

COST FOR ONE CLASSROOM PER YEAR

	Solve long term needs by purchasing new (yearly cost for 40 years)	Short term needs by leasing new (yearly cost for 7 years)	Short term needs by using currently owned units (yearly cost for 7 years)
Mobile/Modular	\$ 12,573	\$ 17,753	\$ 10,818
Permanent	\$ 7,656	\$ 40,679 <small>Comment 2</small>	\$ 40,679 <small>Comment 2</small>

Comments:

1) Based on the above, using permanent construction is more economical for long term crowding solutions. For short term crowding needs, the mobile/modular solution is more economical.

2) No salvage value is assigned to the permanent construction in the short term options due to not needing/desiring the asset after the crowding need ends. Otherwise schools would be even bigger than current plans. For example, if an 800 capacity elementary is the largest practical size, then building another 100 permanent spaces would encourage the need for the school to achieve that size. When other new schools are opened nearby, that reduces the crowding at that school. Now that excess space needs to be heated/cooled and maintained, but is no longer needed.

3) For short term need, a mobile/modular provides the flexibility to adjust for crowding more quickly than permanent and also allows the flexibility to move when crowding reduces due to other nearby new schools.

4) Minimal moving of modulars has been performed recently and new ones haven't been purchased in years. Therefore the cost data used is best available.
Of past 18 schools openings, only 2 currently have mobiles/modulars.

5) The cost budgeted for mobile or modular leasing / relocations in the 7 year capital plan represents 0.8% of the total 7 year budget, but this number is being evaluated for a possible reduction.

6) WCPSS only leases mobile units if no owned units are available to be relocated for the purposes of overcrowding. Once the overcrowding at school "A" is alleviated by construction of a nearby "School B", the mobiles should no longer be needed and can be removed. As a general rule, WCPSS no longer purchases mobile units and so the capital improvement plan includes only funding for moving owned and leased mobiles. That being the case, leasing a mobile unit is less expensive over the lease period than the cost of construction and ownership of a new permanent classroom over that same period of time.

7) For the purposes of this cost analysis exercise, it is noted that the proto-typical classroom sizes of a mobile unit and a permanent classroom space are different as follows:

a. Mobile or Modular classroom

a typical 8 classroom modular is 8,000 sf - therefore 1 classroom is 1/8th or 1,000 sf which includes some bathroom and hallway areas

b. Permanent classroom

We are using 900 sf as a typical classroom size. In a permanent classroom solution we included the additional square footage for corridors, bathrooms, and mechanical spaces used to support the facility. The factor used for this purpose is 43%, which is added, so the true permanent classroom size is now calculated at 900 sf + 43% grossing factor = 1,247 sf.

c. Summary:

Mobile or Modular classroom	1,000 sf
Permanent classroom	1,278 sf

** Therefore - the permanent classroom spaces in the examples above are approximately 25% larger than the comparable mobile/modular space used for comparison.

Life Cycle Costs of Mobile Classroom vs New permanent classroom (Brick and Mortar)

Mobile/Modular	Purchase modular which has 20 yr useful life (replace again at 20 years)		
\$	135,000	Cost of 1 classroom (based on 8 cls owned modular unit)	
\$	236,723	New replacement cost at 20 years	1000 sf
\$	105,562	Maint cost \$ 1400/yr inflated at 3% over 40 years	
		Custodial Expenses - assume comparable for both cases	
		Utility Cost - assume comparable in both cases	
		No Roof Replacement during 20 yr life	
\$	5,219	One HVAC - Bard unit at 10 years	
\$	9,426	One HVAC - Bard unit at 30 years	
\$	3,914	One flooring replacement and Paint at 10 years	
\$	7,070	One flooring replacement and Paint at 30 years	
\$	-	Value at the end of 20 and 40 year intervals	
\$	502,914	Total Cost over 40 yr Life Cycle	
	40	Total years to compare to permanent space	
\$	12,573	Cost per Year to own and operate	

Permanent CR	40 yr useful life					
\$	280,920	Bldg. Unit Cost New	\$ 218/sf (including soft costs)	sf	1287 sf (900sf with 43% non assignable)	218 Cost per square foot
\$	37,701	Maint cost	\$ 500/yr inflated at 3% over 40 years			
		Custodial Expenses - assume comparable for both cases				
		Utility Cost - assume comparable in both cases				
\$	17,535	Renovation -	1 Roof replacement	original 10K inflated at 3% for 20 years		
\$	35,070		1 HVAC and Lighting replacements	original 20K inflated at 3% for 20 years		
\$	10,521		1 flooring and paint	original 6K inflated at 3% for 20 years		
\$	8,768		1 Technology upgrades	original 5K inflated at 3% for 20 years		
\$	(84,276)	Value at end of 40 years (30%)				
\$	306,239	Total Cost over 40 yr Life Cycle				
\$	40	Total years to compare to modular space				
\$	7,656	Cost per Year to own and operate				

Life Cycle Costs of Mobile Classroom vs New permanent classroom (Brick and Mortar)

Mobile/Modular	Lease new unit for 7 years		
\$	65,000	Bring in new and setup complete cost of 1 classroom (based on 8 cls modular unit)	
\$	48,125	Lease payments for 7 years (for 1 classroom)	1000 sf
\$	1,149	Maint cost \$ 150/yr inflated at 3% over 7 years	
		Custodial Expenses - assume comparable for both cases	
		Utility Cost - assume comparable in both cases	
\$	10,000	Lease company removes and therefore no salvage value	
\$	124,274	Total Cost over 7 yr	
	7	Total years to compare to permanent space	
\$	17,753.48	Cost per Year to lease and operate for 7 years	

Permanent CR	Permanent space (40 yr useful life, but only used for 7 years)			218	Cost per square foot
\$	280,920	Bldg. Unit Cost New	\$ 218/sf (including soft costs)	sf	1287 sf (900sf with 43% non assignable)
\$	3,831	Maint cost \$ 500/yr inflated at 3% for 7 years			
		Custodial Expenses - assume comparable for both cases			
		Utility Cost - assume comparable in both cases			
\$	-	Normally there would be a salvage value of approx. \$238,782 based on 85% of initial value, but due to not wanting or needing this asset at the end of this time, it is being shown as zero.			
\$	284,751	Total Cost over 7 yr			
\$	7	Comparion period			
\$	40,679	Cost per Year to own and operate for 7 years			

Life Cycle Costs of Mobile Classroom vs New permanent classroom (Brick and Mortar)

Mobile/Modular	Currently owned unit for 7 years		
\$ 65,000	Relocation cost of 1 classroom (based on 8 cls modular unit)		
\$ -	Lease payments for 7 years (for 1 classroom)	1000 sf	
\$ 10,727	Maint cost \$ 1400/yr inflated at 3% over 7 years		
	Custodial Expenses - assume comparable for both cases		
	Utility Cost - assume comparable in both cases		
\$ -	Next use pays for removal and restoration of site		
\$ 75,727	Total Cost over 7 yr		
7	Total years to compare to permanent space		
\$ 10,818	Cost per Year to own and operate for 7 years		

Permanent CR	Permanent space (40 yr useful life, but only used for 7 years)			218 Cost per square foot
\$ 280,920	Bldg. Unit Cost New \$ 218/sf (including soft costs)	sf	1287 sf	(900sf with 43% non assignable)
\$ 3,831	Maint cost \$ 500/yr inflated at 3% for 7 years			
	Custodial Expenses - assume comparable for both cases			
	Utility Cost - assume comparable in both cases			
\$ -	Normally there would be a salvage value of approx. \$238,782 based on 85% of initial value, but due to not wanting or needing this asset at the end of this time, it is being shown as zero.			
\$ 284,751	Total Cost over 7 yr			
\$ 7	Comparion period			
\$ 40,679	Cost per Year to own and operate for 7 years			