# Douglas MacArthur Elementary School

1101 Janney's Lane, Alexandria, VA 22302

At a Glance								
Year Built	Тах Мар	Current Square Feet	Average Educational Adequacy					
1942	051.02-03-16	56,098	Borderline (68)					
Zoning	Lot Size	Floor Area Ratio	Allowed Square Feet					
R12	191,664	0.30	57,000					
School Site	Building Assessment	Instructional & Support Spaces	Utilization					
Satisfactory (84)	Borderline (58)	Borderline (63)	Very Inadequate (69)					

# **Background**

Douglas MacArthur Elementary School was built in 1943 predominantly for children of the Naval Torpedo Plant



workers living in Chinquapin Village. The school has undergone a number of renovations with the most recent one occurring in 2008. The school is located at 1101

Jenney's Lane, in a residential neighborhood.

In 2014, Douglas MacArthur had an enrollment of 708 students with a capacity of 554 students. By 2020, enrollment is expected to increase by 9.5 percent to 772 students.

The academic curriculum at MacArthur includes reading, language arts, mathematics, social studies, and science.

#### The school also offers:

• Art instruction once per week • Two physical education classes per week • Global Art on a Timeline • Habits of the Mind and Character Counts • Instruction in family life education at age appropriate levels • Band and orchestra beginning in 4<sup>th</sup> grade • Vocal music instruction once per week • LD Resource with inclusion, • Speech, OT and PT • Visiting science teacher • Weekly library visits, • Talented & Gifted program for grades K-5 • ELL program for students learning English as a second language • Opportunity to participate in numerous after school programs.

DASHBOARD				
Current Enrollment (2014-2015)	708			
School Capacity	554			
Projected Enrollment (2020)	772			
Projected Primary Instructional Classroom	2020			
(surplus/deficit)	-6			
Projected Total Program Square Feet	2020			
	-23,445			
Electric Usage in kilowatt-hour	539,440			
(7/1/2013 – 6/30/2014)				
Number of Maintenance Calls	134			
(7/1/2013 - 6/30/2014)				

# **Key Findings**

# Summary

With a score of 68 percent, the site assessment completed for Douglas MacArthur rates this school as borderline on the educational adequacy benchmark.

## High Priority Issues

• The school will be significantly over capacity by 2020. The major issues in the school are the classroom sizes, need for additional storage areas and temperature controllability.

## **School Site**

Environmental Considerations	Rolling slopes			
Number of Playgrounds	4			
Recreation Features	Playgrounds, basketball court, synthetic turf field, open fields.			
Resource Protection Areas	No			
Number of Parking Spaces	59			
Storm Water Management	No existing BMPs			
115/010	weat			
	To s MacArthur tary School			

The existing school is adjacent to the Forest Park. The existing school building was partially constructed in the adjacent park (POS zone). Any future projects should consider rectifying this boundary issue.

While assessment of this school site resulted in a satisfactory rating, it is important to note that the school is lacking a student drop-off area with a stacking room and the pedestrian pathways are not adequately separate from vehicular traffic.

There are significant drainage issues that have caused flooding and deterioriation of the north wing of the school.

## **Instructional and Support Spaces**

The overall score for this section is borderline. Items contributing to this low score include classroom size, internal organization, loose furnishings, and air quality—while more than half of instructional and specialty classrooms did not have the required number of teaching walls

For Alexandria City Public Schools (ACPS), meeting size requirements is one of the highest priorities and the majority of classrooms in this category were below the minimum square footage requirement. The desired square

footage for a kindergarten classroom is 1,175, however, at Douglas MacArthur, the average for this grade level was 961 square feet. First through fifth grade classrooms require at least 900 square feet, but the average at this school is 742 square feet. The overall capacity of the instructional classrooms is only 69 percent of their ideal square foot size (per student) as detailed in the educational specifications.

The second most important condition is air, lighting, and acoustic quality of the rooms. Of these three, the lack of controllable lighting and air temperature were borderline for both core and specialty classrooms. Although most core instructional classrooms maintained proper equipment and infrastructure, with classroom acoustics being acceptable, the specialty and shared classrooms were borderline or below in this category. The specialty and shared classrooms were also missing adequate storage and the presence of an interactive electronic device. The last area of concern is the specialty classrooms which are lacking required space, infrastructure, furnishings, temperature and lighting controls.

# Building Assessment

There are three subcategories evaluated in the building assessment section: building organization, technology and support infrastructure, and building accessibility. MacArthur received a borderline rating in two of the three subcategories; technology and support infrastructure and building accessibility. Some technology inadequacies include: lack of wireless internet for students at a 1:1 ratio, lack of electrical outlets in classrooms and hallways, and an integrated clock and public announcement system.

Finally, building organization received a satisfactory score due to shared space and grade level clusters being centrally located, however, the school does not have extended learning areas for first through third grade clusters. ACPS should also provide public visitor restrooms, which were not available at MacArthur.

#### **Recommendations**

Because of the building condition and the interior configuration, a total school replacement is recommended. In order to accommodate the existing enrollment, a new building will likely exceed the FAR allowed by the zoning.

## GROUP 1 - REQUIRED PLANNING

• **Site** assessment to determine whether the drop-off location for the school can be relocated/reconfigured (based on property, boundaries, setbacks, etc.).

## **GROUP 2 - FIRST PRIORITY**

- Rezone the property and correct the boundary to allow for a new building to accommodate the projected student enrollment
- Consider a total school replacement. This should address additional square footage supporting projected utilization and address deficient key organizational adjacencies while maximizing open space at the existing site.

## GROUP 3 - SECOND PRIORITY

- Equip all core classrooms and support spaces with wall mounted interactive devices and the appropriate support infrastructure.
- Additional storage for teachers and students should be integrated into the reconfigured classrooms as well as an upgrade to furniture, fixtures and equipment
- Equip all classrooms and support spaces with individual climate and variable lighting controls.



## Exhibit A

EXHIDII A					_	
Appraisal Sumn	nary for: Douglas	MacArthur				Key
					1	Excellent
Summary	Unweight Points	ed Tier	Priority	Rating Category	2	Satisfactory
					3	Borderline
1.0 School Site	84			Satisfactory	4	Inadequate
2.0 Building Assessment	58			Borderline	5	Very Inadequate
3.0 Instructional and Support Space	ces 63			Borderline		
4.0: Utilization	47			Very Inadequate		
Average	63			Borderline		
	1.0 School Site	<u> </u>				
Section 1	Unweight	ed Tier	Priority	Rating Category		
A Site Circulation.	Points 68	4	14	Borderline	-	
B Play areas / fields	100	3	23	Excellent		
Average : School Site	84			Satisfactory		
	202 111				_	
	2.0 Building Assess					
Section 2	Unweight Points	ea Tier	Priority	Rating Category		
A Building Organization	75	4	19	Satisfactory		
B Technology and Supporting Infrastructure	e <b>50</b>	4	14	Borderline		
C Accessibility	50	4	14	Borderline	4	
Average: Building Assessment	58			Borderline		
3.01	Instructional and Sup	port Spaces				
Section 3	Unweight		Priority	Rating Category		
Court Classes and	Points				4	_
Core Classrooms  Meets Size Requirements	48	2	7	Inadequate		_
Internal Organization and Ancillary Space		4	19	Satisfactory		
Loose Furnishings	69	4	14	Borderline	•	
Fixed Equipment and Infrastructure	81	4	19	Satisfactory		
Lighting Quality	69	3	13	Borderline		
Natural Lighting	82	3	18	Satisfactory		
Acoustics	93	3	23	Excellent		
Air Quality and Temperature	65	3	13	Borderline	4	
Shared Spaces	27		-	In the second	4	
Meets Size Requirements	36 s 79	2	7 19	Inadequate Satisfactory		
Internal Organization and Ancillary Space Loose Furnishings	90	4	24	Satisfactory Excellent		
Fixed Equipment and Infrastructure	69	4	14	Borderline		
Lighting Quality	76	3	18	Satisfactory		
Natural Lighting	74	3	18	Satisfactory		
Acoustics	87	3	18	Satisfactory		
Air Quality and Temperature	72	3	18	Satisfactory		
Average: Instructional and Support Spaces	63			Borderline	4	
	4.0: Utilization	<u>1</u>				
Section 4 : Utilization	Unweight	ed Tier	Priority	Rating Category		
A Core Classrooms (Capacity Drivers)	Points 75	2	7	Inadequate		
B Specialty Classrooms (Core A)	9	3	3	Very Inadequate		
	57	3	3	Very Inadequate		
C Shared Spaces (Core B)	5/	3	3	very madequate		

