

# PHASE 1 – FACILITIES CONDITION ASSESSMENTS

## EXECUTIVE SUMMARY

As part of the study of the possible transfer of the Department of Defense Elementary and Secondary Schools (DDESS) to local education agencies, a contract was given to the Army Corps of Engineers to assess the current condition of the facilities used to educate the students. The Army Corps of Engineers subcontracted with Parkhill, Smith, and Cooper, Inc. in September 2002 to conduct a facility condition assessment at the 58 DDESS schools in the continental United States. The purpose of the assessment was to document the current physical condition of each school, estimate the cost of repairs needed to comply with current Codes and Local Education Agency requirements, and recommend renovation or replacement for each school.

Schools were evaluated using the American Society of Testing Materials (ASTM) guidelines for walk-through surveys and the most recent Department of Defense guidance on facilities recapitalization. The ASTM guide defines customary practice for conducting a baseline property condition assessment to identify and communicate physical deficiencies through a Property Condition Report (PCR). Walk-through procedures that are outlined by ASTM recommend various systems, components, and equipment that should be observed. Physical deficiencies include presence of conspicuous defects or material deferred maintenance of a school's material systems, components or equipment.

Based on this guidance and the necessary repair costs, the study classified each of the 58 DDESS schools as excellent, good, adequate, poor or needs replacement. Most schools (49) in the study were rated as adequate or better including 23 schools that were classified as good or excellent. Four schools were rated as needing replacement and five others were determined to be in poor condition and may require replacement in the out years of this study.

During the course of the analysis, some factors emerged as primary influences on the rating structure. These factors include the building's composite age and the condition of its mechanical, plumbing, electrical and roofing systems. In a few cases, the American Disabilities Act (ADA) accessibility guidelines were also a factor. The schools recommended for replacement all require work to one or more of these major building systems and are schools with a high composite age. These schools are:

Russell Elementary at Quantico Marine Base  
West Point Middle School at the United States Military Academy at West Point  
Irwin Junior High at Fort Bragg  
Stone Street Elementary at Camp Lejeune

Two of these schools, Stone Street Elementary (FY 04) and Irwin Junior High (FY 08) are currently in the military construction program of DoDEA.

It is the recommendation of Parkhill, Smith and Cooper that the items noted for repair is addressed in a renovation program, regardless of the outcome of the DDESS Transfer Study, particularly those items noted for immediate action.

## Facility Condition Assessment

### Modified Recapitalization Metric (MRM)

One of the tenets of the study was to do a school by school analysis of the status of the facilities. Based on the guidelines used by Parkhill, Smith and Cooper, each school was assigned a MRM value. This value is the ratio between requirement investments to target sustainment. A ratio less than 1.00 indicates that it may be more cost effective to renovate a facility rather than replace it. A ratio of 1.00 or more indicates that it is more cost effective to build a new facility. Parkhill, Smith and Cooper also provided a facility rating analysis based on the MRM, as follows:

<u>Ratings</u>	<u>MRM Values</u>	<u>Remediation Needed</u>
Excellent	Has a MRM of less than 0.10	None
Good	Has a MRM between 0.11 and 0.39	Some
Adequate	Has a MRM between 0.40 and 0.79	Significant
<b>Poor</b>	Has a MRM between 0.80 and 1.00	Major
<b>Replace</b>	Has a MRM over 1.00 Replacements	

Listed below are the MRM's ratings for each of the DDESS schools:

<u>District</u>	<u>Installation</u>	<u>School</u>	<u>Rating</u>	
Georgia/Alabama	Fort Benning	Dexter Elementary	Good	
		Faith Middle	Good	
		Loyd Elementary	Adequate	
		McBride Elementary	Adequate	
		Stowers Elementary	Good	
		White Elementary	Adequate	
	Maxwell AFB Robins AFB Fort Rucker	Wilson Elementary	Excellent	
		Maxwell Elementary	Good	
		Robins Elementary	Adequate	
		Rucker Elementary	Good	
		Rucker Primary	Good	
Kentucky DDESS	Fort Campbell	Barkley Elementary	Adequate	
		Fort Campbell HS	Good	
		Jackson Elementary	Adequate	
		Lincoln Elementary	Good	
		Lucas Elementary	Excellent	
		Mahaffey Elementary	Adequate	
		Marshall Elementary	Good	
		Wassom Middle	Good	
		Fort Knox	Fort Knox HS	Adequate
			Kingsolver Elementary	Adequate
	MacDonald Intermediate		Adequate	
	Mudge Elementary		Adequate	
	Pierce Elementary		Adequate	
			Scott Middle	Good
			Van Voorhis Elementary	Adequate
		Walker Elementary	Adequate	

**Modified Recapitalization Metric (MRM) – cont.**

<u>District</u>	<u>Installation</u>	<u>School</u>	<u>Rating</u>		
North Carolina	Fort Bragg	Albritton JH	Adequate		
		Bowley Elementary	Good		
		Butner Elementary	Adequate		
		Devers Elementary	Excellent		
		Holbrook Elementary	Adequate		
		Irwin Middle	<b>Replace</b>		
		McNair Elementary	<b>Poor</b>		
		Murray Elementary	<b>Poor</b>		
		Pope AFB	Camp Lejeune	Pope Elementary	Adequate
				Berkeley Manor Elementary	<b>Poor</b>
				Brewster Middle	Excellent
				Camp Lejeune HS	Excellent
				Delalio Elementary	Adequate
				Russell Elementary	Adequate
				Stone Street Elementary	<b>Replace</b>
New York/Virginia	Dahlgren Quantico	Tarawa Terrace I Elementary	<b>Poor</b>		
		Tarawa Terrace II Elementary	Excellent		
		Dahlgren Elementary	Adequate		
New York/Virginia	West Point	Ashurst Elementary	<b>Poor</b>		
		Burrows Elementary	Good		
		Quantico HS	Adequate		
		Russell Elementary	<b>Replace</b>		
		West Point Elementary	Good		
		West Point Middle	<b>Replace</b>		
South Carolina	Fort Jackson	Hood Street Elementary	Adequate		
		Pierce Terrace Elementary	Good		
		Pinckney Elementary	Adequate		
	Laurel Bay	Fort Stewart	Laurel Bay Intermediate	Adequate	
			Laurel Bay Primary	Adequate	
	Fort Stewart	Fort Stewart	Brittin Elementary	Good	
			Diamond Elementary	Good	

It is noted that two districts, North Carolina and Virginia/New York, have all of the schools that are categorized as being either poor or needing replacement. All of the other districts have their schools ranked as excellent, good or adequate. In terms of installations, Fort Bragg, Camp Lejeune, Quantico and West Point have schools that need major repair or replacement.

**Cost Analysis**

In addition to the rating scale, each of the schools was given a detailed listing of projects that need to be completed. The costs were sub-divided into immediate, intermediate and long-term costs. The school by school listing is available in the Parkhill, Smith and Cooper binder.

Combining these costs by district, the following is the analysis of the costs over the next ten years for each of the DDESS school districts:

Georgia/Alabama	\$14 million
Kentucky	40
North Carolina	49
South Carolina	12
NY/Virginia	10
 Total	 \$125 million

Replacement Costs

As indicated earlier, the Phase 1 Report from Parkhill, Smith, and Cooper recommended the replacement of four schools. An analysis of these schools is noted below:

School	District	Installation	MRM Value	Costs to Replace	MilCon Funding (Year)
Russell Elementary	Virginia/New York	Quantico	2.32	\$5,342,000	None
West Point Middle	Virginia/New York	West Point	1.65	10,262,000	None
Irwin Junior High	North Carolina	Fort Bragg	1.28	12,421,000	2008
Stone Street Elem.	North Carolina	Camp Lejeune	1.04	5,125,000	2004
Totals				\$33,150,000	