Digital learning has a critical role to play in the pursuit of excellence in America's K-12 schools. In an era of scarce resources, it represents our best hope for connecting the faces of our future to the educational opportunities they deserve, regardless of location, race or income.
ROBUST BROADBAND INFRASTRUCTURE IS CRITICAL TO OUR CHILDREN’S FUTURE.

ONLY 28% OF SCHOOLS HAVE SUFFICIENT INFRASTRUCTURE.

MORE THAN 40 MILLION STUDENTS ARE BEING LEFT BEHIND.

Game-changing technologies are poised to revolutionize the way teachers teach and students learn. But they can’t enter the classroom unless high-speed broadband gets there first.

STATE OF THE NATION
Who Has Enough Bandwidth for Digital Learning?

72% NOT READY FOR DIGITAL LEARNING

27% READY FOR DIGITAL LEARNING (2013)

1% READY FOR DIGITAL LEARNING (2017)
THE DIGITAL DIVIDE

Has sufficient Internet infrastructure for digital learning

Still waiting for sufficient infrastructure
OUR SCHOOLS ARE NOT MEETING THE NEEDS OF AMERICA’S CHILDREN.

Our children are trying to learn skills for tomorrow with dial-up speeds of the past: The typical K-12 public school has the same Internet access as the average home — but with 200x more users!

High-speed broadband is key to restoring our educational standing. Compared to other developed nations, the U.S. now ranks 17th in reading, 19th in technology, 21st in science and 31st in math.
WE NEED TO HELP KIDS LEARN AT GIGABIT SPEED.

High-speed broadband unlocks the power of technology to personalize learning, empower teachers, connect parents and ensure equal opportunity for all.

HERE’S HOW:

- One-to-one learning technologies that let students learn at their own pace
- Two-way video that beams experts and experiences from around the globe into the classroom
- Blended learning models that let teachers spend more time in small group instruction
- Immersive learning games as engaging as the best video games
- Computer-based assessments that provide real-time feedback to address issues before students fall behind
- Collaboration tools that give parents daily access to their children’s homework and grades
OUR COMPETITION IS MAKING HIGH-SPEED LEARNING A REALITY FOR THEIR KIDS.

Experts agree that, to enable students to take full advantage of digital learning, America’s schools need 100 megabits per second (Mbps) or more of Internet access today. They will need 1 gigabit per second (Gbps) by 2017.

Around the world, countries are taking action to meet their students’ broadband needs. They understand that in today’s global economy you need to be wired to get hired.
TO REMAIN A GLOBAL LEADER, AMERICA CAN’T ALLOW ITSELF TO BE OUT-EDUCATED.

STUDENTS
become better prepared for the knowledge economy.

TEACHERS
have access to world-class professional development.

RURAL AMERICANS
have equal access to world-class educational opportunities.

PARENTS
are more informed, more engaged and more assured of their children’s education.

NATIVE AMERICANS
can tap into the universe of knowledge and opportunity without leaving their tribal lands.

BUSINESSES
gain from a smarter workforce that can better compete in the global economy.

PEOPLE WITH DISABILITIES
are able to more fully participate in school.

LIBRARIES
become high-speed gateways to the digital future.

Everyone benefits from digital learning.
The President has announced an ambitious new effort called ConnectED to connect 99% of America’s students to high-speed broadband within five years. He has called for gigabit broadband in every school and Wi-Fi in every classroom.

The first step in making ConnectED a reality is to modernize the Federal Communications Commission’s E-rate program.
E-RATE MUST CONNECT OUR SCHOOLS TO FIBER.

E-rate solved America’s access challenge. Now it must provide the speeds we need to power networks that last a generation.

Fiber optics is the only technology that can affordably deliver gigabit speeds to our schools today and scale cost-effectively to meet the growing bandwidth needs of the future.

SPEED MEETS SCALABILITY

Commonly Available Maximum Broadband Speed

- COPPER DS3: 45 MBPS
- WIRELESS LTE: 65 MBPS
- COAX CABLE: 100 MBPS
- WIRELESS POINT-TO-POINT: 1 GBPS
- FIBER: 10 GBPS
THE COST OF NOT HAVING FIBER IS STUNNING.

Fiber is more than fast: It’s cheap to operate and cheap to upgrade. Once installed, the low monthly cost of a fiber connection doesn’t change — whether it delivers 10 megabits or 10 gigabits.

FIBER IS SUPERIOR EDUCATIONALLY AND ECONOMICALLY

- The median school without fiber pays over $100 per month per megabit of bandwidth
- With fiber, schools can pay as little as $1 per megabit
- Fiber capacity can be increased 10x every few years for only a few thousand dollars per school
Without Fiber We Can’t Afford Gigabit Speed.

In order to give 99% of America’s K-12 students access to high-speed learning, we need to lower the cost of bandwidth by 90%, a target achievable by giving schools the flexibility to use E-rate funds to connect to the Internet in the most cost-effective way possible. This includes leasing dark fiber from carriers or, when unavailable, building new school-owned fiber.
NOWHERE IS THE OPPORTUNITY SO VAST, THE NEED SO URGENT AND THE POLICY SO VITAL TO ADVANCING A BRIGHTER, MORE CONNECTED EDUCATIONAL FUTURE.

HELP SHAPE A SMARTER E-RATE PROGRAM.

If we don’t dramatically lower the cost of bandwidth, E-rate will be four times oversubscribed by 2017, and America will be forced to choose between spending billions more to catch up or leaving our kids behind in the global economy.

Join EducationSuperHighway in advocating a three-part vision to modernize E-rate

- **Shift focus to broadband infrastructure.** E-rate must move away from legacy technologies that are only capable of yesterday’s dial-up speeds
- **Create a one-time capital-investment fund.** Intended to connect every school and library to fiber and every classroom to Wi-Fi, it will allow all schools to meet the connectivity goals proposed by the President, save billions and put in place the infrastructure needed for a generation
- **Increase transparency and accountability.** E-rate can reduce costs and improve efficiency by collecting and releasing more data about network infrastructure, how funds are spent and what providers charge
EducationSuperHighway is the leading non-profit focused on upgrading the Internet infrastructure in America's K-12 public schools in order to enable digital learning.

Our work has helped to shape the President’s ConnectED initiative and modernization of the Federal Communications Commission's $2.4 billion E-rate program. We have worked with the FCC, the US Department of Education, twenty-six state departments of education, hundreds of school districts, and over 50 corporate, non-profit and association partners.

In addition, EducationSuperHighway's data-driven programs help superintendents and policymakers identify which schools need to be upgraded, understand what needs to be upgraded in each school and lower the cost of those upgrades.