**DeKalb County School District/Middle Schools** 

# **Henderson Middle**

School Assessment Report
May 20, 2016



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### **School Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The **Replacement Value** is the amount needed to replace the property of the same present scope. The **Repair Cost** (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Gross Area (SF): 158,260

Year Built: 1968

Last Renovation:

Replacement Value: \$35,600,711

Repair Cost: \$12,390,234.42

Total FCI: 34.80 %

Total RSLI: 35.19 %

FCA Score: 65.20



#### **Description:**

Lithonia Middle School campus consists of two school buildings located at 2451 Randall Avenue in Lithonia, Georgia. The original campus was constructed in 1938 and additions to the original school building were constructed in 1953, 1965, 1967, 1970, 1974, and 2003. In addition to the school buildings, the campus contains storage buildings, wrestling building, covered walkway, baseball field, football field, tennis courts, and track. This report contains condition and adequacy data collected during the 2015 Facility Condition Assessment (FCA). Detailed condition and deficiency statements are contained in this report for each building and site improvement on the campus.

# School Assessment Report - Henderson Middle

#### **Attributes:**

#### **General Attributes:**

Assigned Region: Region 2 Board District: District 4
DOE Facility: 797 Geographic Region: Region 2

HS Attendance Area: Lakeside HS Jurisdictional City: DeKalb County (Unincorporated)

Site Acreage: 28.6

# **School Condition Summary**

The Table below shows the RSLI and FCI for each major system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

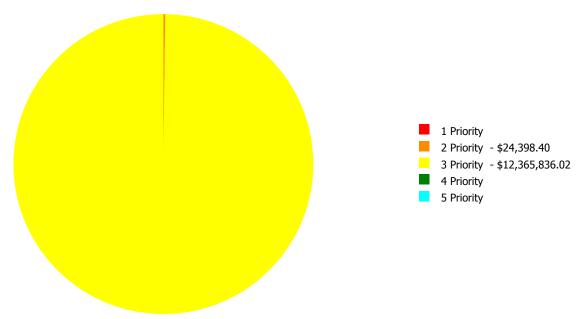
# **Current Investment Requirement and Condition by Uniformat Classification**

UNIFORMAT Classification	RSLI%	FCI %	Current Repair
A10 - Foundations	53.00 %	2.99 %	\$24,398.40
A20 - Basement Construction	0.00 %	0.00 %	\$0.00
B10 - Superstructure	53.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	33.31 %	41.03 %	\$1,691,125.10
B30 - Roofing	0.00 %	109.93 %	\$3,606,067.00
C10 - Interior Construction	63.77 %	2.46 %	\$48,042.19
C20 - Stairs	53.00 %	69.16 %	\$6,370.08
C30 - Interior Finishes	17.92 %	26.46 %	\$1,172,577.80
D10 - Conveying	0.00 %	0.00 %	\$0.00
D20 - Plumbing	24.86 %	61.88 %	\$1,760,535.62
D30 - HVAC	53.94 %	0.00 %	\$0.00
D40 - Fire Protection	0.00 %	0.00 %	\$0.00
D50 - Electrical	38.16 %	36.96 %	\$1,242,032.00
E10 - Equipment	53.79 %	0.00 %	\$0.00
E20 - Furnishings	80.00 %	0.00 %	\$0.00
F10 - Special Construction	53.00 %	0.00 %	\$0.00
G20 - Site Improvements	35.87 %	58.13 %	\$2,062,662.67
G30 - Site Mechanical Utilities	3.57 %	11.74 %	\$135,787.08
G40 - Site Electrical Utilities	0.00 %	110.00 %	\$640,636.48
Totals:	35.19 %	34.80 %	\$12,390,234.42

# **Condition Deficiency Priority**

Facility Name	Gross Area (S.F.)	FCI %	1 Priority	2 Priority	3 Priority	4 Priority	5 Priority
1967, 1968, 1970 Building	158,140	31.52	\$0.00	\$24,398.40	\$9,526,063.79	\$0.00	\$0.00
1968 Storage	120	7.04	\$0.00	\$0.00	\$686.00	\$0.00	\$0.00
Site	158,260	53.69	\$0.00	\$0.00	\$2,839,086.23	\$0.00	\$0.00
Total:	•	34.80	\$0.00	\$24,398.40	\$12,365,836.02	\$0.00	\$0.00

# **Deficiencies By Priority**



Budget Estimate Total: \$12,390,234.42

### **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The **Replacement Value** is the amount needed to replace the property of the same present scope. The Repair Cost (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Function:	Middle School
Gross Area (SF):	158,140
Year Built:	1967
Last Renovation:	2011
Replacement Value:	\$30,303,047
Repair Cost:	\$9,550,462.19
Total FCI:	31.52 %
Total RSLI:	37.00 %



# FCA Score: **Description:**

Henderson Middle School is a one-story building with a partial mezzanine located at 2830 Henderson Mill Road in Chamblee, Georgia. Originally built in 1967, there has been two additions in 1968 and 1970, and a major renovations in 2006 and 2011. There is a current SPLOST project to provide additional renovations and a classroom addition by January 2017. This report contains condition and adequacy data collected during the 2015 Facility Condition Assessment (FCA). Detailed condition and deficiency statements are contained in this report.

68.48

#### **Attributes:**

General Attributes:				
Building Codes:	4010, 4011, 4012	Fire Sprinkler System:	No	

# **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	53.00 %	2.99 %	\$24,398.40
A20 - Basement Construction	0.00 %	0.00 %	\$0.00
B10 - Superstructure	53.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	33.29 %	41.07 %	\$1,690,439.10
B30 - Roofing	0.00 %	110.00 %	\$3,606,067.00
C10 - Interior Construction	63.77 %	2.46 %	\$48,042.19
C20 - Stairs	53.00 %	69.16 %	\$6,370.08
C30 - Interior Finishes	17.92 %	26.46 %	\$1,172,577.80
D10 - Conveying	0.00 %	0.00 %	\$0.00
D20 - Plumbing	24.86 %	61.88 %	\$1,760,535.62
D30 - HVAC	53.94 %	0.00 %	\$0.00
D40 - Fire Protection	0.00 %	0.00 %	\$0.00
D50 - Electrical	38.16 %	36.96 %	\$1,242,032.00
E10 - Equipment	53.79 %	0.00 %	\$0.00
E20 - Furnishings	80.00 %	0.00 %	\$0.00
F10 - Special Construction	53.00 %	0.00 %	\$0.00
Totals:	37.00 %	31.52 %	\$9,550,462.19

# **Photo Album**

The photo album consists of the various cardinal directions of the building.

1). South Elevation - Main Entrance - Jul 30, 2015



2). Southeast Elevation - Jul 30, 2015



3). East Elevation - Jul 30, 2015



4). Northeast Elevation - Jul 30, 2015



5). Northwest Elevation - Jul 30, 2015



6). West Elevation - Jul 30, 2015



7). Southwest Elevation - Jul 30, 2015



#### **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
- 2. System Description: A brief description of a system present in the building.
- 3. Unit Price \$: The unit price of the system.
- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system.
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

# **System Listing**

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$1.63		158,140	100	1968	2068	rear	53.00 %	9.47 %	53	CCIC	\$24,398.40	\$257,768
A1020	Special Foundations	\$0.00			0				0.00 %	0.00 %			7= 700000	\$0
A1030	Slab on Grade	\$3.53		158,140	100	1968	2068		53.00 %	0.00 %	53			\$558,234
A2010	Basement Excavation	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
A2020	Basement Walls	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
B1010	Floor Construction	\$17.69	S.F.	8,690	100	1968	2068		53.00 %	0.00 %	53			\$153,726
B1020	Roof Construction	\$7.81	S.F.	158,140	100	1968	2068		53.00 %	0.00 %	53			\$1,235,073
B2010	Exterior Walls	\$16.35	S.F.	158,140	100	1968	2068		53.00 %	0.00 %	53			\$2,585,589
B2020	Exterior Windows	\$8.82	S.F.	158,140	30	1968	1998		0.00 %	110.00 %	-17		\$1,534,274.00	\$1,394,795
B2030	Exterior Doors	\$0.86	S.F.	158,140	30	1968	1998		0.00 %	114.83 %	-17		\$156,165.10	\$136,000
B3010	Roof Coverings - Asphalt Shingles	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
B3010	Roof Coverings - BUR	\$20.70	S.F.	158,140	20	1968	1988		0.00 %	110.00 %	-27		\$3,600,848.00	\$3,273,498
B3010	Roof Coverings - EPDM	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
B3010	Roof Coverings - Preformed Metal	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
B3010	Roof Coverings Standing Seam Metal	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
B3020	Roof Openings	\$0.03	S.F.	158,140	30	1968	1998		0.00 %	110.01 %	-17		\$5,219.00	\$4,744
C1010	Partitions	\$7.98	S.F.	158,140	100	1968	2068		53.00 %	0.00 %	53			\$1,261,957
C1020	Interior Doors	\$2.28	S.F.	158,140	30	2011	2041		86.67 %	0.00 %	26			\$360,559
C1030	Fittings	\$2.08	S.F.	158,140	20	2011	2031		80.00 %	14.61 %	16		\$48,042.19	\$328,931
C2010	Stair Construction	\$1.06	S.F.	8,690	100	1968	2068		53.00 %	69.16 %	53		\$6,370.08	\$9,211
C3010	Wall Finishes - Ceramic & Glazed	\$10.34	S.F.	78,512	30	1968	1998		0.00 %	0.00 %	-17			\$811,814
C3010	Wall Finishes - Paint	\$1.95	S.F.	79,070	10	1996	2006	2020	50.00 %	0.00 %	5			\$154,187
C3010	Wall Finishes - Wood Paneling	\$6.79	S.F.	558	15	1996	2011	2020	33.33 %	0.00 %	5			\$3,789
C3020	Floor Finishes - Carpet	\$8.58	S.F.	11,925	8	2002	2010		0.00 %	110.00 %	-5		\$112,548.00	\$102,317
C3020	Floor Finishes - Ceramic & Quarry Tile	\$14.61	S.F.	7,630	50	1968	2018		6.00 %	33.00 %	3		\$36,790.80	\$111,474
C3020	Floor Finishes - Epoxy	\$9.58	S.F.	11,248	15	1996	2011		0.00 %	110.00 %	-4		\$118,531.00	\$107,756
C3020	Floor Finishes - Terrazzo	\$53.38	S.F.	22,092	50	1968	2018		6.00 %	0.00 %	3			\$1,179,271
C3020	Floor Finishes - VCT	\$9.58	S.F.	85,852	15	1996	2011		0.00 %	110.00 %	-4		\$904,708.00	\$822,462
C3020	Floor Finishes - Wood	\$9.81	S.F.	17,693	50	1996	2046		62.00 %	0.00 %	31			\$173,568
C3030	Ceiling Finishes	\$6.10	S.F.	158,140	20	2006	2026		55.00 %	0.00 %	11			\$964,654
D1010	Elevators and Lifts	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
D2010	Plumbing Fixtures	\$8.13	S.F.	158,140	20	2006	2026		55.00 %	3.53 %	11		\$45,348.62	\$1,285,678
D2020	Domestic Water Distribution	\$3.84		158,140	30	1968	1998		0.00 %	110.00 %	-17		\$667,983.00	\$607,258
D2030	Sanitary Waste	\$4.33	S.F.	158,140	30	1968	1998		0.00 %	110.00 %	-17		\$753,221.00	\$684,746

# School Assessment Report - 1967, 1968, 1970 Building

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
D2040	Rain Water Drainage	\$0.92	S.F.	158,140	30	1968	1998		0.00 %	110.00 %	-17		\$160,038.00	\$145,489
D2090	Other Plumbing Systems - Natural Gas	\$0.77	S.F.	158,140	30	1968	1998		0.00 %	110.00 %	-17		\$133,945.00	\$121,768
D3020	Heat Generating Systems	\$4.55	S.F.	158,140	30	2006	2036		70.00 %	0.00 %	21			\$719,537
D3030	Cooling Generating Systems	\$4.73	S.F.	158,140	30	2006	2036		70.00 %	0.00 %	21			\$748,002
D3040	Distribution Systems & Exhaust Systems	\$5.51	S.F.	158,140	30	2006	2036		70.00 %	0.00 %	21			\$871,351
D3050	Terminal & Package Units	\$18.53	S.F.	158,140	15	2006	2021		40.00 %	0.00 %	6			\$2,930,334
D3060	Controls & Instrumentation	\$3.57	S.F.	158,140	20	2006	2026		55.00 %	0.00 %	11			\$564,560
D3090	Other HVAC Systems/Equip - Kitchen Hood	\$1.06	S.F.	158,140	30	2006	2036		70.00 %	0.00 %	21			\$167,628
D4010	Sprinklers	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
D4020	Standpipes	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
D5010	Electrical Service/Distribution	\$1.70	S.F.	158,140	40	1968	2008		0.00 %	110.00 %	-7		\$295,722.00	\$268,838
D5020	Branch Wiring	\$5.44	S.F.	158,140	30	1968	1998		0.00 %	110.00 %	-17		\$946,310.00	\$860,282
D5020	Lighting	\$8.22	S.F.	158,140	30	2006	2036		70.00 %	0.00 %	21			\$1,299,911
D5030	Communications and Security - Fire Alarm	\$1.42	S.F.	158,140	15	2006	2021		40.00 %	0.00 %	6			\$224,559
D5030	Communications and Security - PA & Clock Systems	\$3.28	S.F.	158,140	15	2006	2021		40.00 %	0.00 %	6			\$518,699
D5030	Communications and Security - Security & CCTV	\$1.19	S.F.	158,140	15	2006	2021		40.00 %	0.00 %	6			\$188,187
D5090	Other Electrical Systems - Emergency Generator	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
E1020	Institutional Equipment	\$2.79	S.F.	158,140	20	2006	2026		55.00 %	0.00 %	11			\$441,211
E1090	Other Equipment (Athletic Equipment)	\$0.36	S.F.	158,140	15	1968	1983	2020	33.33 %	0.00 %	5			\$56,930
E1090	Other Equipment (Kitchen Equipment)	\$3.31	S.F.	158,140	20	2006	2026		55.00 %	0.00 %	11			\$523,443
E2010	Fixed Furnishings	\$6.53	S.F.	158,140	20	2011	2031		80.00 %	0.00 %	16			\$1,032,654
F1010	Special Structures - Canopies	\$0.32	S.F.	158,140	100	1968	2068		53.00 %	0.00 %	53			\$50,605
	•	•	•	•		•	•	Total	37.00 %	31.52 %			\$9,550,462.19	\$30,303,047

# **Renewal Schedule**

eComet forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$9,550,462	\$0	\$0	\$1,551,476	\$0	\$274,048	\$5,072,283	\$0	\$142,572	\$0	\$0	\$16,590,841
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1010 - Standard Foundations	\$24,398	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,398
* A1020 - Special Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A20 - Basement Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2010 - Basement Excavation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A2020 - Basement Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1010 - Floor Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B2010 - Exterior Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2020 - Exterior Windows	\$1,534,274	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,534,274
B2030 - Exterior Doors	\$156,165	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$156,165
B30 - Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings - Asphalt Shingles	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings - BUR	\$3,600,848	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,600,848
B3010 - Roof Coverings - EPDM	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings - Preformed Metal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings Standing Seam Metal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3020 - Roof Openings	\$5,219	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,219
C - Interiors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C10 - Interior Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

# School Assessment Report - 1967, 1968, 1970 Building

C1010 - Partitions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1020 - Interior Doors	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C1030 - Fittings	\$48,042	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$48,042
C20 - Stairs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* C2010 - Stair Construction	\$6,370	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,370
C30 - Interior Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3010 - Wall Finishes - Ceramic & Glazed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3010 - Wall Finishes - Paint	\$0	\$0	\$0	\$0	\$0	\$196,619	\$0	\$0	\$0	\$0	\$0	\$196,619
C3010 - Wall Finishes - Wood Paneling	\$0	\$0	\$0	\$0	\$0	\$4,832	\$0	\$0	\$0	\$0	\$0	\$4,832
C3020 - Floor Finishes - Carpet	\$112,548	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$142,572	\$0	\$0	\$255,120
C3020 - Floor Finishes - Ceramic & Quarry Tile	\$36,791	\$0	\$0	\$133,992	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$170,783
C3020 - Floor Finishes - Epoxy	\$118,531	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$118,531
C3020 - Floor Finishes - Terrazzo	\$0	\$0	\$0	\$1,417,483	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,417,483
C3020 - Floor Finishes - VCT	\$904,708	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$904,708
C3020 - Floor Finishes - Wood	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C3030 - Ceiling Finishes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D - Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D10 - Conveying	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D1010 - Elevators and Lifts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D20 - Plumbing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D2010 - Plumbing Fixtures	\$45,349	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45,349
D2020 - Domestic Water Distribution	\$667,983	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$667,983
D2030 - Sanitary Waste	\$753,221	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$753,221
D2040 - Rain Water Drainage	\$160,038	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160,038
D2090 - Other Plumbing Systems - Natural Gas	\$133,945	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$133,945
D30 - HVAC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3020 - Heat Generating Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3030 - Cooling Generating Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3040 - Distribution Systems & Exhaust Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3050 - Terminal & Package Units	\$0	\$0	\$0	\$0	\$0	\$0	\$3,848,870	\$0	\$0	\$0	\$0	\$3,848,870
D3060 - Controls & Instrumentation	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D3090 - Other HVAC Systems/Equip - Kitchen Hood	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

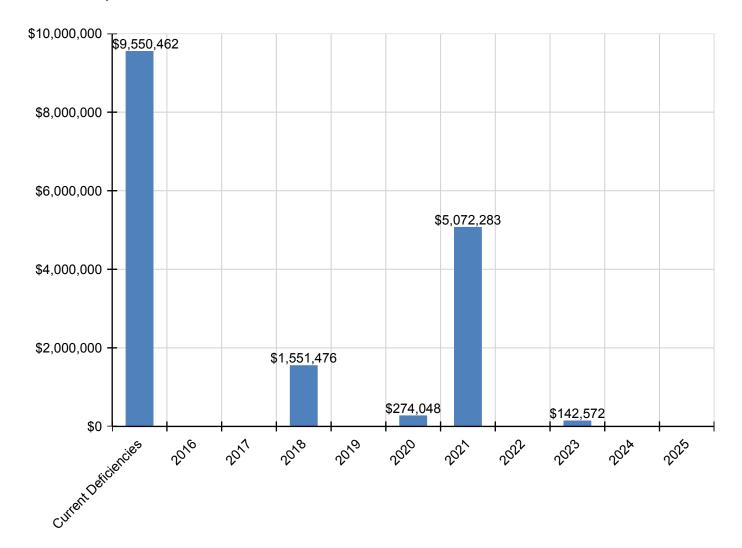
# School Assessment Report - 1967, 1968, 1970 Building

D40 - Fire Protection	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4010 - Sprinklers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D4020 - Standpipes	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D50 - Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5010 - Electrical Service/Distribution	\$295,722	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$295,722
D5020 - Branch Wiring	\$946,310	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$946,310
D5020 - Lighting	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5030 - Communications and Security - Fire Alarm	\$0	\$0	\$0	\$0	\$0	\$0	\$294,949	\$0	\$0	\$0	\$0	\$294,949
D5030 - Communications and Security - PA & Clock Systems	\$0	\$0	\$0	\$0	\$0	\$0	\$681,289	\$0	\$0	\$0	\$0	\$681,289
D5030 - Communications and Security - Security & CCTV	\$0	\$0	\$0	\$0	\$0	\$0	\$247,175	\$0	\$0	\$0	\$0	\$247,175
D5090 - Other Electrical Systems - Emergency Generator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E - Equipment & Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E10 - Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1020 - Institutional Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E1090 - Other Equipment (Athletic Equipment)	\$0	\$0	\$0	\$0	\$0	\$72,597	\$0	\$0	\$0	\$0	\$0	\$72,597
E1090 - Other Equipment (Kitchen Equipment)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E20 - Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
E2010 - Fixed Furnishings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F - Special Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F10 - Special Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
F1010 - Special Structures - Canopies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<sup>\*</sup> Indicates non-renewable system

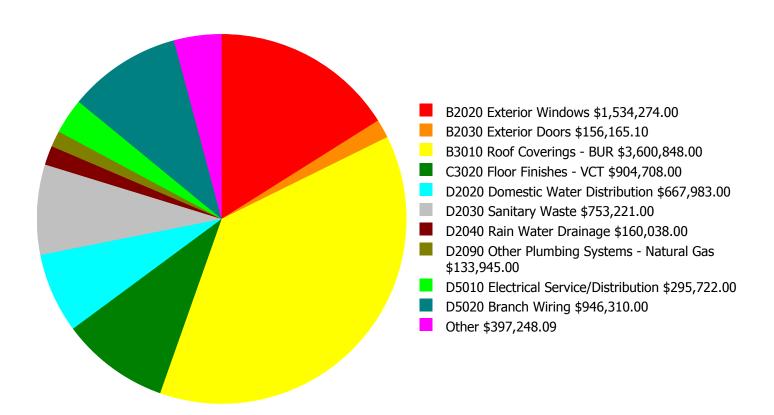
# **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and the forecasted capital renewal (system replacement) requirements over the next ten years.



### **Deficiency Summary by System**

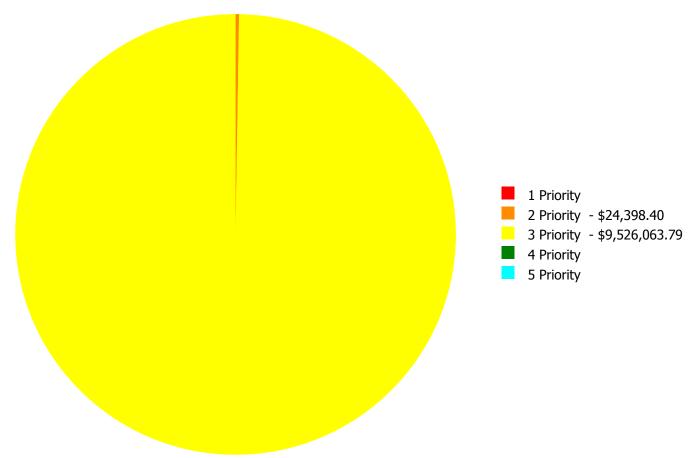
Current deficiencies include assemblies that have reached or exceed their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Service Life'. The following chart lists all current deficiencies associated with this facility broken down by UNIFORMAT system.



**Budget Estimate Total: \$9,550,462.19** 

# **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



**Budget Estimate Total: \$9,550,462.19** 

#### **Deficiency By Priority Investment Table**

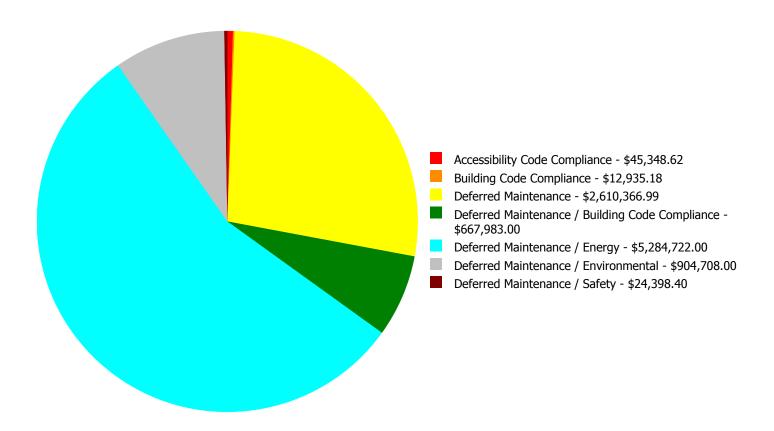
The table below shows the current investment cost grouped by deficiency priority and building system. Assessors assigned deficiencies within eCOMET to one of the following priority categories:

- **Priority 1** deficiencies require immediate review to correct a potential life/safety hazard, stop accelerated deterioration, or return a facility to operation.
- **Priority 2** deficiencies could become a Priority 1 deficiency, if not corrected within the next 2-3 years. These include intermittent operations, rapid deterioration, or potential life/safety hazards..
- **Priority 3** deficiencies require appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further and not completed within the next 3-5 years.
- **Priority 4** deficiencies represent a sensible improvement to existing conditions. The recommended improvements are not required for the basic functionality of the facility; however addressing these deficiencies will improve overall usability and/or reduce long term maintenance costs. Repairs for these deficiencies may be budgeted and scheduled for completion within the next 5-7 years.
- **Priority 5** deficiencies will include conditions that have no impact on the function or usability of the facility, such as appearance. No action is required for these deficiencies, but they are tracked since they may require future inspection or be completed as part of related repairs in contiguous areas of the facility.

System Code	System Description	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Total
A1010	Standard Foundations	\$0.00	\$24,398.40	\$0.00	\$0.00	\$0.00	\$24,398.40
B2020	Exterior Windows	\$0.00	\$0.00	\$1,534,274.00	\$0.00	\$0.00	\$1,534,274.00
B2030	Exterior Doors	\$0.00	\$0.00	\$156,165.10	\$0.00	\$0.00	\$156,165.10
B3010	Roof Coverings - BUR	\$0.00	\$0.00	\$3,600,848.00	\$0.00	\$0.00	\$3,600,848.00
B3020	Roof Openings	\$0.00	\$0.00	\$5,219.00	\$0.00	\$0.00	\$5,219.00
C1030	Fittings	\$0.00	\$0.00	\$48,042.19	\$0.00	\$0.00	\$48,042.19
C2010	Stair Construction	\$0.00	\$0.00	\$6,370.08	\$0.00	\$0.00	\$6,370.08
C3020	Floor Finishes - Carpet	\$0.00	\$0.00	\$112,548.00	\$0.00	\$0.00	\$112,548.00
C3020	Floor Finishes - Ceramic & Quarry Tile	\$0.00	\$0.00	\$36,790.80	\$0.00	\$0.00	\$36,790.80
C3020	Floor Finishes - Epoxy	\$0.00	\$0.00	\$118,531.00	\$0.00	\$0.00	\$118,531.00
C3020	Floor Finishes - VCT	\$0.00	\$0.00	\$904,708.00	\$0.00	\$0.00	\$904,708.00
D2010	Plumbing Fixtures	\$0.00	\$0.00	\$45,348.62	\$0.00	\$0.00	\$45,348.62
D2020	Domestic Water Distribution	\$0.00	\$0.00	\$667,983.00	\$0.00	\$0.00	\$667,983.00
D2030	Sanitary Waste	\$0.00	\$0.00	\$753,221.00	\$0.00	\$0.00	\$753,221.00
D2040	Rain Water Drainage	\$0.00	\$0.00	\$160,038.00	\$0.00	\$0.00	\$160,038.00
D2090	Other Plumbing Systems - Natural Gas	\$0.00	\$0.00	\$133,945.00	\$0.00	\$0.00	\$133,945.00
D5010	Electrical Service/Distribution	\$0.00	\$0.00	\$295,722.00	\$0.00	\$0.00	\$295,722.00
D5020	Branch Wiring	\$0.00	\$0.00	\$946,310.00	\$0.00	\$0.00	\$946,310.00
	Total:	\$0.00	\$24,398.40	\$9,526,063.79	\$0.00	\$0.00	\$9,550,462.19

# **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



**Budget Estimate Total: \$9,550,462.19** 

# **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

#### **Priority 2 Priority:**

#### **System: A1010 - Standard Foundations**



**Location:** Throughout Building

**Distress:** Damaged

**Category:** Deferred Maintenance / Safety

**Priority:** 2 Priority

**Correction:** Engineering Study

**Qty:** 1.00

Unit of Measure: Ea.

**Estimate:** \$24,398.40

Assessor Name: Ben Nixon

**Date Created:** 09/17/2015

**Notes:** Floors are cracked throughout the building. An engineering study is recommended to determine the cause. Pricing does not include remediation measures.

#### **Priority 3 Priority:**

#### System: B2020 - Exterior Windows



**Location:** Throughout Building

**Distress:** Beyond Service Life

Category: Deferred Maintenance / Energy

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$1,534,274.00

**Assessor Name:** Ben Nixon

**Date Created:** 04/11/2015

**Notes:** The aluminum frame, operable, single pane windows are aged, rusted, not energy efficient, and should be replaced. The windows do not seal properly and reportedly shake when the wind blows.

#### System: B2030 - Exterior Doors



**Location:** Throughout Building

**Distress:** Beyond Service Life

Category: Deferred Maintenance / Energy

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 158,140.00

Unit of Measure: S.F.

**Estimate:** \$149,600.00

Assessor Name: Ben Nixon

**Date Created:** 04/11/2015

Notes: The original exterior doors are aged, do not seal properly and not energy efficient, and should be replaced.

#### System: B2030 - Exterior Doors



Location: 702 Weight Room, 603 Orchestra Classroom,

and Mechanical Room

**Distress:** Missing

Category: Building Code Compliance

**Priority:** 3 Priority

**Correction:** Replace door panic device

**Qty:** 4.00

**Unit of Measure:** Ea.

**Estimate:** \$6,565.10

Assessor Name: Ben Nixon

**Date Created:** 07/30/2015

Notes: Building emergency exit doors do not have a panic hardware device installed and they should be provided per building code.

#### System: B3010 - Roof Coverings - BUR



Location: Roof

**Distress:** Beyond Service Life

Category: Deferred Maintenance / Energy

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$3,600,848.00

Assessor Name: Ben Nixon

**Date Created:** 04/11/2015

**Notes:** The built-up roof covering is in deteriorating condition, with cracking, bubbling, loss of surface, patches, ponding water, and reported water leaks, and should be replaced.

#### System: B3020 - Roof Openings



**Location:** Roof

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$5,219.00

Assessor Name: Ben Nixon

**Date Created:** 09/18/2015

Notes: The small acrylic domes are beyond their expected service life and should be replaced in conjunction with the roof.

#### System: C1030 - Fittings



**Location:** Restrooms Next to 604 Tech Lab and Locker

Rooms

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Replace toilet partitions, phenolic-overhead

braced, per stall

**Qty:** 23.00

Unit of Measure: Ea.

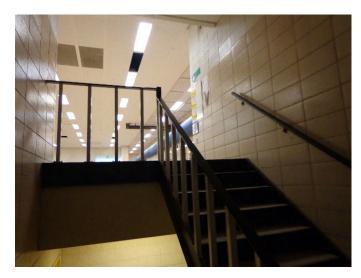
**Estimate:** \$48,042.19

Assessor Name: Ben Nixon

**Date Created:** 07/30/2015

Notes: Most toilet and urinal partitions were replaced, except for the ones in restrooms next to 604 tech lab and locker rooms.

#### System: C2010 - Stair Construction



Location: Stairs

**Distress:** Inadequate

Category: Building Code Compliance

**Priority:** 3 Priority

Correction: Add code compliant guardrail at 42"

**Qty:** 100.00

Unit of Measure: L.F.

**Estimate:** \$6,370.08

Assessor Name: Ben Nixon

**Date Created:** 07/30/2015

**Notes:** Stair handrail is missing a guardrail per building code requirements.

#### System: C3020 - Floor Finishes - Carpet



**Location:** Offices and Weight Room

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 11,925.00

**Unit of Measure:** S.F.

**Estimate:** \$112,548.00

Assessor Name: Ben Nixon

**Date Created:** 04/11/2015

Notes: The media center has a newer carpet; however, in most areas the carpet is aged, stained, and torn, and should be replaced.

### System: C3020 - Floor Finishes - Ceramic & Quarry Tile



**Location:** Restrooms

**Distress:** Inadequate

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Replace epoxy flooring

**Qty:** 20.00

**Unit of Measure:** C.S.F.

**Estimate:** \$36,790.80

Assessor Name: Ben Nixon

**Date Created:** 07/30/2015

**Notes:** The original quarry tile in the restrooms was painted over with an epoxy coat finish, which is an unsuitable material. The epoxy finish is wearing off rapidly and it is not possible to wash or clean this surface. The epoxy finish should be removed and replaced with a more suitable coating material for wet areas.

#### System: C3020 - Floor Finishes - Epoxy



**Location:** Locker Rooms

**Distress:** Beyond Service Life

**Category:** Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 11,248.00

**Unit of Measure:** S.F.

**Estimate:** \$118,531.00

**Assessor Name:** Ben Nixon

**Date Created:** 07/30/2015

Notes: The epoxy floor finish is in poor condition, with different areas worn and stained, and should be replaced.

#### System: C3020 - Floor Finishes - VCT



**Location:** Throughout Building

**Distress:** Beyond Service Life

**Category:** Deferred Maintenance / Environmental

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 85,852.00

**Unit of Measure:** S.F.

**Estimate:** \$904,708.00

**Assessor Name:** Ben Nixon

**Date Created:** 07/30/2015

**Notes:** The VCT flooring is aged, cracked, worn and patched, and should be replaced.

#### System: D2010 - Plumbing Fixtures



**Location:** Locker Rooms

**Distress:** Missing

Category: Accessibility Code Compliance

**Priority:** 3 Priority

Correction: Add ADA compliant shower

**Qty:** 4.00

Unit of Measure: Ea.

**Estimate:** \$45,348.62

Assessor Name: Ben Nixon

**Date Created:** 07/30/2015

**Notes:** Accessible showers should be provided to comply with ADA standards.

#### System: D2020 - Domestic Water Distribution



**Location:** Throughout Building

**Distress:** Beyond Service Life

Category: Deferred Maintenance / Building Code

Compliance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$667,983.00

**Assessor Name:** Ben Nixon

**Date Created:** 06/11/2015

**Notes:** The domestic water distribution system is beyond its expected service life and should be scheduled for replacement. School staff reports that water is not clear after long weekends or holidays. SPLOST IV project 512-422, including 416-422, may include plumbing upgrades.

#### System: D2030 - Sanitary Waste



**Location:** Throughout Building

**Distress:** Beyond Service Life

**Category:** Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$753,221.00

**Assessor Name:** Ben Nixon

**Date Created:** 06/11/2015

**Notes:** The sanitary waste system is beyond its expected service life and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422, may include replacement of the grease trap.

#### System: D2040 - Rain Water Drainage



**Location:** Roof

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$160,038.00

Assessor Name: Ben Nixon

**Date Created:** 04/11/2015

**Notes:** The roof drainage system is beyond its expected service life, reportedly stopped up, and should be replaced in conjunction with the roof. SPLOST IV project 512-422, including 416-422, may include plumbing upgrades.

#### System: D2090 - Other Plumbing Systems - Natural Gas



**Location:** Throughout Building

**Distress:** Beyond Service Life

**Category:** Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$133,945.00

Assessor Name: Ben Nixon

**Date Created:** 06/11/2015

**Notes:** The natural gas distribution system is beyond its expected service life and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422, may include plumbing upgrades.

#### System: D5010 - Electrical Service/Distribution



**Location:** Throughout Building

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$295,722.00

Assessor Name: Ben Nixon

**Date Created:** 06/11/2015

**Notes:** The electrical service/distribution system is beyond its expected service life and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422, may include electrical upgrades.

#### System: D5020 - Branch Wiring



**Location:** Throughout Building

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,140.00

**Unit of Measure:** S.F.

**Estimate:** \$946,310.00

Assessor Name: Ben Nixon

**Date Created:** 04/11/2015

**Notes:** The branch wiring system is beyond its expected service life and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422, may include electrical upgrades.

#### **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The **Replacement Value** is the amount needed to replace the property of the same present scope. The Repair Cost (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Function:	Middle School
Gross Area (SF):	120
Year Built:	1968
Last Renovation:	
Replacement Value:	\$9,745
Repair Cost:	\$686.00
Total FCI:	7.04 %
Total RSLI:	38.81 %
FCA Score:	92.96



#### **Description:**

The storage building at Henderson Middle School is located at 2830 Henderson Mill Road in Chamblee, Georgia. Originally built in 1968, there have been no additions and no major renovations. This report contains condition and adequacy data collected during the 2015 Facility Condition Assessment (FCA). Detailed condition and deficiency statements are contained in this report.

#### Attributes:

7101104001		
General Attributes:		
Building Codes:	Fire Sprinkler System:	No

# **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
A10 - Foundations	53.00 %	0.00 %	\$0.00
B10 - Superstructure	53.00 %	0.00 %	\$0.00
B20 - Exterior Enclosure	46.86 %	12.73 %	\$686.00
B30 - Roofing	0.00 %	0.00 %	\$0.00
D50 - Electrical	0.00 %	0.00 %	\$0.00
Totals:	38.82 %	7.04 %	\$686.00

# **Photo Album**

The photo album consists of the various cardinal directions of the building.

1). North Elevation - Jul 30, 2015



2). West Elevation - Jul 30, 2015



3). South Elevation - Jul 30, 2015



4). East Elevation - Jul 30, 2015



#### **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
- 2. System Description: A brief description of a system present in the building.
- 3. Unit Price \$: The unit price of the system.
- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system.
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

# **System Listing**

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed		Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
A1010	Standard Foundations	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
A1030	Slab on Grade	\$3.59	S.F.	120	100	1968	2068		53.00 %	0.00 %	53			\$431
B1020	Roof Construction	\$16.19	S.F.	120	100	1968	2068		53.00 %	0.00 %	53			\$1,943
B2010	Exterior Walls	\$39.69	S.F.	120	100	1968	2068		53.00 %	0.00 %	53			\$4,763
B2030	Exterior Doors	\$5.20	S.F.	120	30	1968	1998		0.00 %	109.94 %	-17		\$686.00	\$624
B3010	Roof Coverings	\$16.53	S.F.	120	20	1968	1988	2015	0.00 %	0.00 %	0			\$1,984
D5010	Electrical Service/Distribution	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
D5020	Lighting and Branch Wiring	\$0.00	S.F.		0				0.00 %	0.00 %				\$0
	Total								38.82 %	7.04 %			\$686.00	\$9,745

# **Renewal Schedule**

eComet forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

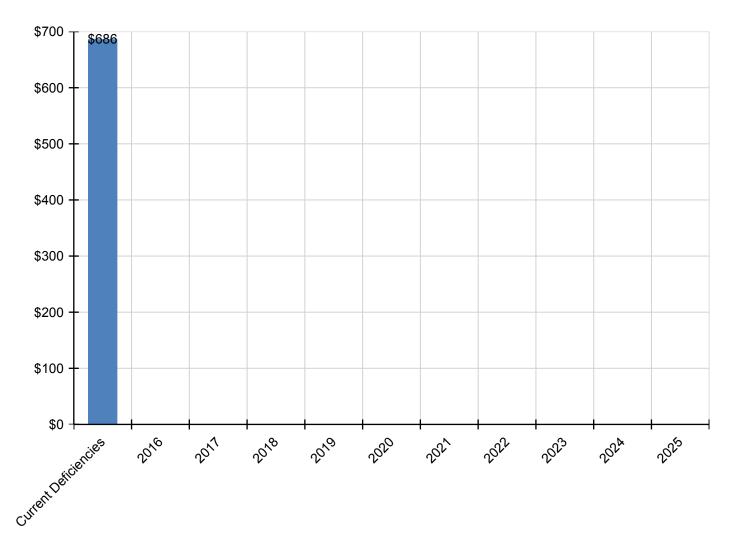
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$686	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$686
* A - Substructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A10 - Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1010 - Standard Foundations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* A1030 - Slab on Grade	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B - Shell	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B10 - Superstructure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B1020 - Roof Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B20 - Exterior Enclosure	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
* B2010 - Exterior Walls	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B2030 - Exterior Doors	\$686	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$686
B30 - Roofing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
B3010 - Roof Coverings	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D - Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D50 - Electrical	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5010 - Electrical Service/Distribution	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
D5020 - Lighting and Branch Wiring	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

<sup>\*</sup> Indicates non-renewable system

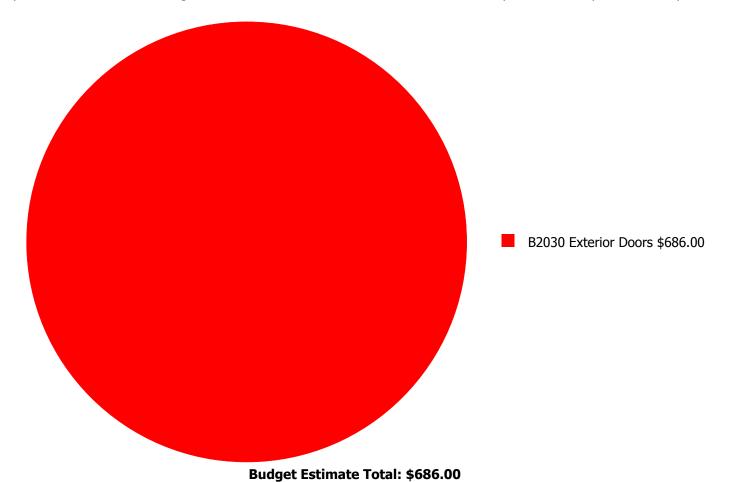
# **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and the forecasted capital renewal (system replacement) requirements over the next ten years.



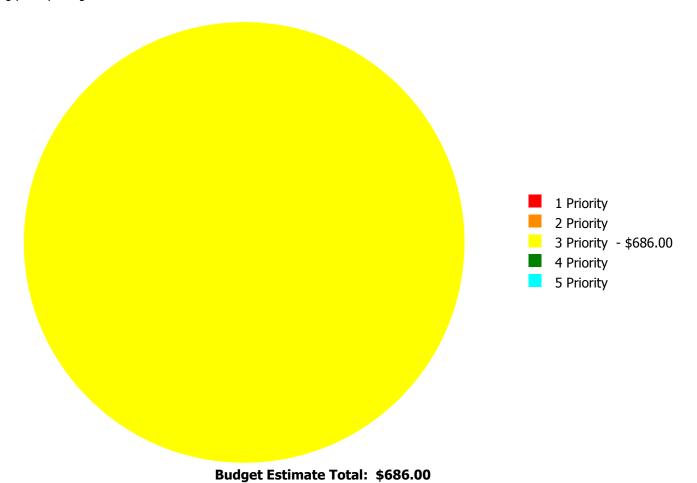
# **Deficiency Summary by System**

Current deficiencies include assemblies that have reached or exceed their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Service Life'. The following chart lists all current deficiencies associated with this facility broken down by UNIFORMAT system.



# **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



## **Deficiency By Priority Investment Table**

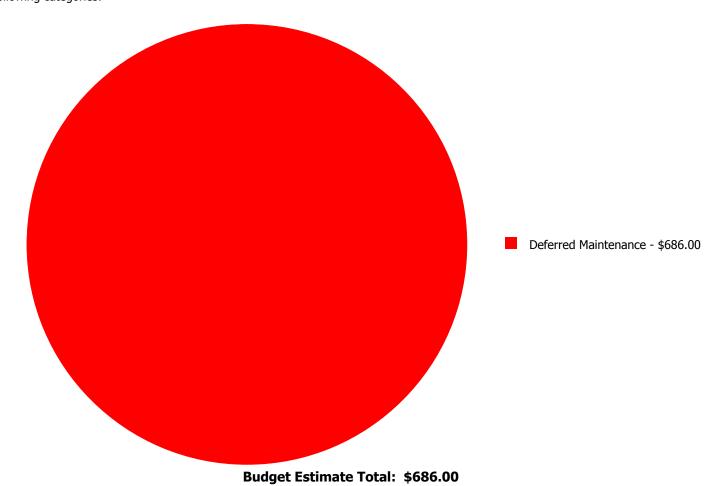
The table below shows the current investment cost grouped by deficiency priority and building system. Assessors assigned deficiencies within eCOMET to one of the following priority categories:

- **Priority 1** deficiencies require immediate review to correct a potential life/safety hazard, stop accelerated deterioration, or return a facility to operation.
- **Priority 2** deficiencies could become a Priority 1 deficiency, if not corrected within the next 2-3 years. These include intermittent operations, rapid deterioration, or potential life/safety hazards..
- **Priority 3** deficiencies require appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further and not completed within the next 3-5 years.
- **Priority 4** deficiencies represent a sensible improvement to existing conditions. The recommended improvements are not required for the basic functionality of the facility; however addressing these deficiencies will improve overall usability and/or reduce long term maintenance costs. Repairs for these deficiencies may be budgeted and scheduled for completion within the next 5-7 years.
- **Priority 5** deficiencies will include conditions that have no impact on the function or usability of the facility, such as appearance. No action is required for these deficiencies, but they are tracked since they may require future inspection or be completed as part of related repairs in contiguous areas of the facility.

System Code	System Description	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Total
B2030	Exterior Doors	\$0.00	\$0.00	\$686.00	\$0.00	\$0.00	\$686.00
	Total:	\$0.00	\$0.00	\$686.00	\$0.00	\$0.00	\$686.00

# **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



## **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

## **Priority 3 Priority:**

System: B2030 - Exterior Doors



**Location:** Exterior Wall

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 120.00

**Unit of Measure:** S.F.

**Estimate:** \$686.00

Assessor Name: Eduardo Lopez

**Date Created:** 04/11/2015

**Notes:** The original exterior doors are aged, damaged, and should be replaced.

## **Executive Summary**

Building condition is evaluated based on the functional systems and elements of a building and organized according to the UNIFORMAT II Elemental Classification. The grouping of these systems and elements and applying a current replacement value to them develops a representative building cost model. Cost Models are developed for similar building types and functions. Systems and their elements are evaluated based on their current replacement values, life cycles, installation dates and next renewal dates. Systems and their elements that are within their useful lives are further evaluated to identify current deficient conditions that may have a significant impact on a system's or element's remaining service life, and to determine if they are beyond their predicted expected life. The system's or element's current replacement value is based on RS Means Commercial Cost Data.

Following are the cost model's system details for this facility. The **Replacement Value** is the amount needed to replace the property of the same present scope. The Repair Cost (the sum of the cost to repair/replace the Deficiencies) represents the budgeted contractor-installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might also be associated with the corrective actions due to packaging of the work. Facility Condition Index ( FCI) is an industry-standard measurement of facility condition calculated as the ratio of the costs to correct a facility's deficiencies (Condition Needs) to the facility's Current Replacement Value. It ranges from 0% (new) to 100% (very poor - beyond service life). The Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) divided by the sum of a system's Replacement Value (both values exclude soft-cost to simplify calculation updates) expressed as a percentage ranging from 100% (new) to 0% (expired). The relationship between the key metrics FCI and RSLI is an important indicator, at either the facility, building, system, or component levels, of the condition trend and the imminent need for capital renewal. These indices exist in an inverse relationship wherein the FCI increases when systems reach their expected life-cycle age, whereas the RSLI decreases annually indicating the relative time remaining before reaching the life-cycle expiration age. For example, a facility or a system with a high RSLI and a low FCI indicates it is in the early portion of its useful life. However, a low RSLI indicates that expiration dates are approaching at which point the FCI would increase. The term FCA Score is the inverse of Total FCI and calculated as 100-Total FCI (without the %) where 100 is best and 0 is worst condition.

Middle School

Gross Area (SF):	158,260
Year Built:	1967
Last Renovation:	
Replacement Value:	\$5,287,919
Repair Cost:	\$2,839,086.23
Total FCI:	53.69 %
Total RSLI:	24.85 %



# FCA Score: **Description:**

Function:

The Henderson Middle School site was originally constructed in 1967, has a total area of 28.6 acres, and is occupied by approximately 158,260 square feet of permanent building space. Campus site features include paved driveways and parking lots, pedestrian pavement, flag pole, landscaping, and fencing. Site mechanical and electrical features include water, sewer, natural gas, and site lighting. This report contains condition and adequacy data collected during the 2015 Facility Condition Assessment (FCA). Detailed condition and deficiency statements are contained in this report for the site features.

46.31

#### Attributes:

### **General Attributes:**

Site Code: 1290

# **Condition Summary**

The Table below shows the RSLI and FCI for each major building system shown at the UNIFORMAT classification Level II. Note that Systems with lower FCIs require less investment than systems with higher FCIs.

UNIFORMAT Classification	RSLI %	FCI %	Current Repair Cost
G20 - Site Improvements	35.87 %	58.13 %	\$2,062,662.67
G30 - Site Mechanical Utilities	3.57 %	11.74 %	\$135,787.08
G40 - Site Electrical Utilities	0.00 %	110.00 %	\$640,636.48
Totals:	24.85 %	53.69 %	\$2,839,086.23

# **Photo Album**

The photo album consists of the various cardinal directions of the building.

1). Aerial Image of Henderson Middle School - Jul 30, 2015



## **Condition Detail**

This section of the report contains results of the Facility Condition Assessment. The building is separated into system components based on UNIFORMAT II. The columns in the System Listing table represent the following:

- 1. System Code: A code that identifies the system.
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- 4. UoM: The unit of measure of the system.
- 5. Qty: The quantity for the system.
- 6. Life: Building Owners and Managers Association (BOMA) recommended system design life.
- 7. Year Installed: The date of system installation.
- 8. Calc Next Renewal Year: The date of system expiration based on the life, NR stands for non renewable.
- 9. Next Renewal Year: The suggested system expiration date by the assessor based on visual inspection.
- 10. RSLI: The Remaining Service Life Index of the system.
- 11. FCI: The Facility Condition Index of the system.
- 12. RSL: Remaining Service Life in years.
- 13. eCR: eCOMET Condition Rating (not used in this assessment).
- 14. Deficiency \$: The financial investment to repair/replace system to address deficiency.
- 15. Replacement Value \$: The replacement cost of the system.

# **System Listing**

The System Listing table below lists each of the systems organized by their UNIFORMAT II classification. The assessment team was tasked with recording the most recent replacement year of each system, determining the remaining service life based on the theoretical life, and evaluating the condition to confirm the forecast next replacement year. The system listing is the basis for all data contained in the Building Assessment Report.

System Code	System Description	Unit Price \$	UoM	Qty	Life	Year Installed	Calc Next Renewal Year	Next Renewal Year	RSLI%	FCI%	RSL	eCR	Deficiency \$	Replacement Value \$
G2010	Roadways	\$5.17	S.F.	104,249	25	1967	1992		0.00 %	110.00 %	-23		\$592,864.06	\$538,967
G2020	Parking Lots	\$4.56	S.F.	67,010	25	1967	1992		0.00 %	110.00 %	-23		\$336,122.16	\$305,566
G2030	Pedestrian Paving	\$1.50	S.F.	158,260	30	1967	1997		0.00 %	110.00 %	-18		\$261,129.00	\$237,390
G2040	Baseball Field	\$8.35	S.F.	94,997	20	1967	1987		0.00 %	110.00 %	-28		\$872,547.45	\$793,225
G2040	Canopies	\$0.29	S.F.		0				0.00 %	0.00 %				\$0
G2040	Covered Walkways	\$48.72	S.F.	1,075	100	1967	2067		52.00 %	0.00 %	52			\$52,374
G2040	Fencing & Guardrails	\$0.91	S.F.	158,260	30	2014	2044		96.67 %	0.00 %	29			\$144,017
G2040	Football Field	\$5.85	S.F.	99,568	20	2014	2034		95.00 %	0.00 %	19			\$582,473
G2040	Hard Surface Play Area	\$6.26	S.F.		0				0.00 %	0.00 %				\$0
G2040	Playing Field	\$3.92	S.F.	41,528	20	1967	1987	2018	15.00 %	0.00 %	3			\$162,790
G2040	Soccer/Lacross Field	\$5.00	S.F.		0				0.00 %	0.00 %				\$0
G2040	Softball Field	\$8.86	S.F.		0				0.00 %	0.00 %				\$0
G2040	Tennis Courts	\$18.47	S.F.	13,904	20	2013	2033		90.00 %	0.00 %	18			\$256,807
G2040	Track	\$7.04	S.F.	34,880	10	2014	2024		90.00 %	0.00 %	9			\$245,555
G2050	Landscaping	\$1.45	S.F.	158,260	15	1967	1982	2020	33.33 %	0.00 %	5			\$229,477
G3010	Water Supply	\$1.83	S.F.	158,260	50	1967	2017		4.00 %	0.00 %	2			\$289,616
G3020	Sanitary Sewer	\$1.15	S.F.	158,260	50	1967	2017		4.00 %	0.00 %	2			\$181,999
G3030	Storm Sewer	\$3.55	S.F.	158,260	50	1967	2017		4.00 %	0.00 %	2			\$561,823
G3060	Fuel Distribution	\$0.78	S.F.	158,260	40	1967	2007		0.00 %	110.00 %	-8		\$135,787.08	\$123,443
G4010	Electrical Distribution	\$1.86	S.F.	158,260	30	1967	1997		0.00 %	110.00 %	-18		\$323,799.96	\$294,364
G4020	Site Lighting	\$1.15	S.F.	158,260	30	1967	1997		0.00 %	110.00 %	-18		\$200,198.90	\$181,999
G4030	Site Communications & Security	\$0.67	S.F.	158,260	10	1967	1977		0.00 %	110.00 %	-38		\$116,637.62	\$106,034
		•	•					Total	24.85 %	53.69 %			\$2,839,086.23	\$5,287,919

# **Renewal Schedule**

eComet forecasts future Capital Renewal projects for expiring systems based on the Calculated Next Renewal year found in the system listing. There is a 3% yearly inflation factor applied to the system costs expiring in the future. The table below reflects Capital Renewal projects over the next 10 years. Note: Blank cells (or \$0) indicate no systems are scheduled for renewal in that year.

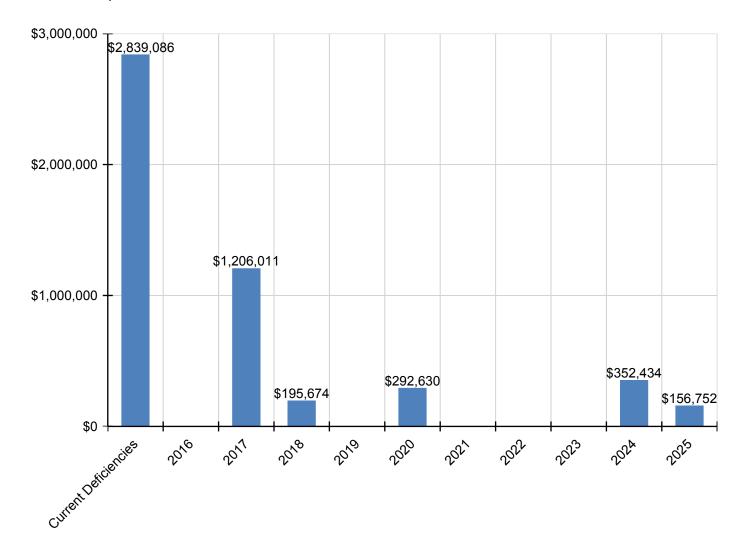
Inflation Rate: 3%

System	Current Deficiencies	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Total:	\$2,839,086	\$0	\$1,206,011	\$195,674	\$0	\$292,630	\$0	\$0	\$0	\$352,434	\$156,752	\$5,042,586
G - Building Sitework	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G20 - Site Improvements	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2010 - Roadways	\$592,864	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$592,864
G2020 - Parking Lots	\$336,122	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$336,122
G2030 - Pedestrian Paving	\$261,129	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$261,129
G2040 - Baseball Field	\$872,547	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$872,547
G2040 - Canopies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Covered Walkways	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Fencing & Guardrails	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Football Field	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Hard Surface Play Area	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Playing Field	\$0	\$0	\$0	\$195,674	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$195,674
G2040 - Soccer/Lacross Field	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Softball Field	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Tennis Courts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G2040 - Track	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$352,434	\$0	\$352,434
G2050 - Landscaping	\$0	\$0	\$0	\$0	\$0	\$292,630	\$0	\$0	\$0	\$0	\$0	\$292,630
G30 - Site Mechanical Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G3010 - Water Supply	\$0	\$0	\$337,978	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$337,978
G3020 - Sanitary Sewer	\$0	\$0	\$212,391	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,391
G3030 - Storm Sewer	\$0	\$0	\$655,642	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$655,642
G3060 - Fuel Distribution	\$135,787	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$135,787
G40 - Site Electrical Utilities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
G4010 - Electrical Distribution	\$323,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$323,800
G4020 - Site Lighting	\$200,199	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,199
G4030 - Site Communications & Security	\$116,638	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$156,752	\$273,389

<sup>\*</sup> Indicates non-renewable system

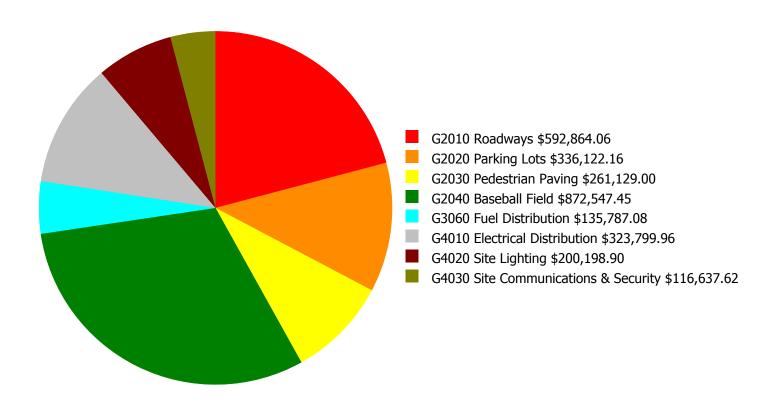
# **Forecasted Capital Renewal Requirement**

The following chart shows the current building deficiencies and the forecasted capital renewal (system replacement) requirements over the next ten years.



## **Deficiency Summary by System**

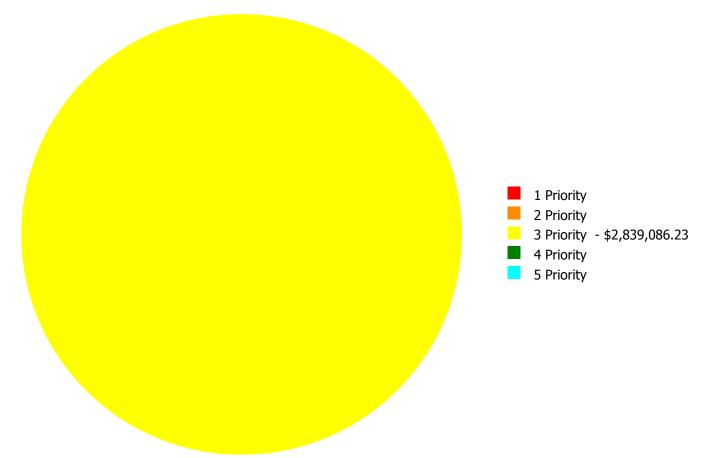
Current deficiencies include assemblies that have reached or exceed their design life or components of the assemblies that are in need of repair. Assemblies that have reached their design life are identified as current deficiencies and assigned the distress 'Beyond Service Life'. The following chart lists all current deficiencies associated with this facility broken down by UNIFORMAT system.



**Budget Estimate Total: \$2,839,086.23** 

# **Deficiency Summary by Priority**

The following chart shows the total repair costs broken down by priority. Assessors assigned deficiencies within eCOMET to one of the following priority categories:



**Budget Estimate Total: \$2,839,086.23** 

## **Deficiency By Priority Investment Table**

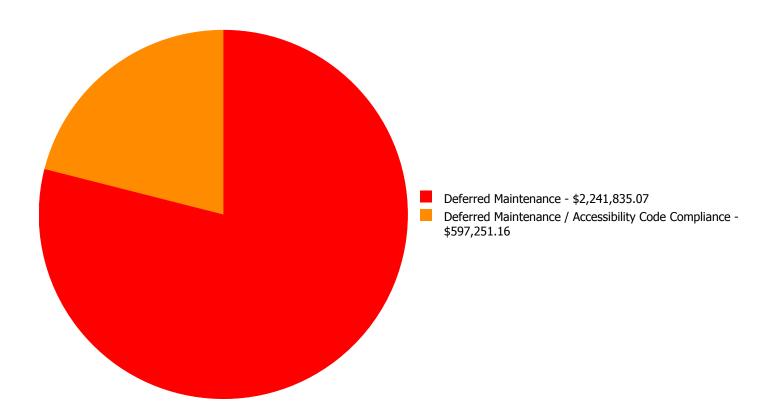
The table below shows the current investment cost grouped by deficiency priority and building system. Assessors assigned deficiencies within eCOMET to one of the following priority categories:

- **Priority 1** deficiencies require immediate review to correct a potential life/safety hazard, stop accelerated deterioration, or return a facility to operation.
- **Priority 2** deficiencies could become a Priority 1 deficiency, if not corrected within the next 2-3 years. These include intermittent operations, rapid deterioration, or potential life/safety hazards..
- **Priority 3** deficiencies require appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further and not completed within the next 3-5 years.
- **Priority 4** deficiencies represent a sensible improvement to existing conditions. The recommended improvements are not required for the basic functionality of the facility; however addressing these deficiencies will improve overall usability and/or reduce long term maintenance costs. Repairs for these deficiencies may be budgeted and scheduled for completion within the next 5-7 years.
- **Priority 5** deficiencies will include conditions that have no impact on the function or usability of the facility, such as appearance. No action is required for these deficiencies, but they are tracked since they may require future inspection or be completed as part of related repairs in contiguous areas of the facility.

System Code	System Description	Priority 1	Priority 2	Priority 3	Priority 4	Priority 5	Total
G2010	Roadways	\$0.00	\$0.00		\$0.00	\$0.00	
G2020	Parking Lots	\$0.00	\$0.00	. ,	\$0.00	\$0.00	. ,
G2030	Pedestrian Paving	\$0.00	\$0.00	\$261,129.00	\$0.00	\$0.00	\$261,129.00
G2040	Baseball Field	\$0.00	\$0.00	\$872,547.45	\$0.00	\$0.00	\$872,547.45
G3060	Fuel Distribution	\$0.00	\$0.00	\$135,787.08	\$0.00	\$0.00	\$135,787.08
G4010	Electrical Distribution	\$0.00	\$0.00	\$323,799.96	\$0.00	\$0.00	\$323,799.96
G4020	Site Lighting	\$0.00	\$0.00	\$200,198.90	\$0.00	\$0.00	\$200,198.90
G4030	Site Communications & Security	\$0.00	\$0.00	\$116,637.62	\$0.00	\$0.00	\$116,637.62
	Total:	\$0.00	\$0.00	\$2,839,086.23	\$0.00	\$0.00	\$2,839,086.23

# **Deficiency Summary by Category**

The following chart shows the total repair costs broken down by deficiency categories. Assessors assigned deficiencies to one of the following categories:



**Budget Estimate Total: \$2,839,086.23** 

## **Deficiency Details by Priority**

The deficiency detail notes listed below provide additional information on identified deficiencies found within the facility.

#### **Priority 3 Priority:**

System: G2010 - Roadways



Location: Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 104,249.00

**Unit of Measure:** S.F.

**Estimate:** \$592,864.06

Assessor Name: Sam Mandola

**Date Created:** 07/30/2015

**Notes:** The roadways are aged, damaged with many cracks and potholes, and should be repaved. SPLOST IV project 512-422, including 416-422, may include replacement of the parking lots and roadways.

#### System: G2020 - Parking Lots



Location: Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance / Accessibility Code

Compliance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 67,010.00

**Unit of Measure:** S.F.

**Estimate:** \$336,122.16

Assessor Name: Sam Mandola

**Date Created:** 07/30/2015

**Notes:** The parking lots are aged, have many cracks and potholes, do not have enough handicap spaces, and should be repaved and re-striped. Sign heights need to be adjusted per minimum ADA standards. SPLOST IV project 512-422, including 416-422, may include replacement of the parking lots and roadways.

#### System: G2030 - Pedestrian Paving



Location: Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance / Accessibility Code

Compliance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,260.00

**Unit of Measure:** S.F.

**Estimate:** \$261,129.00

Assessor Name: Eduardo Lopez

**Date Created:** 06/10/2015

Notes: The pedestrian paving is aged and damaged in areas, and should be replaced to include missing ramps per ADA standards.

## System: G2040 - Baseball Field



Location: Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 94,997.00

**Unit of Measure:** S.F.

**Estimate:** \$872,547.45

Assessor Name: Eduardo Lopez

**Date Created:** 10/30/2015

**Notes:** The softball field is beyond its expected service life and should be scheduled for replacement.

#### System: G3060 - Fuel Distribution



**Location:** Site

**Distress:** Beyond Service Life

**Category:** Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 158,260.00

**Unit of Measure:** S.F.

**Estimate:** \$135,787.08

**Assessor Name:** Eduardo Lopez

**Date Created:** 06/15/2015

Notes: Natural gas service is beyond its expected service life and should be scheduled for replacement.

#### **System: G4010 - Electrical Distribution**



**Location:** Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,260.00

**Unit of Measure:** S.F.

**Estimate:** \$323,799.96

Assessor Name: Eduardo Lopez

**Date Created:** 06/10/2015

**Notes:** The electrical distribution system is beyond its expected service life and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422, may include electrical upgrades.

### System: G4020 - Site Lighting



Location: Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

Correction: Renew System

**Qty:** 158,260.00

**Unit of Measure:** S.F.

**Estimate:** \$200,198.90

Assessor Name: Eduardo Lopez

**Date Created:** 06/10/2015

**Notes:** Site lighting is beyond its expected service life, inadequate across the entire site, and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422 may include electrical upgrades.

### System: G4030 - Site Communications & Security



**Location:** Site

**Distress:** Beyond Service Life

Category: Deferred Maintenance

**Priority:** 3 Priority

**Correction:** Renew System

**Qty:** 158,260.00

**Unit of Measure:** S.F.

**Estimate:** \$116,637.62

Assessor Name: Eduardo Lopez

**Date Created:** 06/10/2015

**Notes:** The site communications and security systems are beyond their expected service life and should be scheduled for replacement. SPLOST IV project 512-422, including 416-422, may include electrical upgrades.

## **Glossary**

Abandoned A facility owned by a district that is not occupied and not maintained. See Vacant.

Additional Cost Total project cost is composed of hard and soft costs. Additional costs or soft expenses are costs

that are necessary to accomplish the corrective work but are not directly attributable to the deficient systems direct construction cost, which are often referred to as hard cost. The components included in the soft costs vary by owner but usually include architect and contractor fees, contingencies and other owner-incurred costs necessary to fully develop and build a facility. These soft cost factors can be adjusted anytime within the eCOMET® database at the owner's

discretion.

Assessment Visual survey of a facility to determine its condition. It involves looking at the age of systems,

reviewing information from local sources and visual evidence of potential problems to assign a condition rating. It does not include destructive testing of materials or testing of systems or

equipment for functionality.

ASTM ASTM International (ASTM): Originally known as the American Society for Testing and Materials,

ASTM is an international standards organization that develops and publishes voluntary consensus

technical standards for a wide range of materials, products, systems, and services.

BOMA Building Owners Managers of America (BOMA): National organization of public and private facility

owners focused on building management tools and maintenance techniques. eCOMET®

reference: Building and component system effective economic life expectancies.

Building A fully enclosed and roofed structure that can be traversed internally without exiting to the

exterior.

Building Addition An area, space or component of a building added to a building after the original building's year

built date. NOTE: As a convention in the database, "Main" was used to designate the original building. Additions built prior to 1983 (30 years) were included in the main building area calculations to reflect their predicted system depreciation characteristics and remaining service

life.

Building Systems eCOMET® uses UNIFORMAT II to organize building data. UNIFORMAT II was originally developed

by the federal General Services Administration to delineate building costs by systems rather than by material. UNIFORMAT II was formalized by an NIST standard, NISTIR 6389 in 1999. It has been further quantified and updated by ASTM standard 2005, E1557-05. The Construction Specifications Institute, CSI, has taken over the standard as part of their MasterFormat /

MasterSpec system.

Calculated Next Renewal The year a system or building element would be expected to expire based solely on the date it

was installed and the expected useful lifetime for that kind of system.

Capital Renewal Capital renewal refers to the cyclical replacement of building systems or elements as they become

obsolete or beyond their useful life. It is not normally included in an annual operating/maintenance budget. See calculated next renewal and next renewal.

City Cost Index (CCI)

RS Means provides building system, equipment, and construction costs at a national level. The

City Cost Index (also provided by RS Means) localizes those costs to a geographic region of the United States. In eCOMET®, each building or site is assigned a City Cost Index, which adjusts all

of the associated costs for systems, deficiencies and inventory to the local value.

Condition Condition refers to the state of physical fitness or readiness of a facility system or system element

for its intended use.

Condition Budget The Condition Budget, also known as Condition Needs, represents the budgeted contractor

installed costs plus owner's soft costs for the repair, replacement or renewal for a component or system level deficiency. It excludes contributing costs for other components or systems that might

also be associated with the corrective actions due to packaging the work.

Condition Index (CI) %

The Condition Index (CI) also known as the Remaining Service Life Index (RSLI) is calculated as the sum of a renewable system's Remaining Service Life (RSL) Value divided by the sum of a system's Replacement Value (both values exclude soft cost to simplify calculation updates) expressed as a percentage ranging from 100.00% (new) to 0.00% (expired - no remaining life).

Construction

Specifications Institute

Construction Specifications Institute: Primary national organization specializing in construction materials data and data location in construction documents. eCOMET® reference: UNIFORMAT II materials classification.

Correction

Correction refers to an assessor's recommended deficiency repair or replacement action. For any system or element deficiency, there can be multiple and alternative solutions for its repair or replacement. A Correction is user defined and tied to a UNIFORMAT II element, or system it is intended to address. It excludes other peripheral costs that may also be included in the packaging of repair, replacement or renewal improvements that may also be triggered by the deficiency correction.

Cost Model

A cost model is a list of facility systems which could represent the installed systems a given facility. Included in the cost model are standard unit cost estimates, gross areas, life cycles and installed dates. Also represented is the repair cost for deficient systems, replacement values. See eCOMET® cost models.

Criteria

Criteria refer to the set of requirements, guidelines or standards that are assessed and rated to develop a score.

Current Period

The Current Period is the current year plus a user defined number of forward years.

Current Replacement Value (CRV)

The Current Replacement Value (CRV) of a facility, building or system represents the hypothetical cost of rebuilding or replacing an existing facility under today's codes and construction standards, using its current configuration. It is calculated by multiplying the gross area of the facility by a square foot cost developed in that facility's cost model. Replacement cost includes construction costs and owner's additional or soft costs for fees, permits and other expenses to reflect a total project cost.

**Deferred Maintenance** 

Deferred maintenance is condition work deferred on a planned or unplanned basis to a future budget cycle or postponed until funds are available.

Deficiency

A deficiency is a repair item that is damaged, missing, inadequate or insufficient for an intended purpose.

**Deficiency Category** 

Deficiency Category refers to the type or class of a user defined deficiency grouping with shared or similar characteristics. Category descriptions include, but are not limited to: Accessibility Code Compliance, Appearance, Building Code Compliance, Deferred Maintenance, Energy, Environmental, Life Safety Code Compliance, and Safety.

**Deficiency Distress** 

Deficiency Distress refers to a user-defined root cause of a deficiency. Distress descriptions are: Beyond Service Life, Damaged, Inadequate, Needs Remediation, and Missing.

**Deficiency Priority** 

Deficiency Priority refers to a deficiency's urgency for repair as determined by the assessment team. Deficiencies were assigned a priority of 1 through 5, with Priority 1 deficiencies being the most urgent.

eCOMET®

Energy and Condition Management Estimation Technology (eCOMET®) is Parsons proprietary facility asset management software developed to provide facility managers with a state of the art, web-based tool to develop and maintain a comprehensive database of FCA data and information used for facility asset management, maintenance and repair, and capital renewal planning. eCOMET® is used by Parsons and its clients as the primary tool for collecting FCA data, preparing cost estimates, generating individual facility reports and cost estimates, and developing the overall capital renewal program.

eCOMET® Cost Models eCOMET® cost models are derived from RS Means Square Foot Cost Data cost models and these

models are used to develop the current replacement value (CRV) and assign life cycle costs to the various systems within a building. Cost models are assigned current costs-per-square-foot to establish replacement values. The Cost models are designed to represent a client specific facility

that meets local standards cost trends.

Element Elements are the major components that comprise building systems as defined by UNIFORMAT II.

Expected Life Also referred to as Useful Life. See Useful Life definition.

Facility A facility refers to site(s), building(s), or building addition(s), or combinations thereof that provide

a particular service or support of an educational purpose.

Facility Attributes Customizable eCOMET® fields to identify attributes specific to a facility. These fields are part of

the eCOMET® database set-up with the owner.

Facility Condition A facility condition assessment (FCA) is a visual inspection of buildings and grounds at a facility to identify and estimate current and future needed repairs or replacements of major systems for

planning and budgeting purposes. It is typically performed for organizations that are tasked with the day to day maintenance, operation, and capital renewal (replacement) of building systems and components of a large inventory of facilities. The primary goal of an FCA is to objectively and quantifiably identify, inspect, and prioritize the repair and replacement needs of the building and ground systems (e.g., roofs, windows, doors, floor finishes, plumbing fixtures, parking lot, and sidewalks) within facilities that have either failed or have surpassed their service life, and to identify and forecast future capital replacement needs for systems that have not yet failed, but planned replacement of those systems is needed to ensure that the facilities will continue to meet

the mission of the organization.

Facility Condition Index (FCI)

FCI is an industry-standard measurement of a facility's condition expressed as a percentage from 0.00% to 100.00% that is derived by dividing the cost to correct a facility's deficiencies by its Current Replacement Value (CRV). The higher the FCI the poorer the condition of a facility. After an FCI is established for all buildings within a portfolio, a building's condition can be ranked relative to other buildings. The FCI may also represent the condition of a portfolio based on the cumulative FCIs of the portfolio's facilities.

Forecast Period The Forecast Period refers to a user defined number of years forward of the Current Period.

Gen (Generate) The Cost Model has a Gen box for each system line item. By checking the box, eCOMET® will

generate life cycle deficiencies based on the Year Installed and the Life for that system. Systems that typically do not re-generate (foundations, floor construction, roof construction, basement walls, etc.) would not have the Gen box checked as those systems would not re-generate at the end of a life cycle. In those instances, it would be more practical and cost effective to demolish

the entire facility than renew those systems.

Gross Square Feet (GSF) The area of the enclosed floor space of a building or building addition in square feet measured to

the outside face of the enclosing wall.

Life cycle Life cycle refers to the period of time that a building or site system or element can be expected to

adequately serve its intended function. Parsons assigns expected life cycles to all building systems based on Building Operators and Managers of America (BOMA) recommended life cycles,

manufacturers suggested life, and RS Means cost data, and client-provided historical data. BOMA standards are a nationally recognized source of life cycle data for various components and/or systems associated with facilities. RS Means is a national company specializing in construction

estimating and costs.

Next Renewal Next Renewal refers to a manually-adjusted expected useful life of a system or element based on

on-site inspection either by reducing or extending the Calculated Next Renewal to more accurately

reflect current conditions.

## School Assessment Report - Henderson Middle

Order of Magnitude Order of Magnitude refers to a rough approximation made with a degree of knowledge and

confidence that the budgeted, projected or estimated cost falls within a reasonable range of cost

values.

Remaining Service Life

(RSL)

RSL is the number of years of service remaining for a system or equipment item. It is automatically calculated based on the difference between the current year and the Calculated

Next Renewal date or the Next Renewal date whichever one is the later date.

Renewal Factors Renewal factors represent the difference in cost of renovating or replacing an existing system,

rather than new construction of a building system. For example, installing a new built-up roof on an existing building would include removing and disposing of the old roof, a cost not associated with new construction. Using a renewal premium to account for demolition and other difficulty

costs, Parsons typically assigns a renewal factor of 110%.

Renewal Schedule A timeline by year that indicates when the systems will need to be renewed and the estimated

price of the renewal.

Repair Cost Repair cost is the sum of all the deficiencies associated with a building or multiple

buildings/facilities. It will include any applied soft costs or City Cost Indexes.

Replacement Value See Current Replacement Value.

Site A facility's grounds and its utilities, roadways, landscaping, fencing and other typical land

improvements needed to support a facility.

Soft Costs Soft Costs are a construction industry term that refers to expense items that are not considered

direct construction costs. Soft costs are user-defined and include architectural, engineering, management, testing, and mitigation fees, and other owner pre- and post-construction expenses.

Sustainability Sustainability refers to the collection of policies and strategies that meet society's present needs

without compromising the ability of future generations to meet their own needs.

System System refers to building and related site work elements as described by ASTM UNIFORMAT II

Classification for Building Elements (E1557-97), a format for classifying major facility elements common to most buildings. Elements usually perform a given function regardless of the design

specification construction method or materials used. See also UNIFORMAT II.

System Generated

Deficiency

eCOMET® automatically generates system deficiencies based on system life cycles using the systems installation dates as the base year. By adjusting the Next Renewal date ahead or behind the predicted or stated life cycle date, a system cost will come due earlier or later than the originally installed life cycle date. This utility accounts for good maintenance conditions and a longer life, or early expiration of a system life due to any number of adverse factors such as poor installation, acts of god, material defects, poor design applications and other factors that may shorten the life of a material or system. It is important to mention that the condition of the systems is not necessarily a reflection of maintenance practices, but a combination of system usage and age.

UNIFORMAT II, Classification for Building Elements (E1557-97), a publication of the

Construction Specification Institute (CSI), is a format used to classify major facility components common to most buildings. The format is based on functional elements or parts of a facility characterized by their functions without regard to the materials and methods used to accomplish

them. These elements are often referred to as systems or assemblies.

Unit Price The Unit Price (Raw) x (100% + the Additional Cost Template percentage).

Unit Price (Raw) The actual \$/sq. ft cost being used for the building and systems. It will include adjustments for

the City Cost Index applied to the facility.

## School Assessment Report - Henderson Middle

Useful Life Also known as Expected Life, Useful Life refers to the intrinsic period of time a system or element

is expected to perform as intended. Useful life is generally provided by manufacturers of materials, systems and elements through their literature, testing and experience. Useful Lives in the

database are derived from the Building Owners and Managers (BOMA) organization's guidelines,

RSMeans cost data, and from client- defined historical experience.

Vacant refers to a facility that is not occupied but is a maintained facility by a district. See

Abandoned.

Year Built The year that a building or addition was originally built based on its date of substantial completion

or occupancy.

minimum of 70% of the system's Current Replacement Value (CRV) was replaced.