Broadband Assistance Grant (BAG) 100: What is the Cost?

What does the School Broadband Assistance Grant (BAG) Program currently cost the state?

In FY 23, the BAG 25 program offered \$6,611,900 in grant funding to assist 151 eligible Alaska schools to reach 25 Mbps download speeds.

Why is the fiscal note for SB 140 (increasing BAG support to bring schools to 100 Mbps download speeds) so high?

The fiscal note appears to have been prepared by applying basic math to the FY23 program cost, rather than by doing a detailed analysis of the actual cost of service to the individual schools supported. That is, the note assumes that BAG 100 will require exactly four times the funding required for BAG 25 $(\$26,447,600 = \$6,611,900 \times 4)$. The note further assumes that the required funding for schools which currently purchase services above 25 Mbps but below 100 Mbps, who will be eligible for BAG funding under SB 140, can also be directly extrapolated. Specifically, the note appears to assume that since 108 is 72% of 151, the cost of bringing an additional 108 schools to 100 Mbps is approximately 72% of \$26,447,600 (or \$19,000,800).

Why is this the incorrect approach?

Rates for telecommunications services are not like pricing for tangible goods (like books, groceries, toiletries). While the price of four books may be 4X the price of one book, the same is not true with bandwidth. Instead, the following factors come into play:

- 1. Pricing for higher bandwidth services is generally lower, on a per unit basis, than for lower bandwidth services;
- 2. Increased demand for service on a network will drive down the per-customer cost of service on that network;
- 3. Different types of service are cheaper than others. Specifically, satellite and microwave services are more expensive than fiber service. Where a school is and what network it is served by matters.

What do providers project SB 140 will actually cost, based on their specific knowledge of rates at each service location?

Increases in demand for bandwidth plus the phase-in of new fiber technology from projects across the state which are already in progress will lead to decreased costs. Schools will also be able to make the jump to 100 Mbps in phases because of the timing of pending network changes and upgrades. Working with other providers, GCI estimates the additional cost to the State of BAG 100 for all currently served schools to be:

BAG100 estimated Fiscal Year budget impact (July 1 - June 30)			
\$m	2025	2026	2027
Estimated incremental cost to State	\$8.3	\$12.9	\$13.9
Estimated total cost to State	\$14.5	\$19.1	\$20.1

What about the additional schools which will be newly eligible for support under SB 140?

The schools that will be newly eligible for support under SB 140 are served by a very different set of networks than the schools currently supported by BAG 25. 84% of schools currently receiving BAG support are served by costly satellite and microwave networks. In comparison, only 30% of newly eligible schools are served by these networks, with 70% served by existing fiber systems. Even assuming that all of these schools could move to 100 Mbps immediately, a reasonable estimate of additional support required for these schools, based on a school-by-school analysis of cost, is a total of \$6.5M.