

Technology Board Report

February 2024 - Sam Rigby

Internet - Our current internet contract with SES ends on 6/30/24. We will be soliciting bids for a new contract to maximize the value of the internet available in our schools. Our experience with both OneWeb and Starlink this year will help when evaluating proposed services for FY25.

- Our current service with DRS provides a fixed 25mbps Low-earth orbit (LEO) OneWeb connection with automatic failover to a high-latency connection in the event of a OneWeb outage
- OneWeb and Starlink are both comparable lower-latency, LEO connections
- Our OneWeb connections are capped at 25mbps to maintain BAG (broadband assistance grant) eligibility
- BAG provided a \$116,000 total discount on internet service for FY24
- Starlink and OneWeb both experience routine outages ranging on average from 2 seconds to 5 minutes. When asked, many teachers find these outages to be acceptable and minimally disruptive
- We are seeing average download speeds of 200mbps with Starlink at most schools. Starlink is affordable without the BAG discount, so we are not restricted by the 25mbps limit.

Computer Updates - Limited bandwidth poses a significant challenge to keeping up with a never-ending schedule of software updates on our laptops and iPads. We also face the challenge of infrequent physical access. We rely heavily on a suite of management tools and a fleet of servers to keep our deployment of computers and iPads secured, updated, and usable.

We prioritize software updates by allowing automated systems to install most, and manually installing updates that are large or time-sensitive. In January we learned that a large majority of our computer's operating system versions are out of date with what is required for state testing this year. Schyler and I have both spent a large amount of our time over the past few weeks distributing and installing these updates.