

## Summary of Findings

The Lois T. Murray Special Ed. PK-8 Facility located at 1600 Arlington Avenue in Baltimore, Maryland, was built in 1979. It comprises 20,503 gross square feet.

The total current deficiencies for this site, in 2011 construction cost dollars, are estimated at \$2,035,253. The 10 Yr Life Cycle Costs are estimated at \$1,679,787. The Ten-Year Repair Cost, calculated by adding the Building Condition Costs and the Ten-Year Life Cycle Renewal Cost is \$3,715,040.

### Facility Condition by Building

Number	Building Name	Gross Sq Ft	Built Date	Facility Condition Cost	Future Life Cycle Cost (Yr 1-10)	Repair Cost	Replacement Cost	Current + 10 Yr LC FCI	Cost Per Square Foot
313	Site Bldg 1	20,503	1979	\$478,799 \$1,556,454	\$180,000 \$1,499,787	\$658,799 \$3,056,241	\$4,399,490	69.47%	\$149.06
Totals		20,503		\$2,035,253	\$1,679,787	\$3,715,040	\$4,399,490	84.44%	\$181.19

### Cross Tab of Current Deficiencies

The following chart summarizes the current deficiencies for this site in a cross tab that shows the buildings systems down the left and the priority of the deficiency across the top. This listing includes current deficiencies including deferred maintenance, functional deficiencies, code compliance, Americans with Disabilities Act, and Capital Renewal categories.

### Facility Condition Cost - System by Priority

System	Priority					Total
	1	2	3	4	5	
Site	-	\$3,152	\$8,749	\$133,810	\$41,186	\$186,897
Roofing	-	-	-	-	-	\$0
Structural	\$1,778	-	-	-	-	\$1,778
Exterior	-	-	-	-	\$5,010	\$5,010
Interior	-	-	\$46,088	\$18,249	\$10,567	\$74,905
Mechanical	-	\$7,717	-	-	-	\$7,717
Electrical	\$49,372	\$193,796	-	\$18,001	\$42,604	\$303,773
Plumbing	-	-	-	\$119,932	\$66,020	\$185,952
Fire & Life Safety	\$79,369	\$42,388	\$158,390	-	\$98,000	\$378,147
Technology	-	-	\$23,258	\$89,090	\$48,161	\$160,509
Stairs & Elevators	-	\$401,378	-	-	-	\$401,378
Specialties	-	-	-	\$47,302	\$281,885	\$329,186
Total	\$130,519	\$648,432	\$236,485	\$426,383	\$593,434	\$2,035,253

The deficiencies have been further grouped according to the category of deficiency observed with its priority. ADA Compliance are code related concerns brought about by the Americans with Disabilities Act of 1990, in most cases after the school was constructed. Capital Renewal items include those items that have reached or exceeded their useful life. Code Compliance includes components of the building, other than ADA items, that do not comply with current codes. In many cases these may be 'grandfathered', however will have to be addressed under any major renovation scenarios. Deferred Maintenance includes items that have broken or are in need of repair prior to reaching the end of their useful life, and have not been addressed by the district's maintenance program due to a lack of funding. Educational Adequacy needs are items that are directly related to the instructional environment and support the educational mission at the school including, for instance, instructional aids, technology, supervision and security concerns. The Energy Efficiency category generally includes system wide replacements that are associated with a reduction in energy or water consumption. Furniture, Fixtures, and Equipment include three classifications associated with the district's ongoing program for replacing furniture and moveable equipment that has reached the end of its serviceable life in the custodial, food service, and instructional or administrative areas. A Functional Deficiency is typically one that is presently not in place and is needed at the site or facility.

#### Facility Condition Cost - Category by Priority

Category	Priority					Total
	1	2	3	4	5	
ADA Compliance	-	\$3,152	\$4,356	\$13,819	-	\$21,326
Capital Renewal	\$51,150	\$201,513	\$4,394	\$69,161	-	\$326,218
Code Compliance	\$79,369	\$9,227	-	-	-	\$88,597
Deferred Maintenance	-	\$17,663	-	\$24,417	\$13,412	\$55,492
Educational Adequacy	-	\$401,378	\$227,736	\$262,485	\$580,022	\$1,471,621
Functional Deficiency	-	\$15,498	-	\$56,502	-	\$72,000
Total	\$130,519	\$648,432	\$236,485	\$426,383	\$593,434	\$2,035,253

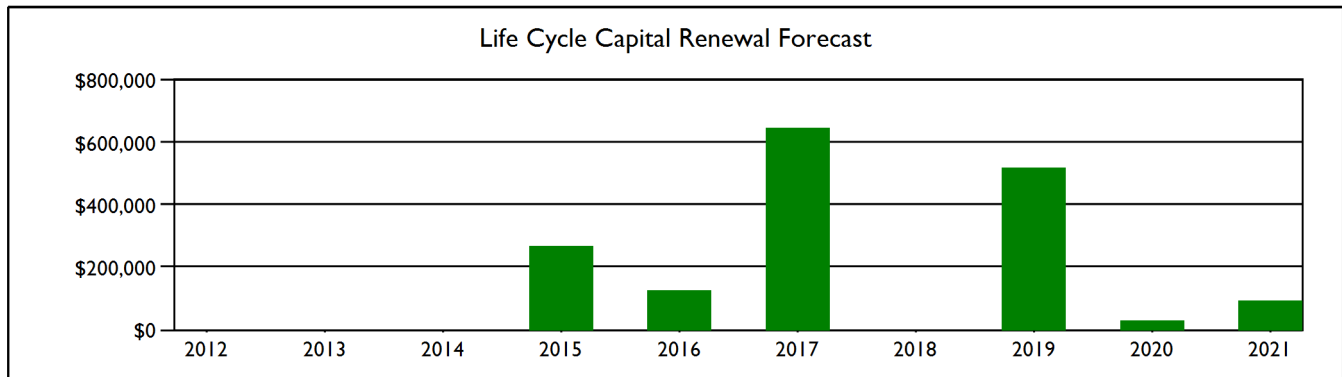
#### Life Cycle Capital Renewal Forecast

As part of the assessment process, this facility was analyzed according to its major building systems. Each system can be distinguished by its type, and each type of system or equipment has an expected serviceable life, at which point the system will in all likelihood require replacement. Life cycle capital renewal forecasts are developed by cataloguing system installation dates and comparing the ages to their expected life to determine the remaining life for that system. The assessment database incorporates a combination of building system data from two sources. The district maintains detailed information about roofing and paving according to the section, and that information was used to construct a life cycle capital renewal forecast for those systems. In cooperation with the State of Maryland, that data has been incorporated into the district's assessment database in order to provide a projection of capital renewal needs for the next ten years.

The following chart shows all current deficiencies and the subsequent ten-year life cycle capital renewal projections for major building systems where a component is expected to reach the end of its useful life and require capital funding for replacement. This chart shows the forecast in thousands (\$000s) for the next ten years.

## Capital Renewal Forecast

System	Life Cycle Capital Renewal Projections											Total	\$/GSF
	Current Deficiencies	Year 1 2012	Year 2 2013	Year 3 2014	Year 4 2015	Year 5 2016	Year 6 2017	Year 7 2018	Year 8 2019	Year 9 2020	Year 10 2021		
Site	186,897	0	0	0	180,000	0	0	0	0	0	0	\$180,000	\$8.78
Roofing	0	0	0	0	0	0	339,891	0	3,434	0	0	\$343,325	\$16.75
Structural	1,778	0	0	0	0	0	0	0	0	0	0	\$0	\$0.00
Exterior	5,010	0	0	0	0	0	0	0	43,703	0	0	\$43,703	\$2.13
Interior	74,905	0	0	0	66,442	27,587	0	0	213,375	0	0	\$307,404	\$14.99
Mechanical	7,717	0	0	0	19,080	96,938	205,348	0	41,374	32,571	10,303	\$405,614	\$19.78
Electrical	303,773	0	0	0	0	0	0	0	0	0	0	\$0	\$0.00
Plumbing	185,952	0	0	0	0	0	16,504	0	6,618	0	0	\$23,122	\$1.13
Fire & Life Safety	378,147	0	0	0	0	0	0	0	209,899	0	82,768	\$292,667	\$14.27
Technology	160,509	0	0	0	0	0	0	0	0	0	0	\$0	\$0.00
Stairs & Elevators	401,378	0	0	0	0	0	0	0	0	0	0	\$0	\$0.00
Specialties	329,187	0	0	0	0	0	83,952	0	0	0	0	\$83,952	\$4.09
Other	0	0	0	0	0	0	0	0	0	0	0	\$0	\$0.00
<b>Total</b>	<b>2,035,253</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>265,522</b>	<b>124,525</b>	<b>645,695</b>	<b>0</b>	<b>518,403</b>	<b>32,571</b>	<b>93,071</b>	<b>\$1,679,787</b>	<b>\$81.93</b>



Lois T. Murray Special Ed. PK-8 Condition Assessment

Assessment Findings

Facility Condition Index (FCI)

The Facility Condition Index (FCI) is used throughout the facility condition assessment industry as a general indicator of a building's health. The FCI is calculated by dividing the Ten-Year Repair cost by the Replacement Value. Costs associated with new construction are not included in the FCI calculation. As a rule of thumb, an FCI below 10% is considered good. An FCI above 75% would suggest that the building is a candidate for replacement.

The Lois T. Murray Special Ed. PK-8 facility has an overall FCI of 84.4%

The total current cost for all building deficiencies is \$2,035,253. There are \$478,799 in deficiencies at the site level that are included in the FCI calculation. In addition, the ten year life cycle renewal cost was \$1,679,787. The cost estimates were derived using a detailed listing of all noted deficiencies in the building. The cost to repair these deficiencies was then estimated using the cost data adjusted to Baltimore, Maryland (92.6% of national average).

The Replacement Value represents the estimated cost of replacing the current building with another building of like size, based on today's estimated cost of construction in the Baltimore, Maryland area. The estimated replacement cost for this facility is \$4,399,490.

The following pages provide a listing of all deficiencies and their associated cost for the site and building, followed by photos taken during the assessment.

## Site Level Deficiencies

### Site

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Existing Sidewalk Is Cracked And Poses A Hazard To Accessibility	ADA Compliance	250	SQFT	2	\$3,152	1610
Concrete Walks Are Damaged And Require Replacement	Capital Renewal	300	SF	3	\$4,394	1600
The Van Accessible Parking Spaces Have Slopes That Exceed The Maximum Allowable ADA Compliant Criteria	ADA Compliance	1	Ea.	3	\$4,356	1605
Asphalt Paving Is Damaged And Requires Replacement	Capital Renewal	12	CAR	4	\$40,714	1597
Concrete Paving Is Damaged And Requires Replacement	Capital Renewal	3	CAR	4	\$10,198	1598
Exterior Basketball Goals Are Damaged And Require Replacement	Deferred Maintenance	2	Ea.	4	\$12,578	1603
Parent Drop-Off (including all related drives and walks) is missing and is required	Functional Deficiency	1	Ea.	4	\$56,502	497305
<b>Note:</b> Parent Drop-Off (including all related drives and walks) is missing and is required						
The Car Accessible Parking Spaces Do Not Meet ADA Requirements	ADA Compliance	1	Ea.	4	\$2,733	1607
The Curb Ramp Does Not Meet Minimum ADA Compliance Requirements	ADA Compliance	3	Ea.	4	\$8,695	1609
The Exterior Signage At The Accessible Parking Area Does Not Meet ADA Requirements	ADA Compliance	3	Ea.	4	\$852	1608
The Van Accessible Parking Spaces Are Not Properly Striped	ADA Compliance	1	Ea.	4	\$646	1604
The Van Accessible Parking Spaces Do Not Meet ADA Requirements	ADA Compliance	1	Ea.	4	\$893	1606
Paving Requires Restriping	Deferred Maintenance	25	CAR	5	\$942	1599
Play Field Requires Repair	Deferred Maintenance	1,000	SF Surf	5	\$1,359	1602
School lacks marquee or marquee in poor condition.	Educational Adequacy	1	Ea.	5	\$37,078	529303
<b>Note:</b> School lacks marquee or marquee in poor condition.						
Wheel Stops Are Damaged And Require Replacement	Deferred Maintenance	8	Ea.	5	\$1,808	1601
<b>Sub Total for System</b>		<b>16</b>	<b>items</b>		<b>\$186,897</b>	

### Structural

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Concrete stairs require replacements	Capital Renewal	25	SF	1	\$1,778	1611
<b>Note:</b> Exterior stair deteriorated/cracked/damaged						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$1,778</b>	

### Fire & Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Building not equipped with Card Key Access Control	Educational Adequacy	6	Ea.	3	\$158,390	497473
<b>Note:</b> Building not equipped with Card Key Access Control						
School lacks appropriate central surveillance equipment.	Educational Adequacy	1	Ea.	5	\$46,047	497035
<b>Note:</b> School lacks appropriate central surveillance equipment.						
School lacks appropriate number of surveillance cameras.	Educational Adequacy	16	Ea.	5	\$51,954	497075
<b>Note:</b> School lacks appropriate number of surveillance cameras.						
<b>Sub Total for System</b>		<b>3</b>	<b>items</b>		<b>\$256,390</b>	

### Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Cable TV Is Inadequate To All Rooms And A Headend Should Be Installed	Educational Adequacy	20,503	SF	4	\$33,734	486334
<b>Note:</b> The Cable TV Is Inadequate To All Rooms And A Headend Should Be Installed						
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$33,734</b>	
<b>Sub Total for School and Site Level</b>		<b>21</b>	<b>items</b>		<b>\$478,799</b>	

## Building: 313 - Building 1

### Exterior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Exterior Requires Cleaning	Deferred Maintenance	2,000	SF Wall	5	\$5,010	1347
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$5,010</b>	

### Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Door does not have the Required Thumb / Key Lock	Educational Adequacy	22	Door	3	\$46,088	Rollup
The Acoustical Ceilings Tiles Are Damaged And Require Replacement	Capital Renewal	2,600	SF	4	\$18,249	1348
Classroom door lacks the appropriate vision panel.	Educational Adequacy	2	Ea.	5	\$972	Rollup
Interior Ceramic Walls Require Repainting	Deferred Maintenance	700	SF Wall	5	\$1,829	1351
Interior Gypboard Walls Require Repainting	Deferred Maintenance	1,500	SF Wall	5	\$1,847	1350
Large rooms lack capacity signs.	Educational Adequacy	2	Ea.	5	\$378	Rollup
Room lacks appropriate sound control.	Educational Adequacy	1,908	SF	5	\$4,924	Rollup

## Interior

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Gypboard Ceilings Are Damaged And Requires Repainting	Deferred Maintenance	200	SF	5	\$618	1349
<b>Sub Total for System</b>		<b>8</b>	<b>items</b>		<b>\$74,905</b>	

## Mechanical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
LC: The Mechanical / Fan Coils (Count Basis) / Water (Heat) system is beyond its useful life.	Capital Renewal	3	Ea.	2	\$7,717	9854
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$7,717</b>	

## Electrical

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The Panel board Is Damaged And Should Be Replaced <b>Note:</b> 2@225A; 1@200A; 2@300A	Capital Renewal	1,250	Amps	1	\$49,372	1358
Switchgear Is Needed Or Requires Replacement	Capital Renewal	1	Ea.	2	\$33,398	1353
The Electrical Disconnect Is Damaged And Should Be Replaced	Capital Renewal	1,600	Amps	2	\$65,543	1356
The Motor Control Center Is Damaged And Should Be Replaced	Capital Renewal	1	Ea.	2	\$10,209	1357
The Power Service Is Inadequate And Should Be Replaced <b>Note:</b> qty 1	Capital Renewal	1,600	Amps	2	\$84,646	1355
Room lighting is inadequate or in poor condition.	Educational Adequacy	1,004	SF	4	\$6,162	Rollup
The 2 X 4 Interior Fluorescent Lighting Is Damaged And Should Be Replaced	Deferred Maintenance	20	Ea.	4	\$11,839	1354
Room does not have tamper-proof light switching.	Educational Adequacy	4	Ea.	5	\$2,350	Rollup
Room has insufficient electrical outlets.	Educational Adequacy	136	Ea.	5	\$37,058	Rollup
Room lacks controls to partially dim lights.	Educational Adequacy	5	Ea.	5	\$3,196	Rollup
<b>Sub Total for System</b>		<b>10</b>	<b>items</b>		<b>\$303,773</b>	

## Plumbing

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks private toilets.	Educational Adequacy	7	Ea.	4	\$97,374	Rollup
The Class Room Lavatories Plumbing Fixtures Are Missing And Should Be Installed	Educational Adequacy	5	Ea.	4	\$22,558	Rollup
Room lacks a drinking fountain.	Educational Adequacy	8	Ea.	5	\$8,084	Rollup
Room lacks a private shower area.	Educational Adequacy	6	Ea.	5	\$57,936	Rollup
<b>Sub Total for System</b>		<b>4</b>	<b>items</b>		<b>\$185,952</b>	

## Fire & Life Safety

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Emergency Battery Pack Lighting Is Missing And Needed	Code Compliance	20	Ea.	1	\$23,790	1359
Fire Alarm is Missing or Inadequate	Code Compliance	20,503	SF	1	\$55,580	1362
Emergency Exit Signage Is Missing And Needed	Code Compliance	10	Ea.	2	\$9,227	1360
Security Alarm is Missing or Inadequate	Functional Deficiency	20,503	SF	2	\$15,498	1361
The Exterior Security Camera Is Damaged And Should Be Replaced	Deferred Maintenance	4	Ea.	2	\$17,663	1352
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$121,758</b>	

## Technology

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room lacks audio enhancement system	Educational Adequacy	14	Ea.	3	\$15,118	Rollup
Room lacks wall or cabinet mounted media controller	Educational Adequacy	15	Ea.	3	\$8,141	Rollup
Fixed Projector is Missing and is Needed	Educational Adequacy	14	Ea.	4	\$34,190	Rollup
Room lacks interactive white board	Educational Adequacy	13	Ea.	4	\$21,165	Rollup
Room has insufficient data ports.	Educational Adequacy	132	Ea.	5	\$48,161	Rollup
<b>Sub Total for System</b>		<b>5</b>	<b>items</b>		<b>\$126,775</b>	

## Stairs & Elevators

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Lift for Physically Impaired is Missing and is Needed	Educational Adequacy	9	Ea.	2	\$401,378	Rollup
<b>Sub Total for System</b>		<b>1</b>	<b>items</b>		<b>\$401,378</b>	

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
Room has insufficient tack board area.	Educational Adequacy	37	Ea.	4	\$13,248	Rollup
Room has insufficient writing area.	Educational Adequacy	30	Ea.	4	\$34,054	Rollup
Room does not have sufficient cubbies.	Educational Adequacy	90	Ea.	5	\$19,437	Rollup
Room has an insufficient number of coat hooks.	Educational Adequacy	84	Ea.	5	\$2,097	Rollup
Room lacks a changing table.	Educational Adequacy	9	Ea.	5	\$30,147	Rollup
Room lacks an appropriate refrigerator.	Educational Adequacy	8	Ea.	5	\$45,163	Rollup
Room lacks an appropriate stove.	Educational Adequacy	7	Ea.	5	\$57,040	Rollup
Room lacks appropriate amount of teacher storage.	Educational Adequacy	138	Ea.	5	\$85,550	Rollup

## Specialties

Deficiency	Category	Qty	UoM	Priority	Repair Cost	ID
The room lacks a washer and/or dryer.	Educational Adequacy	8	Ea.	5	\$42,451	Rollup
	<b>Sub Total for System</b>	<b>9</b>	<b>items</b>		<b>\$329,186</b>	
	<b>Sub Total for Building 313 - Building 1</b>	<b>44</b>	<b>items</b>		<b>\$1,556,454</b>	
	<b>Total for Campus</b>	<b>65</b>	<b>items</b>		<b>\$2,035,253</b>	



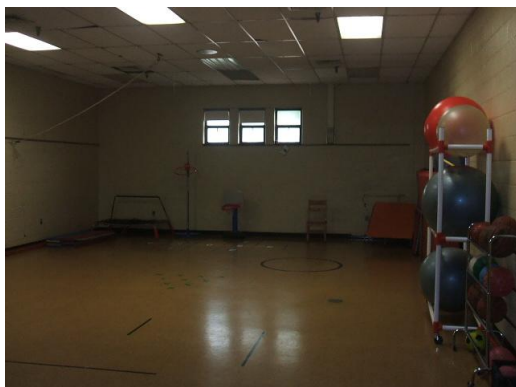
Lois T. Murray Special Ed. PK-8 Condition Assessment  
Supporting Photos



School Name



Library



Gym



Classroom



Open



Open





Open



Mock Living Dining



Mock Living Bedroom



Open Classroom



Classroom



Classroom



Playground



Playground Side



Receiving



Side



Front