



To: Dr. Riggle, Superintendent
From: Marcus Thimm, CTO
Re: April 13th 2015
Date: **Second Internet Connection replacement**

The district launched the Northfield TWP Technology consortium (NTTC) last year to reduce the costs of Internet access and increase Internet capacity and reliability for its members. The district currently operates two independent Internet services.

- 1.) 10 GB/sec Internet Access through Hurricane Electric (HE) for \$3,500 per month.
Managed fiber transport connection by Sunesys for \$2,000 per month.
Cross-connection fee at 350 E. Cermak, Chicago IL, between HE and Sunesys for \$650 per month.
The total costs for this Internet service are \$6,150 per month before Erate discounts or \$0.61 per MB/sec
- 2.) 1 GB/sec Internet Access and fiber transport from Comcast connecting our district data center to Comcast's data center in Arlington Heights.
The costs for this connection are \$3,300 per month or \$3.30 per MB/sec.

Current monthly costs **\$9,450 before discounts, \$5,670 after 40% erate discounts.**

The Comcast connection has reached the end of its three year-contract term and we are able to replace it with a higher capacity connection at a much lower per MB/sec cost that matches our primary 10 GB/sec service. This replacement is done under the Erate program in order to qualify for federal discounts of 40%. The district will need to have signed contracts and Erate fillings completed by the 16th of April.

During the 30-day posting window under the Erate program, we received many proposals that are not as cost-effective as our existing services, except for our established vendors, Hurricane Electric and Sunesys, that are able to provide additional services at the lowest costs.

We recommend replacing the expiring Comcast 1 GB/sec service with a second 10 GB/sec service by Hurricane Electric and managed fiber transport by Sunesys. This will provide a good balance across both Internet connections and simplify the firewall rules and traffic loads across those two connections.

The new Services are established between the district's data center at 1835 Landwehr Rd, Glenview, IL, and 427 S. LaSalle, Chicago, IL, using an alternate fiber route. Both Internet services are connecting to GBS and the district's data center at 1835 Landwehr Road, Glenview IL, respectively, further eliminating single points of failure.

Our Internet services starting at the next school year will be:

- 1.) Hurricane Electric 10 GB/sec Internet Access at 350 E Cermak, Chicago IL, connecting to GBS via Sunesys 10GB Fiber.
HE Access costs = \$3,000 (this is reduced \$500 monthly)
Cross Connect fee = \$ 650 connection fee between HE and Sunesys
Sunesys managed fiber = \$2,000
SUB TOTAL = \$5,650 (\$3,390 after 40% Erate discount)

- 2.) Hurricane Electric 10 GB/sec Internet Access at 427 S LaSalle St., Chicago, IL connecting to 1835 Landwehr Rd, Glenview IL,
HE Access cost = \$3,000
Cross-connect fee = \$ 400
Sunesys managed 10GB fiber. = \$2,500 (is higher as it is a longer route)
SUB TOTAL = \$5,900 (\$3,540 after 40% Erate discount)

The new total monthly costs are **\$11,550 before discounts, \$6,930 after discounts.**

Districts 30 and 28 have been using 500MB of bandwidth each and D27 is joining the consortium this year. This provides reimbursements of \$1,500 per month from the consortium members. Considering the consortium members reimbursements we will have a monthly cost after Erate of \$5,430 or less than \$1 per district user per month.