

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of  
Modernizing the E-Rate Program for  
Schools and Libraries

August 16, 2019  
WC Docket No. 13-184

**NOTICE OF PROPOSED RULEMAKING  
Comment by the New York City Department of Education**

The New York City Department of Education (NYC DOE) supports the Federal Communication Commission's (FCC) proposal to move from a per-school budget to a per-district budget for category two products and services E-rate reimbursements. The NYC DOE is unlike any other school system in the country in that we utilize more than 1,800 unique schools to serve approximately 1.1 million students. Currently, we refresh network infrastructure equipment approximately every 5 years using tax levy, capital funds, and reimbursements from the E-rate program. The network infrastructure equipment in NYC DOE schools is typically maintained longer than the ideal 5-year refresh cycle due to fluctuation in funding streams and coordination of implementation schedules. We target technology refresh in approximately 200-250 school buildings per year in order to provide appropriate IT infrastructure and sufficient digital bandwidth in classrooms. The current funding cap and per-school budget within the category two reimbursement model presents challenges and logistical limitations on our technology refresh efforts.

At the NYC DOE, the current funding model artificially caps E-rate reimbursement based on student head count rather than accounting for individual school building needs. For example, enrollment in a new school in its early years is often lower than the projected ultimate enrollment, as schools typically start with only one or two grades. New schools are often housed in old buildings. If the refresh for the school occurs during the early years of a new school, the 5-year E-rate budget for that school will be artificially low if calculated against the current student enrollment. The result is an insufficient E-rate reimbursement to support both the infrastructure of the building and the digital bandwidth needs of a growing student population.

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Furthermore, because the current funding model bases each school's budget strictly by head count, it fails to recognize the differing technology needs between grades that could potentially affect the true infrastructure needs of the building. All NYC DOE school buildings receive the same infrastructure backbone, regardless of grade, however, the end-user technology varies by grade. The bandwidth needs of a first grade class differ considerably from the bandwidth needs of a high school because high school students have multiple end-user devices. A district-wide E-rate budget would allow the NYC DOE to adjust our budgets based on technology needs as they relate to both building needs and grade level.

Using a district-wide budget, as described by the FCC in the Notice of Proposed Rule Change, would allow the NYC DOE to allocate funds based on the population of schools and the infrastructure needs of the building. Unused funds allocated to one school would be available to other schools in need of more expansive technology upgrades. Currently, if a school has not reached the budgetary limit and there are unused funds, those funds cannot be used to address the needs of another school eligible for category two upgrades. The surplus of funding allocated for that particular school is essentially lost. In addition, there is the added complexity of calculating and budgeting supplemental funding via tax levy and capital funds when a given school has reached its E-rate budget limit, but is in need of further upgrades, which occurs within the per-school budget model now employed by USAC. A district-wide allocation would allow the NYC DOE to take advantage of the full funding allotted for its 1.1 million students, and enhance technology throughout our schools in a manner consistent with student and school building needs.

The current NYC DOE program for IT refresh is modeled around an equitable distribution of digital bandwidth in classrooms based on age of infrastructure, grade, and number of anticipated students. Formal teams of engineers continually update technology standards for NYC DOE schools. In addition, engineers establish and follow a systematic refresh cycle so as to regularly distribute technology upgrades across all 5 boroughs and all NYC DOE learning facilities. The NYC DOE Division of Instructional and Informational Technology (DIIT) documents and catalogue all school sites and associated IT work. This documentation creates a timeline for DIIT to plan the refresh of equipment and IT infrastructure over 5-year cycles and further insures equitable distribution of both funding and resources. Up-to-date standards, inventory documentation, annual re-assessment of core network systems, and specific product model numbers within schools all combine to assure that bandwidth per 1000 students across the city is equitably distributed and administered.

Alternatively, the NYC DOE would benefit from a per-building budget instead of a per-school budget. Many of our school buildings house more than one school. A per-building budget would allow the NYC DOE to calculate our budget based on the student capacity of the building rather than the enrollment of students in the schools within the building, because as previously mentioned, enrollment varies. This would minimize the administrative burden of cost-allocation.

Ultimately, by moving from a per-school budget to a per-district budget, or in the alternative a per-building budget, category two funding will better support the equitable distribution of infrastructure refresh and bandwidth in schools. It would simplify the calculation and budgeting of public funding streams which are used in conjunction with E-rate reimbursements to fund our 5-year refresh system and better serve students. By utilizing all annual funding throughout eligible schools in the district, the NYC DOE will be more efficient in providing more bandwidth per student, which enhances their educational experience.