



School Facilities COST CALCULATOR

A Joint-Use Tool for Fair Fees
USER GUIDE – EXCEL VERSION

STEPS



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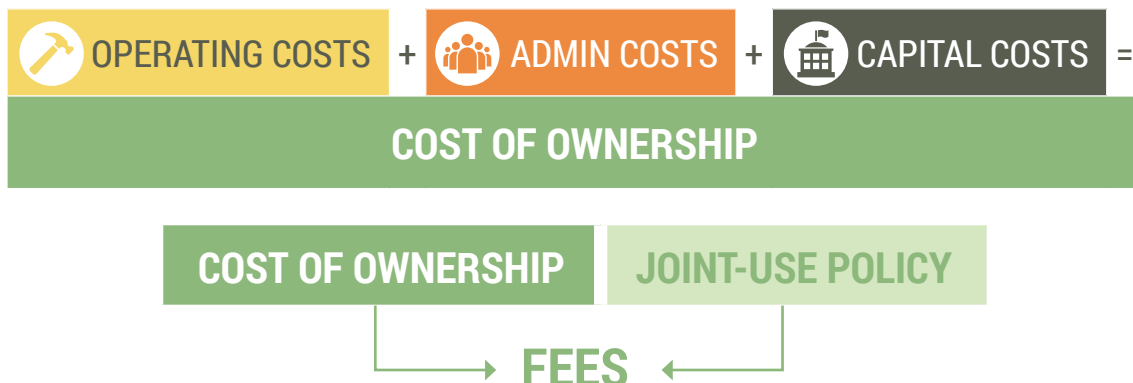
INTRODUCTION

The joint use of public school facilities can create:

- Expanded educational programs and services;
- More integrated communities;
- Environmental benefits; and
- Fiscal savings and efficiencies.

The School Facilities Cost Calculator, available both as a downloadable Excel file and online at www.bestfacilities.org/jointusecalc, enables school districts to do the following:

- 1) Determine the true cost of ownership of all of its facilities and grounds – including operating, administrative, and capital costs
- 2) Develop a transparent fee structure for joint use of its facilities, based on the real cost of ownership and district policies on joint use



This user guide walks you through the four interconnected worksheets in the Excel version of the calculator. Each worksheet generates calculations based on values that you enter: facility data, time and use estimates, district policy assumptions, and district costs. You enter these values in the fields highlighted in yellow. The data used in this guide are for illustrative purposes only; we encourage you to tailor the Excel file to fit the unique realities in your district.

See more resources on the joint use of public school facilities at www.bestfacilities.org.

STEP 1: ENTER BASIC DISTRICT DATA

This tab collects the basic data, estimates, and assumptions that form the basis of the calculator’s output. It also suggests the likely source for each indicator. It is important to note that some indicators are somewhat subjective (e.g., Building Depreciation Schedule) or variable (e.g., Total Usable Hours per Year). Altering these factors will change the final calculations.


	Cost of Ownership	Amount (Sample Data)	Unit	Data Type	Data Source
1	Total Building Gross Square Footage (GSF)	9,317,862	GSF	Actual	School district
2	Current-Year Building Replacement Value	\$250	\$/GSF	Estimate	Industry
3	Building Depreciation Schedule	30	years	Policy	School district
4	Total Site Acres	385	acres	Actual	School district
5	Total Usable Hours per Year	2,500	hours	Policy	School district
6	Core Space Factor	30%	%	Estimate	Facility design standard

- 1 Total Building Gross Square Footage (GSF)** – The total GSF of all buildings in the school district inventory, in this example, 9,317,862. If the Cost of Ownership is to be analyzed related to only one facility, then the GSF would be of the one facility, but then all costs would need to be related to just that one facility.
- 2 Current-Year Building Replacement Value** – The estimate of the current market cost on a per square foot basis to replace the existing school facility or facilities – in this example, \$250 per GSF. This varies depending on regional construction and labor costs, as well as the quality of design and construction. The market cost of a school facility replacement value should include the “hard” costs for construction, as well as the “soft” costs for design and project management. It would not include site purchase costs, but it would include site preparation costs.
- 3 Building Depreciation Schedule** – The determination, based on the quality of design, materials, and construction quality, of the average life expectancy of major building systems, components, and structure – in this example, 30 years. For example, if schools are built of brick, with slate roofs, terrazo floors, and tile interior wall hallways, they may be considered to have an 80-year life. If they are built with block, VCT floors, built-up roof, and sheet rock hallways, they would be considered to have a 30-year life.
- 4 Total Site Acres** – The total land area encompassed by district facilities, totaled in acres – in this example, 385 acres.
- 5 Total Usable Hours per Year** – The total number of hours that the district operates a school facility so that it can be occupied by administrative staff and/or teachers and students. In this example, if the school can be occupied 5 days a week, 10 hours a day for 50 weeks, then the total usable hours is 2,500.
- 6 Core Space Factor** – The estimate of the percentage of the building GSF that is hallways, stairways, elevators, bathrooms, and operational support spaces included in the GSF of a building, but excluded from the net square footage of community-use space. In this example, that is an estimated average of 30%.


STEP 2: ENTER FACILITIES-RELATED COSTS

This tab calculates the total annual facilities-related expenditures in a district. The costs are organized into three main categories: operating costs, administrative costs, and capital costs. Enter the annual school district budget expenditures for fields highlighted in yellow. The expenditure categories are typical, but you can customize them to your district by adding or changing categories.


The operating expenditures are required to operate the facility safely and pay for utilities, custodial services, event setup, security, and overtime. In this example, the district's total operating costs are \$5.65 per square foot.

 OPERATING COSTS		Total District Cost	Share Dedicated to Facilities	Annualized Cost for Facilities	Annual Cost/SF
Facilities Operating Costs					
Utilities				\$ 6,600,000	\$ 0.71
Maintenance and Repairs				\$ 13,027,519	\$ 1.40
Custodial Services				\$ 26,386,387	\$ 2.83
Security				\$ 6,238,555	\$ 0.67
Custodial and Security Overtime				\$ 410,220	\$ 0.04
Total Facilities Operating Costs				\$ 52,662,681	\$ 5.65

These are the expenditures required to manage the operations and capital costs associated with the decision making, management, and oversight of school facilities. For some administrative cost categories, you will want to take a fraction of the total budget amount – for example, if the superintendent's office spends 10% of its time attending to facilities-related issues, you can enter 10% in the Share Dedicated to Facilities column to calculate the real annualized cost. In this example, administrative costs are 63 cents per square foot.




 ADMIN COSTS		Total District Cost	Share Dedicated to Facilities	Annualized Cost for Facilities	Annual Cost/SF
Admin-Related Facilities Costs					
District Facility Office		\$ 324,794	100%	\$ 324,794	\$ 0.03
Real Estate Office		\$ 495,269	100%	\$ 495,269	\$ 0.05
Environmental Health Office		\$ 1,246,696	100%	\$ 1,246,696	\$ 0.13
School-Level Administration (Principal)		\$ 21,600,000	10%	\$ 2,160,000	\$ 0.23
Human Resources Administration		\$ 3,728,837	10%	\$ 372,884	\$ 0.04
Superintendent's Office		\$ 1,202,080	10%	\$ 120,208	\$ 0.01
Payroll		\$ 2,246,089	10%	\$ 224,609	\$ 0.02
Office of Emergency Planning		\$ 190,052	50%	\$ 95,026	\$ 0.01
Purchasing Department		\$ 2,056,328	5%	\$ 102,816	\$ 0.01
District's Insurance Cost				\$ -	\$ -
Pensions & Benefits		\$ 7,616,920	10%	\$ 761,692	\$ 0.08
Total Facilities Administrative Costs				\$ 5,903,994	\$ 0.63

These are the annual capital costs needed to keep facilities in a state of good repair. They are based on the estimated current replacement value and the number of years estimated for the building's full depreciation. In this example, the annual capital costs are \$9.61 per square foot.

 CAPITAL COSTS		Total District Cost	Share Dedicated to Facilities	Annualized Cost for Facilities	Annual Cost/SF
Capital Costs					
Total Estimated Building Replacement Costs		\$ 2,329,465,500		\$ 77,648,850	\$ 8.33
Long Term Debt Service				\$ 1,324,426	\$ 0.14
Capital Management Costs				\$ 10,607,109	\$ 1.14
Total Capital Costs				\$ 89,580,385	\$ 9.61

COST OF OWNERSHIP

Once you have entered values for all of the facilities-related budget items, the calculator divides the Total Costs by the Total Square Footage and Total Usable Hours per Year to determine the Annual Cost per Square Foot (column E in the Excel file) and the Cost per Usable Hour per Square Foot (column F).

ADD	 OPERATING COSTS	\$52,662,681
+	 ADMIN COSTS	\$5,903,994
+	 CAPITAL COSTS	\$89,580,385
<hr/>		
=	TOTAL COSTS	\$148,147,060

Cost of Ownership by Square Foot






	TOTAL COSTS	\$148,147,060
DIVIDED BY	SQUARE FEET (SEE P. 2)	9,317,862
<hr/>		
=	ANNUAL COST PER SQUARE FOOT	\$15.90

Cost of Ownership by Square Foot Per Hour






	TOTAL COSTS	\$148,147,060
DIVIDED BY	USABLE HOURS (SEE P. 2)	2,500
<hr/>		
=	COST PER USABLE HOUR PER SQUARE FOOT	\$0.00636

STEP 3: SET JOINT-USE POLICIES

This tab helps you develop a joint-use fee policy and structure. The worksheet includes five categories of users, each of which is charged a particular percentage of the costs associated with their use of the district's facilities.

	Civic Users	0%	Level 1
	Program Partners	25%	Level 2
	Community Users	50%	Level 3
	Private Users 1	100%	Level 4
	Private Users 2	200%	Level 5

You can customize the categories of users and the percentages charged to them in the fields highlighted in yellow.

-  **Level 1: Civic Users** – These are organizations or individuals from the local community who use the school facilities for civic purposes, such as voting, community meetings, informal recreation, and shelter in an emergency. The policy in the example above would give them free use of the building as a public benefit.
-  **Level 2: Program Partners** – These are nonprofit organizations or other public agencies that use the school facilities and whose primary purpose is to provide programs and/or services that are designed and operated to advance the academic success of the children in the school. The example above charges them only 25% of the cost.
-  **Level 3: Community Users** – These are nonprofit organizations or other public agencies that use the school facilities and whose primary purpose is to provide programs and/or services that serve the local neighborhood or community, but are not explicitly designed and operated to advance the academic success of the children in the school. The example above charges them only 50% of the cost.
-  **Level 4: Private Users 1** – These are organizations, for profit or nonprofit, that are using the facility to raise revenue. The example above charges them 100% of the cost.
-  **Level 5: Private Users 2** – These are for-profit organizations that are using a facility for business purposes. The example above charges them 200% of the cost.

A transparent fee and subsidy structure is only one part of policy needed to support joint use. See www.bestfacilities.org to learn more about policy frameworks that support the joint use of public schools.

STEP 4: APPLY FEE STRUCTURE

This tab allows you to enter the Net Square Footage for different types of spaces, such as classrooms, cafeterias/multipurpose rooms, and gymnasiums. The calculator will help you determine the fees to charge for different types of spaces. Then, based on the policies established in Step 3, you can decide the percentage of facilities costs that you want to recover – in this example, from 0% to 200%.

Type of Space	Total Net Square Footage	Joint-Use Space		
		Core Space Factor	Total Gross Square Footage	Annual Cost of Ownership per Space
Classroom	1,000	30%	1,300	\$ 20,669
Cafeteria/Multipurpose Room	2,500	30%	3,250	\$ 51,673
Gymnasium	7,500	30%	9,750	\$ 155,018

Once you know individual space costs and the policies to determine what to charge, then you can apply the discounts or subsidies to specific types of spaces.

Fee Levels	% of Costs to be Recovered	Total Annual Cost per Space		
		Classroom Fees	Cafeteria/ Multipurpose Fees	Gymnasium Fees
Civic Users	0%	\$ -	\$ -	\$ -
Program Partners	25%	\$ 5,167	\$ 12,918	\$ 38,754
Community Users	50%	\$ 10,335	\$ 25,836	\$ 77,509
Private Users 1	100%	\$ 20,669	\$ 51,673	\$ 155,018
Private Users 2	200%	\$ 41,338	\$ 103,345	\$ 310,035
Total Cost/Hr		Total Cost/Hr		

Finally, you can assign an hourly fee for each space and each type of user.

Total Usable Hours Per Year	2500	Classroom Fees	Cafeteria/ Multipurpose Fees	Gymnasium Fees
Civic Users	0%	\$ -	\$ -	\$ -
Program Partners	25%	\$ 2.07	\$ 5.17	\$ 15.50
Community Users	50%	\$ 4.13	\$ 10.33	\$ 31.00
Private Users 1	100%	\$ 8.27	\$ 20.67	\$ 62.01
Private Users 2	200%	\$ 16.54	\$ 41.34	\$ 124.01