

City of Alexandria, Virginia

MEMORANDUM

DATE: APRIL 17, 2001

TO: THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

FROM: PHILIP SUNDERLAND, CITY MANAGER *ps*

SUBJECT: BUDGET MEMO # 10: UTILITY COSTS AT BURKE LIBRARY AS COMPARED TO TUCKER ELEMENTARY (COUNCILWOMAN EBERWEIN'S REQUEST)

This memorandum is in response to Councilwoman Eberwein's request for information regarding the increased utilities budget for the Charles E. Beatley, Jr. Library. Specifically, Councilwoman Eberwein requested the total annual cost for the utilities at Beatley, per square foot, as compared to the newly constructed Samuel Tucker Elementary School. Both facilities have similar heating and cooling systems powered by gas for heat (for the most part) and electricity for cooling.

A review of the Tucker facility for the first five months of operation (October 2000 through February 2001) for which data are available indicates the following by utility use and per square foot cost based on the floor plan of 51,500 total square feet.

UTILITY	FIVE MONTH COST	COST PER SQ. FT.
GAS	\$19,624	\$0.38
ELECTRIC	\$26,881	\$0.52
TOTAL	\$46,505	\$0.90

For the same five month period, Beatley's utility costs, based on its floor plan of 62,400 total square feet, were:

UTILITY	FIVE MONTH COST	COST PER SQ. FT.
GAS	\$29,269	\$0.47
ELECTRIC	\$35,475	\$0.56
TOTAL	\$64,744	\$1.04

Based on these per-square-foot figures, the Beatley Library costs are approximately 16 percent higher than the Tucker School costs. This is due to the fact that the first floor of the Beatley Library has ceiling heights that vary from the typical height of eight feet up to thirty-four feet in the central reception area. The three pyramids have ceiling heights of just over twenty-four feet at their highest point. The higher ceilings create a greater volume of space (cubic feet) to be heated and cooled. To compensate for this greater volume of air space within the building, a rough factor of 1.55 could be applied to the square footage to yield a comparative for volume by square foot. Using this calculation method, the cost of the Beatley Library would be \$0.67 per square foot for the five month period.

cc: Mark Jinks, Assistant City Manager
Ed Mandley, Director, General Services