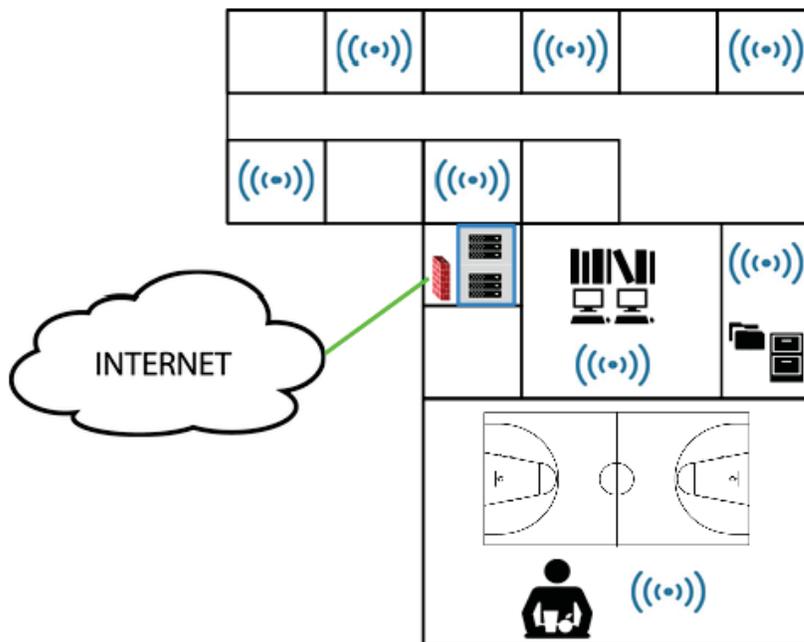


Estimating the Cost of Small School Wi-Fi Networks

Small schools (100 students or less) provide a unique challenge modeling network infrastructure cost because the density of students is less than the national average, therefore the cost of common use space infrastructure and core infrastructure is averaged across fewer students. The following analysis demonstrates the estimated infrastructure needs for a school with 100 students.

Assumptions:

- 100 students
- 10 classrooms
- Additional common use space such as library, cafeteria/gymnasium, and administration are included. Each of these spaces has a dedicated AP.
- Considering small class sizes, wireless is designed for coverage rather than density. This means one AP for every two classrooms.



Equipment	Qty	Cost per Unit	Total	Notes
WAP	8	\$520	\$4,160	802.11n
WAP Mgmt	8	\$100	\$800	Licensing
Core switch	1	\$3,600	\$3,600	Collapsed core/distribution switch, 24-port POE, dual SFP+ capable
Wired drops	8	\$215	\$1,720	Minimum Cat 5e/6
Firewall	1	\$3,000	\$3,000	Entry-level enterprise model
UPS	1	\$500	\$500	At least 10 min of battery run-time, 6 receptacles
		Total Cost	\$13,780	

