

# FIBER OPTIC PROJECT



**Project Archive** One of the bond's most ambitious projects involved the installation of infrastructure for a fiber optic network to connect all of the District's buildings to the City of Hillsboro's new HiLight\* fiber optic backbone. Originally conceived as a stand-alone project, this developed into a mutually-beneficial, long-term partnership with the City to reduce our reliance on independent service providers for broadband.

"Our network services are no longer dependent on what our ISP contracts limit us to based on pricing," explained Jordan Beveridge, HSD's Chief Technology Officer. "Rather, our network capacity and speed are based solely on the equipment we have installed."

Not only will HSD facilities enjoy over 10 Gb of bandwidth, but the multiple fiber strands into each building provide resiliency and redundancy; if one strand goes down, there are others to support the load. The partnership with HiLight includes long-term prospects for expansion as the District grows. However, instead of purely commercial goals and outcomes, the focus will be on affordable service to the community and supporting our students' futures.

Mayor Steve Callaway has stated: "We wanted to make sure [HiLight] was something that would address equity, education, and entrepreneurial and economic opportunities."

The fiber optic project involved three years of planning and design, laying conduit, and installing fiber optic lines and switchgear around the District, from North Plains to Groner and Free Orchards to Butternut Creek.

The first directional bore of conduit for the fiber cable took place at McKinney Elementary in March 2019. Work then progressed building by building, ring by ring, across the District. In February 2020, at Evergreen Middle School, we commemorated completion of the first school connections. The latest connection was made at Groner K-8 in August 2020. All existing District buildings are now connected to HiLight; Atfalati Ridge Elementary and ES29



will be connected when their construction is completed.

Not only will the fiber optic network provide fast, reliable internet access, it also supports the District's security systems, telephone services, and other communications systems.

The \$13 million fiber optic network investment from the bond and the partnership with the City of Hillsboro are already yielding dividends. Cancellation of contracts with the District's original ISP will produce over \$50,000 per month in networking cost savings.

"We are not only saving money by removing those commitments," Beveridge stated, "but also insulating ourselves from the ongoing spikes in pricing we experienced with our previous contracts."

The savings are being applied toward removing some of the barriers that students experience in connecting to remote learning and digital resources, as well as ensuring equitable access to those resources.

Beveridge added: "The savings have helped pay for additional digital learning resources and IT staff to manage Comprehensive Distance Learning and the 1:1 project."

Bond funding also added about \$6.4 million to enable the 1:1 project to eventually provide a Chromebook for each student in grades 3-12 to use. In grades K-2, each device would be shared between two students (1:2). This currently amounts to

**Fiber Optic Network:** three years of planning and implementation included the first directional boring, seen here in March 2019, to install conduit at McKinney Elementary and culminated with the latest connection in August 2020 at Groner K-8.

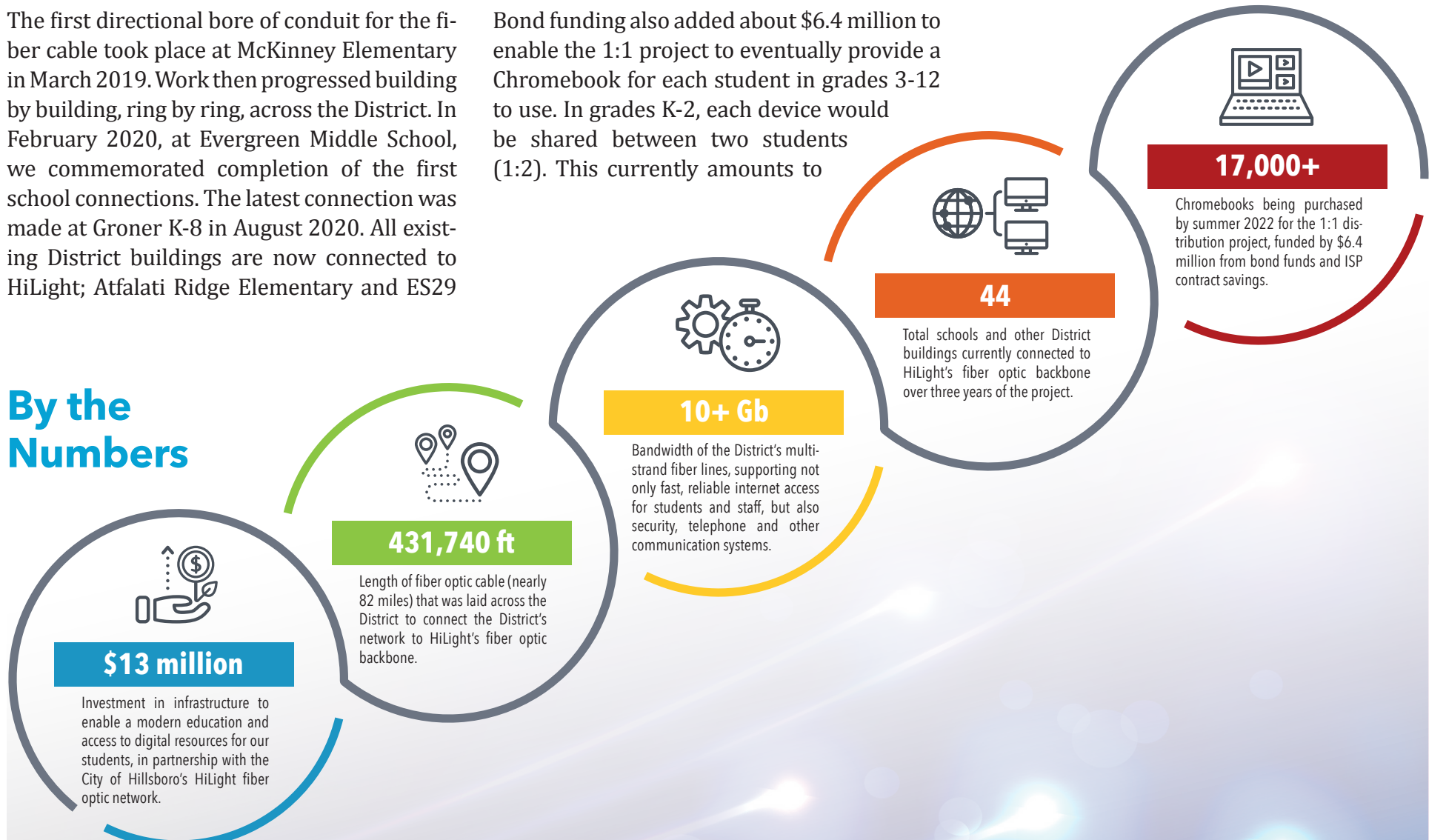
over 17,000 devices to be purchased for our students.

New Chromebooks will be checked out this school year, subject to the supplier's availability, to middle and high school students to facilitate their learning. Returned devices will be sanitized and redistributed for elementary students who need them. By summer 2022, Beveridge expects to purchase and distribute enough Chromebooks for classroom use by the elementary students.

With the City's partnership and HiLight, the fiber optic project will enable the District to provide a modern education to every student, fulfilling a primary goal of the bond promise. As School Board Chair Erika Lopez remarked at the commemoration:

"There is a well-known African proverb that says, 'If you want to go fast, go alone. If you want to go far, go together.'"

## By the Numbers



\*More information about the City's HiLight network may be found at: [hillsboro-oregon.gov/services/hilight](https://hillsboro-oregon.gov/services/hilight)