving forward

- *One-Time Cost*: Other funding sources to support fiber construction to remote communities?
- *Monthly Recurring Cost*: Consortia development at broader scale?
- *Both*: Convey to district leaders and communities the importance of investing in broadband infrastructure

Service Providers

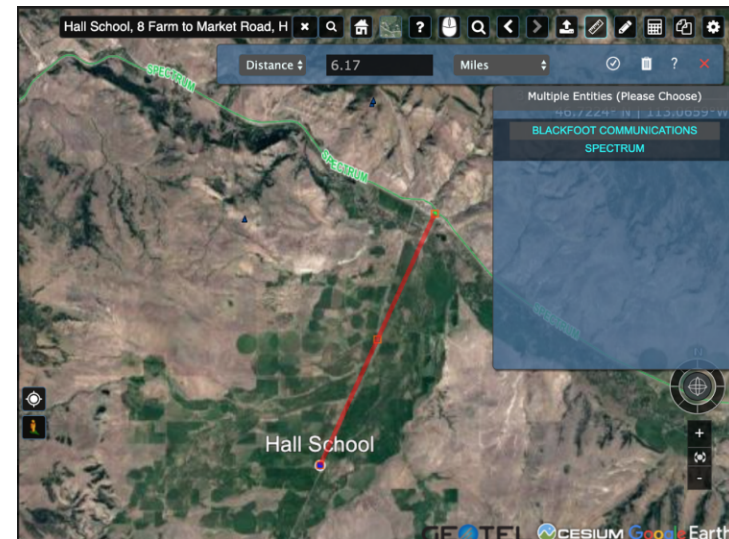


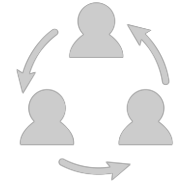
What has worked so far

- Alerting service providers of districts who have filed Form 470s seeking fiber upgrades
- Reaching out to service providers on behalf of districts to determine if they can serve the district

Potential solutions moving forward

- New partnership with GeoTel enables ESH to determine distance of fiber from school buildings
- For districts that are too far from fiber, we can explore other solutions (fixed wireless, satellite)





What has worked so far

- E-rate consultant funding
- Messaging from working group on important E-rate information and deadlines

Potential solutions moving forward

- Other funding sources to continue subsidizing E-rate consultant funding?
- “E-rate filing day”
- ESH’s Classroom Connectivity Assurance Program (CCAP)

We seek to improve our work together so that...

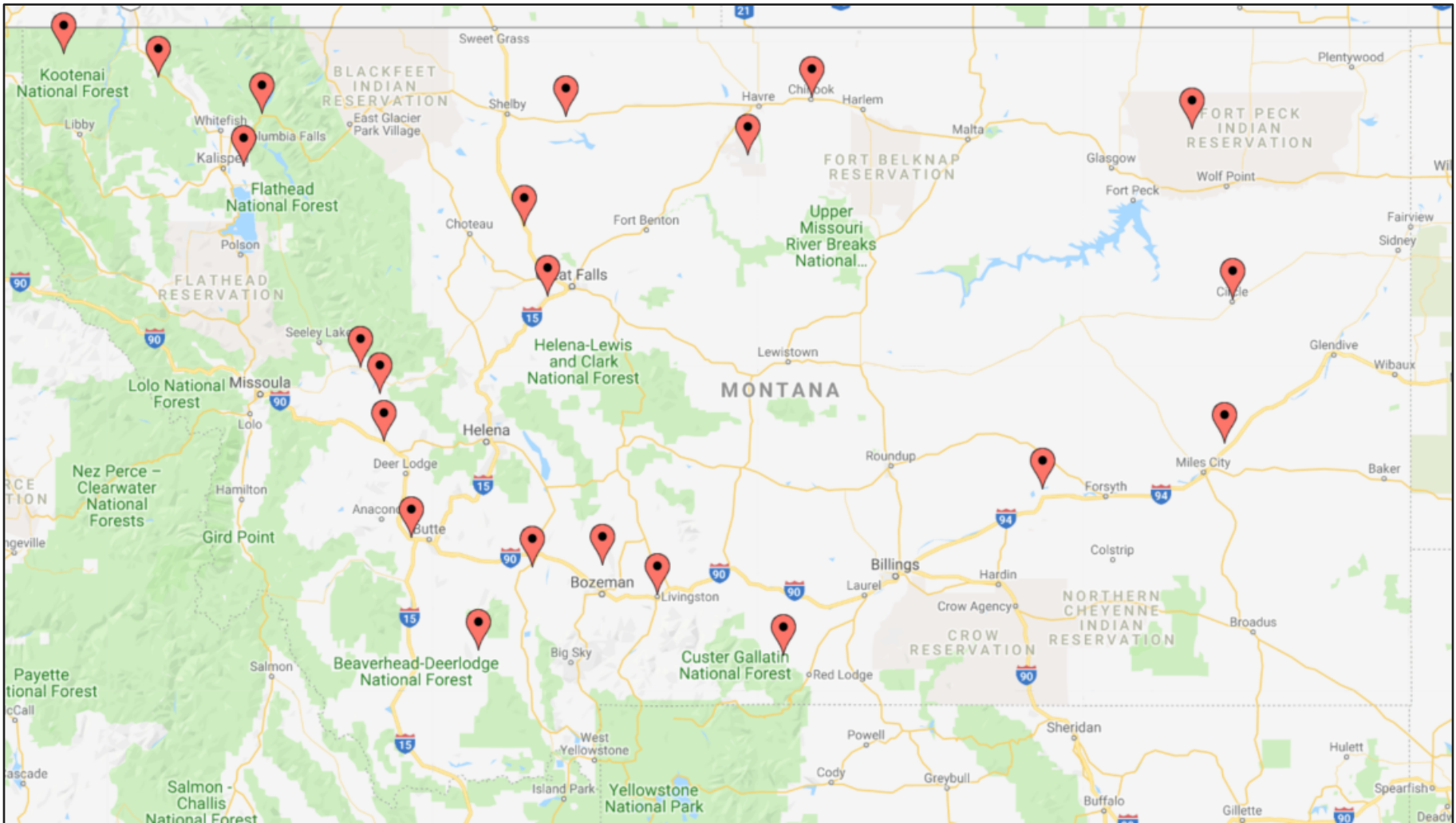
- **Schools and consortia** receive adequate tools, information and support to upgrade broadband services and leverage E-rate
- **Service providers** offer competitive, high quality services to schools across the state
- **Data on K-12 connectivity** is reliable and available to inform leaders on local decisions, programs and policy
- **State supports** (awareness marketing, expertise, etc.) help to ensure that all schools have the infrastructure they need for the future

How do we best support districts next year?

ESH's 1:1 District Support

- ESH has determined a list of districts to target for 1:1 district support
- Qualities of these schools:
 - Contract expiring June 2020
 - Demonstrated interest in upgrading to fiber
 - filed Form 470s for fiber
 - responded to ESH and working group outreach expressing desire to upgrade
 - Fiber is relatively close to the district
- All of our other resources (RFP templates, CCK12, E-rate guidance, webinars) will still be available to every Montana school leader

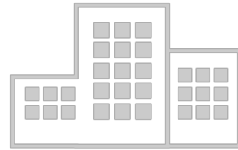
Preliminary Map of Districts Targeted for 1:1 ESH Support



Supporting the hardest to reach school districts requires careful, customized outreach



Personal direct mail



In-person visits



Warm introductions



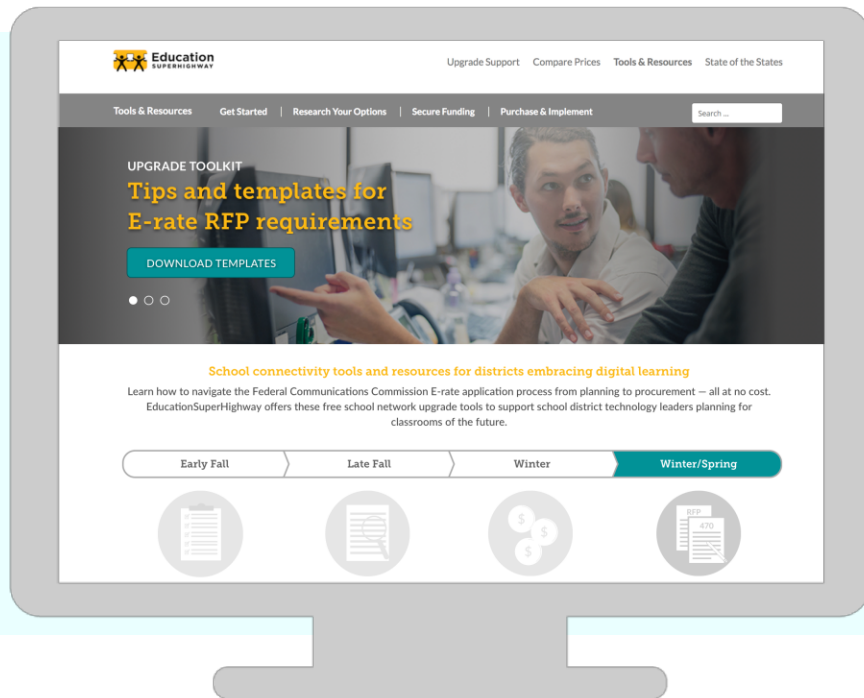
Direct phone calls & emails



Custom upgrade plans

National school district communication will continue

EducationSuperHighway communications will include:



- Invitations to speak with our district consulting and support team
- Email campaigns delivering free tools and resources
- Live webinar invitations and access to recordings
- Relevant tips via our blog
- Social media updates
- Monthly newsletter (projects only)



Programs & Milestones



ESH is on track to complete our mission by 2020

With support from our partners, we are on track to reach our goal of 99% of America's public schools being connected to the FCC's minimum goal of 100 kbps per student.

After ESH sunsets, 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

Priorities Brainstorm

Priority	What success looks like	Next step
Upgrade districts to fiber or scalable infrastructure	<ul style="list-style-type: none"> ● 22 more districts will be on fiber 	<ul style="list-style-type: none"> ● Begin outreach to all 22 districts (in a variety of ways) earlier. Consider in-person visits ● Research school board meetings ● Research alternative funding sources ● Research alternative scalable solutions for connectivity (not just fiber) ● Collaborate with working group and share updated list of districts ● Research conferences and other in-person events
Program Sustainability	<ul style="list-style-type: none"> ● Develop strategy on how to do something like “E-Rate Filing Day” in MT ● Partner with economic development agencies regionally and understand how their work overlaps with the work that we do ● Celebrate the initiative/Bring together stakeholders in some way to learn and inspire future work 	<ul style="list-style-type: none"> ● Research economic development agencies ● Figure out best process for knowledge sharing and resource sharing with E-Rate consultants that we work with directly and districts that don’t have consultants ● Continue working group conversation over the next E-rate year ● Include Dept. of Commerce once every 6 weeks ● Continue sharing program updates and challenges ● Include Dept. of Commerce in review SOTS numbers
Other Priorities	<ul style="list-style-type: none"> ● We know not every school wants to upgrade – instead we should ensure that there is 100% of awareness about E-Rate and fiber upgrade opportunities 	<ul style="list-style-type: none"> ● Continue Awareness outreach to all districts

Proposed Timeline

Summer

Fall

Winter

Spring

Summer

START

PLAN

EVALUATE

AWARD

IMPLEMENT

School District Role:

Funding year begins.
Assess needs.

Design upgrade, plan
and release E-rate
470/RFP

After 28-day
window evaluate
bids

Select provider &
apply for E-rate
funding (Form 471)

Funding commits
issued. Upgrade
network.

ESH Role:

- Outreach begins
- Service provider engagement begins
- Plan for district roadshows
- Peer referral strategy

- Continue to execute district outreach (emails, direct mail, calls)
- District roadshows
 - Support with 470/RFPs
- National Webinars

- District roadshows continue
- Help finalize E-rate applications
 - National Webinars

- Support projects with bids analysis
- Continue to support service provider engagement

- Support with application review
- Support with implementation as needed

Next steps

May	June	July	August	September	October	November
<i>Roadshow</i>	<i>Research No-Data Districts</i>	<i>Service Provider Engagement</i>	<i>Back to school: Launch Year 5</i>	<i>SAM Conferences (META, MASS, etc.)</i>	<i>State of the States report</i>	

Action	Timing	Owner



Appendix



Consortium Required Roles & Competencies

- 1. Overall consortium owner/manager**
 - a. respected by schools and providers, is 'the face' of the project
- 2. Procurement lead**
 - a. does the RFP and procurement legwork; district and provider communication
- 3. E-rate support**
 - a. a consultant expert in E-rate rules and capacity
- 4. Regional leads**
 - a. secures letters of agency from districts in each cluster, is the person on the ground in each region

Steps to creating a consortium



Gauging interest from districts, service providers, E-rate consultants, state leaders

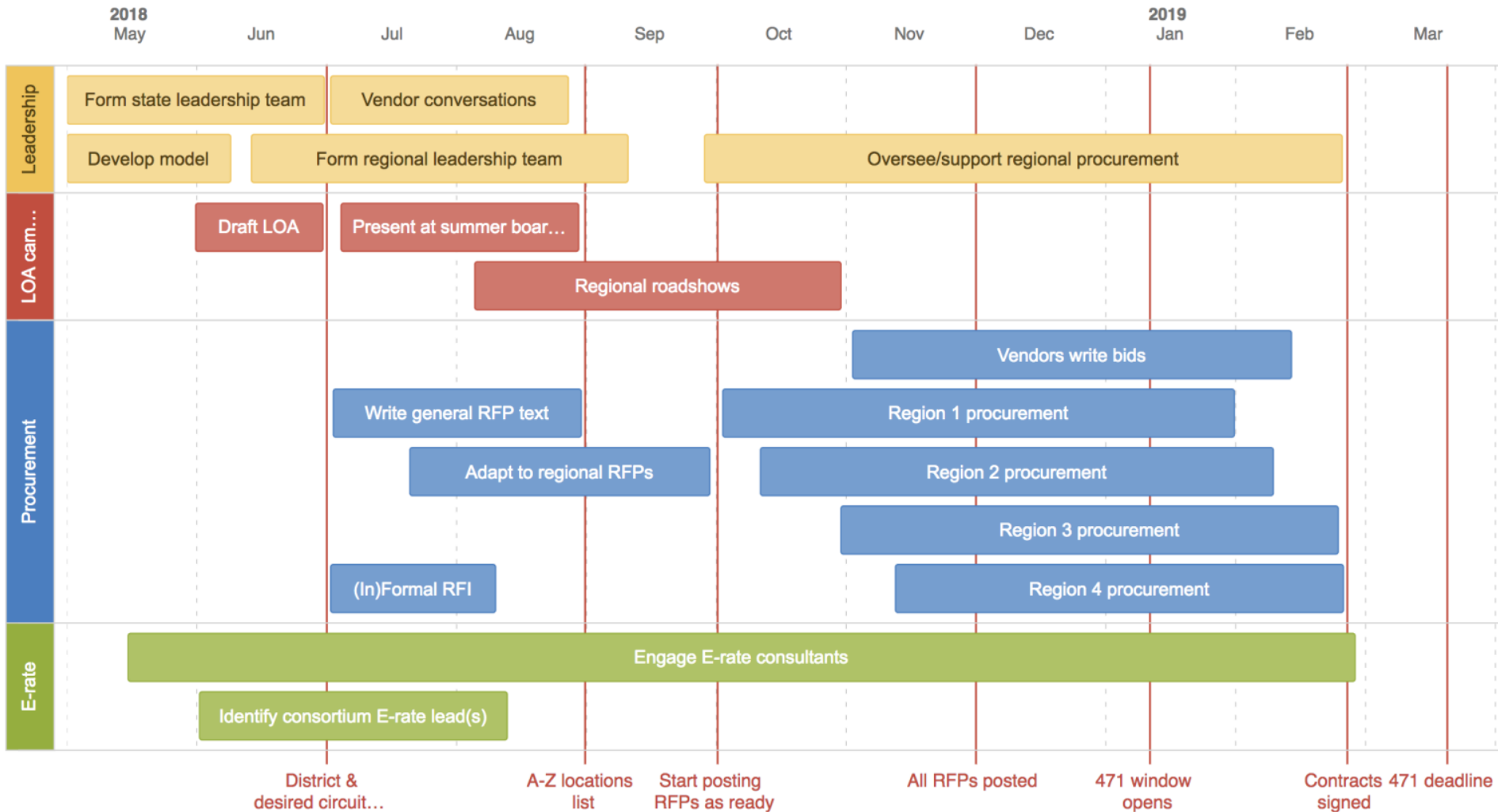
Identify who will fill key roles (foremost the consortium lead)

Form executive board & regional leads

Hit the road and sign up districts

Run the procurement (write RFP, file 470, negotiate, contract)

Example timeline



Preliminary List of Districts Targeted for 1:1 ESH Support

Alder-Upper Ruby School District 2
Chinook School District 10
Creston School District 9
Dutton/Brady School District 28-C
Galata School District 21
Gold Creek Elem School District 33
Helmville School District 15
Hysham School District 7 & 1
Kinsey School District 63
Livingston Public Schools
Lustre Elementary School District 23
Luther School District 10
Ovando School District 11
Ramsay School District 3
Rocky Boy School District 87-J
Springhill School District 20
Trego School District 53
Ulm School District 85
Vida School District 134
West Glacier School District
Willow Creek School District J15-17
Yaak Elementary

