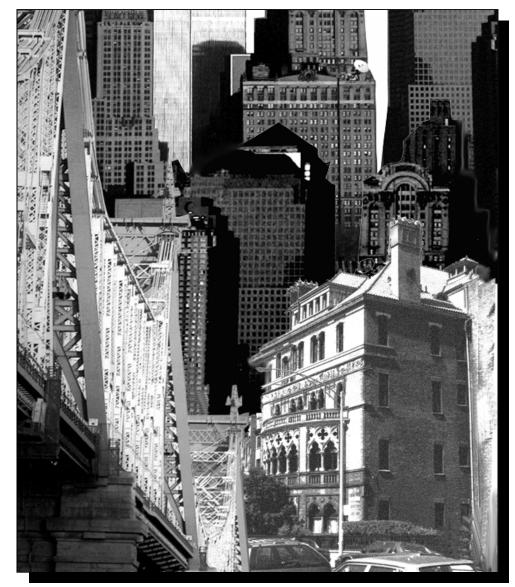


# Asset Information Management System (AIMS) Report

# Executive Summary



The City of New York Bill de Blasio, Mayor

Fiscal Year 2016



The City of New York Office of the Mayor New York, N.Y. 10007

#### **MEMORANDUM**

TO: Melissa Mark-Viverito, Speaker, City Council Carl Weisbrod, Chairman, City Planning Commission Scott M. Stringer, Comptroller

Bill de Blasio, Mayor Bill De Blasi FROM:

DATE: November 10, 2015

SUBJECT: Asset Information Management System (AIMS) Executive Summary Report

In accordance with Section 1110-a of the City Charter, I am transmitting herewith an Executive Summary of the maintenance schedules for the "major portions" of the City's physical plant as defined in that Section for the Fiscal Year 2016. The Charter requires each agency head to submit to the mayor a condition assessment and maintenance schedule necessary to preserve the structural integrity for each of their capital assets with a replacement cost of at least \$10 million and a useful life in excess of ten years. The summary that I am transmitting relates to those maintenance schedules. Detailed information relating to each specific asset is available for review at the Office of Management and Budget.

Included in the summary is a description of the latest methodology used to compile the condition assessment and maintenance schedules. This summary, together with the details of the maintenance schedules and condition assessments, provides the City with a comprehensive assessment of the condition of its major assets, the projected costs necessary to restore these assets to a state of good repair and schedules detailing the maintenance required to maintain the assets' structural integrity. It does not address priorities or relative importance of any particular asset. A separate document will be published in the spring of 2016 comparing total funding recommended in the Fiscal Year 2016 report with the agencies' planned expense program for 2017 and capital program for 2017 through 2020.

The City of New York

# Asset Information Management System (AIMS)

Condition and Maintenance Schedules For Major Portions of the City's Fixed Assets and Infrastructure

Fiscal Year 2016

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### Background

he November 1988 amendments to the City Charter (Sec. 1110-a) included a requirement that the City compile an inventory of the major portions of its physical plant. Major portions of the physical plant are defined by the Charter to include all assets or asset systems with a replacement cost of ten million dollars or greater, and a useful life in excess of ten years. The Charter amendments also require each agency to assess the condition of their assets and prepare maintenance schedules for those assets. The condition assessments and the maintenance schedules are required to be published each year.

Assets leased to the Transit Authority, the New York City Water Finance Authority and to certain other public benefit corporations are excluded from the above Charter reporting requirements. Excluded also are all properties owned by the City as a result of in-rem proceedings. For the City University, only assets of the Community Colleges are included. Table A provides a Citywide breakdown of assets by classes.

The City Charter requires that a report be issued on an annual basis. The Office of Management and Budget has overall responsibility for the delivery of this yearly publication. This year building surveys were performed by The Department of Design and Construction. Waterfront, retaining wall, bridge and selected building surveys were performed by Gannett Fleming Inc. and their subconsultants. The Department of Transportation continued to survey the City's streets and highways using a 10-point assessment system.

Detailed condition reports and maintenance schedules (i.e. Agency Reports) were provided to agencies for their review and approval. This executive report summarizes all cost data from the agency condition and report schedules. A separate document (i.e. Agency Reconciliation) will be published next Spring to illustrate the comparison of funding recommended in this report with agencies' planned capital and expense activities.

### **Report Context and Items Excluded from Study**

While the study is comprehensive, consistent with previous reports, a number of items and considerations were excluded from the condition review and cost estimates. They were not considered directly related to the "structural integrity" of the asset as required by the Charter. These include but are not limited to:

- Most equipment (electronic, fixed and movable)
- Special operating systems within assets
- Aesthetic considerations or special design elements
- Landscaping and outdoor elements
- Statuary or ornamental edifices

- Components not readily observable or accessible by field engineers
- Handicapped access requirements
- Information obtained through testing or probing
- Asbestos, lead paint, and other hazardous material identification and removal
- Programmatic needs not related to structural integrity
- Efficiency improvements
- Swing space costs/phasing costs, or premium time costs
- Components deficient in code or local law compliance but which do not impact on the integrity of the asset
- Assets known to be scheduled for near-term total replacement

It should be noted that in surveying piers and bulkheads, underwater surveys were not carried out. Therefore the condition reports for piers and bulkheads do not include those potential repairs that can only be determined by underwater surveys. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB.

The report continues to reflect changes in the asset inventory every year. At the beginning of this survey year, each agency was requested to provide any additions, deletions or changes to the inventory of assets through new construction, acquisition, sale or demolition.

The asset condition and maintenance schedule report is not a budget document, but rather a broad, unrestrained analysis of a subset of general needs. It serves as a planning tool in addressing overall citywide funding requirements. The report does not attempt in any manner to balance the City's asset and infrastructure requirements against other important City needs, nor does it attempt to make any funding recommendations between the needs of different agencies. It is a general prioritization to indicate to agencies the relative importance of various repairs and maintenance items to the preservation of the assets.

Due to the complexity of the analysis, the large scale of the project, the amount of estimation required, and the necessary methodology constraints, there are inherent limitations to the level of accuracy possible at the detailed asset and component level.

In this context it should be noted that the actual cost for a project may vary substantially from the amount estimated in this report when a detailed scope of work and cost estimate is completed. Agencies will not be restricted to any asset specific number contained in the reports when planning and developing their budget requests. It is further understood that there will be work items (i.e., programmatic) excluded from this study which may require additional expenditures.

### **Report Organization**

#### **Report Schedules**

This publication contains two major summaries: CITYWIDE SUMMARY SCHEDULES and AGENCY SUMMARY SCHEDULES.

#### **Capital and Expense Designations**

Repairs, replacement and major maintenance costs are all presented at the detailed component level in the Agency Reports. Repairs are defined as reconstruction or renovation. For convenience and citywide reporting purposes, this report presents the cost categories by their appropriate expense budget and capital budget classification. The rules for classifying individual items are as follows:

Cost Item	Budget Classification	
Repairs greater than \$35,000 AND remaining component life of 5 years or greater	Capital	
Replacements greater than \$35,000	Cupitui	
Major Maintenance programs greater than \$35,000 at the component type level		
Repairs less than \$35,000 OR remaining component life less than 5 years	Expense	
Replacements less than \$35,000		
Major Maintenance programs less than \$35,000 at the component type level		

#### **Projected Repair Years**

- Expense Budget Items of need are shown over the next four years
- Capital Budget Items of need are shown over the next ten years, grouped by periods of four and six years

It should be noted that for reporting purposes all asset component repairs are presented in the funding need for the upcoming fiscal year. This in essence reflects the amounts estimated to "catch up" and bring all assets to a "state of good repair". In reality, even if funding was available to do everything, it would be beyond the ability of City agencies to plan, design, and implement the work within a single year. The actual work, which can be funded, will operationally have to be spread out over a number of years.

#### Importance Codes for Repair, Replacement and Major Maintenance

In the citywide report, component repair, replacement and major maintenance are assigned an A, B, C or D rating. Each component has been assigned an importance to the structural integrity of the assets. For example, architectural exterior components of buildings (i.e. roofs, parapets, exterior walls and windows) are classified as key components and receive higher importance than architectural interior components because of their relative importance in maintaining structural integrity of the assets. (See Exhibit A)

#### **Condition Information**

The summary maintenance schedules presented in the citywide executive report represent the maintenance requirements developed from the condition surveys of individual assets. Actual condition data on any particular asset is contained in the Agency Reports. A typical example of an Agency Report and a detailed discussion of the project methodology are included in the technical notes of this report. (See Exhibits B, C)

#### **Professional Certification**

The Charter requires a statement by a registered Professional Engineer (PE) or Registered Architect (RA) regarding the reasonableness of the repair/replacement and maintenance schedules for each agency's assets. Certifications are provided by the Department of Design and Construction, the Department of Transportation, Gannett Fleming Inc., and their subconsultants.

# Table ACitywide Asset Classes by Agency

New York, Brooklyn, Queens Public Libraries		Department of Small Business Services	
Libraries 103		Shelters	
Department of Education		Museum/Gallery Facilities	3
Primary Schools	807	Terminals/Markets	56
Intermediate/Junior High Schools	201	Piers/Bulkheads	177
High Schools	180	Parking Garages	1
Administrative Buildings	10	Ferry Terminal Facilities	2
Piers/Bulkheads	2	Marinas/Docks	6
City University of New York		Department of Health & Mental Hygiene	
Community College Buildings	84	Administrative Buildings	1
Piers/Bulkheads	3	Clinics/Labs. Classrooms	26
Parking Garages	1	Vehicle Maint./Storage Facilities	1
Police Department		Animal Shelters	3
Precinct Houses	79	Health and Hospitals Corporation	
Police Buildings Non-Precinct	68	Hospital Buildings	91
Piers/Bulkheads	3	Department of Sanitation	
Marinas/Docks	4	Piers/Bulkheads	32
Fire Department		Transfer Stations	5
Fire Department Buildings	50	Vehicle Maint./Storage Facilities	41
Piers/Bulkheads	3	Fresh Kills Facilities	17
Firehouses	57	<b>Department of Transportation</b>	
Marinas/Docks	1	Bridge/Waterways	38
Fireboats	5	Highway Bridges and Tunnels	86
Administration for Children's Services		Highway Facilities	45
Shelters	2	Streets and Arterials (miles)	6,500
Non-Shelters	2	Street Lighting Systems	1
Day Care Centers	5	Traffic Signal Systems	1
Department of Homeless Services		Ferry Terminal Facilities	5
Shelters	61	Piers/Bulkheads	26
Non-Shelters	2	Ferries/Barges	8
Department of Correction		Pier Facilities	3
Rikers Island Facilities/Utilities	40	Parking Garages	9
Correction Facilities	5	Marinas/Docks	15
Piers/Bulkheads	2	<b>Department of Parks and Recreation</b>	
Marinas/Docks	1	Museum/Gallery Facilities	16
Human Resources Administration		Piers/Bulkheads	138
Shelters	8	Vehicle Maint./Storage Facilities	4
Non-Shelters	8	Park Facilities	717
Department for the Aging		Stadium Facilities	5
Senior Center	13	Marinas/Docks	26
<b>Department of Cultural Affairs</b>		Walls	276
Museum/Gallery Facilities	65	Park Bridges	97
Cultural Facilities	224	Dept. of Citywide Administrative Services	
Division of Youth & Family Justice		Piers/Bulkheads	10
Juvenile Justice Buildings	4	Court Buildings	23
Taxi & Limousine Commission		Public Office Buildings	34
Vehicle Maint./Storage Facilities	1		

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Citywide Summary Schedule

### **CITYWIDE SUMMARY SCHEDULE BY AGENCY**

#### Asset Information Management System (AIMS)

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

		CAPITAL	EXPENSE
		FY 2017 - 2020	FY 2017
•	NEW YORK PUBLIC LIBRARY	30,605,000	6,175,000
•	BROOKLYN PUBLIC LIBRARY	15,191,000	2,699,000
•	QUEENS PUBLIC LIBRARY	11,115,000	1,310,000
•	DEPARTMENT OF EDUCATION	2,021,194,000	158,668,000
•	CITY UNIVERSITY OF NEW YORK	99,303,000	11,168,000
•	POLICE DEPARTMENT	90,348,000	12,152,000
•	FIRE DEPARTMENT	20,107,000	10,265,000
•	ADMIN. FOR CHILDREN'S SERVICES	1,226,000	881,000
•	DEPT. OF HOMELESS SERVICES	68,259,000	6,345,000
•	DEPARTMENT OF CORRECTION	303,186,000	7,333,000
•	HUMAN RESOURCES ADMINISTRATION	18,915,000	2,148,000
•	DEPARTMENT FOR THE AGING	1,797,000	1,455,000
•	DEPARTMENT OF CULTURAL AFFAIRS	130,983,000	19,970,000
•	DIV. OF YOUTH & FAMILY JUSTICE	901,000	364,000
•	TAXI & LIMOUSINE COMMISSION	1,542,000	92,000
•	DEPT. OF SMALL BUSINESS SERV.	249,654,000	10,216,000
•	DEPT. OF HEALTH & MENTAL HYGIENE	28,006,000	3,550,000
•	HEALTH AND HOSPITALS CORP.	278,518,000	18,988,000
•	DEPARTMENT OF SANITATION	146,956,000	8,211,000
•	DEPARTMENT OF TRANSPORTATION	,	-,,-,
	Bridges	491,732,000	23,657,000
	Facilities & Ferries	68,801,000	7,790,000
	Street & Traffic Lighting	50,312,000	62,466,000
	Streets & Highways	2,328,110,000	
•	DEPT. OF PARKS & RECREATION	555,628,000	33,875,000
•	DEPT. OF CITYWIDE ADMIN. SERV.	197,508,000	23,810,000
	Total	\$7,209,896,000*	\$433,589,000

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB. Costs for Streets and Arterials beyond the Four Year Plan are not included in summary.

### **CITYWIDE SUMMARY SCHEDULE**

#### Asset Information Management System (AIMS)

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

Total	\$7,209,896,000 *	\$7,489,316,000
Importance Code D	146,017,000	43,256,000
Importance Code C     Importance Code D	1,615,065,000	366,038,000
Importance Code B	3,373,103,000	5,860,798,000
Importance Code A	2,075,711,000	1,219,224,000
Total	\$7,209,896,000 *	\$7,489,316,000
Street Lighting System	34,966,000	
Traffic Signal System	15,346,000	
Step Streets	26,460,000	
Arterial Streets	40,000,000	
Local Streets	1,334,560,000	
Secondary Streets	541,830,000	
Primary Streets	385,260,000	
Bridge Mechanical	13,603,000	1,175,000
Bridge Electrical	9,654,000	13,412,000
• Marinas/Docks	17,511,000	31,364,000
Park Bridges	25,534,000	8,623,000
Rikers Island Utilities	5,200,000	, ,
• Parks' Streets and Roads	71,653,000	20,124,000
Elevators/Escalators	, , ,	_, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Parks' Electrical Utilities	32,285,000	48,427,000
<ul> <li>Parks' Water and Sewer Utilities</li> </ul>	107,299,000	160,949,000
<ul> <li>Miscellaneous Buildings</li> </ul>	47,904,000	23,132,000
<ul> <li>Parks' Boardwalks</li> </ul>	56,237,000	57,968,000
• Parks' Walls	45,721,000	452,000
Vessels	27,700,000	
Ferries	27,700,000	250,577,000
Bridge Structure	468,475,000	256,347,000
• Bulkheads	130,751,000	130,853,000
Piers	43,176,000	28,389,000
<ul><li>Electrical</li><li>Mechanical</li></ul>	858,721,000 473,677,000	2,932,095,000 1,805,311,000
Interior Architecture	1,084,557,000	1,169,659,000
• Exterior Architecture	1,311,817,000	801,036,000

\* Investment necessary to bring assets to a State of Good Repair

Note : Costs are in current dollars and are not escalated for potential future inflation.

Dollars beyond the 4 year plan for Streets and City owned Arterials are not included in summary.

## CITYWIDE SUMMARY SCHEDULE (cont.)

#### Asset Information Management System (AIMS) Report on Estimated Cost for Repairs, Replacements, Major Maintenance

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	63,327,000	9,382,000	10,855,000	8,142,000
Interior Architecture	113,660,000	15,748,000	39,024,000	32,937,000
Electrical	32,617,000	22,077,000	24,018,000	22,092,000
Mechanical	86,549,000	55,201,000	75,421,000	56,706,000
• Piers	3,050,000	170,000	323,000	647,000
Bulkheads	7,059,000	410,000	367,000	235,000
Bridge Structure	21,318,000	12,819,000	26,080,000	14,654,000
• Ferries	3,648,000			
• Vessels	583,000	600,000	1,622,000	637,000
Parks' Walls	3,575,000			
Parks' Boardwalks	109,000			
Miscellaneous Buildings	3,562,000	932,000	914,000	1,163,000
Parks' Water and Sewer Utilities	2,682,000	2,682,000	2,682,000	2,682,000
Parks' Electrical Utilities	808,000	808,000	808,000	808,000
<ul> <li>Elevators/Escalators</li> </ul>	18,360,000	18,298,000	18,298,000	18,298,000
Parks' Streets and Roads				
Rikers Island Utilities	1,750,000	1,750,000	1,750,000	1,750,000
Park Bridges	4,485,000	8,000	6,000	771,000
Marinas/Docks	1,643,000	265,000	508,000	804,000
Bridge Electrical	780,000	69,000	100,000	80,000
Bridge Mechanical	1,559,000	86,000	638,000	98,000
Primary Streets				
Secondary Streets				
Local Streets				
Arterial Streets				
Step Streets				
Traffic Signal System	39,066,000	42,322,000	42,322,000	42,322,000
Street Lighting System	23,400,000	23,400,000	23,400,000	23,400,000
Total	\$433,589,000	\$207,028,000	\$269,136,000	\$228,227,000
Importance Code A	168,321,000	104,204,000	114,637,000	105,144,000
• Importance Code B	220,684,000	100,367,000	151,152,000	119,736,000
• Importance Code C	41,023,000	1,526,000	2,434,000	2,184,000
Importance Code D	3,562,000	932,000	914,000	1,163,000
Total	\$433,589,000	\$207,028,000	\$269,136,000	\$228,227,000

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Report Schedules by Agency

# **NEW YORK PUBLIC LIBRARY - 035**

<b>Project Type :</b>	NEW YORK PUBLIC LIBRARY
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LIBRARIES	:	54
Total Assets in AIMS	:	54

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	9,938,000	4,499,000
Interior Architecture	3,805,000	8,443,000
• Electrical	11,865,000	20,360,000
Mechanical	4,998,000	22,957,000
Total	\$30,605,000 *	\$56,259,000
Importance Code A	10,245,000	4,595,000
Importance Code B	20,054,000	48,797,000
• Importance Code C	305,000	2,866,000
Total	\$30,605,000 *	\$56,259,000

Total	\$6,175,000	\$2,311,000	\$2,999,000	\$2,985,000
Importance Code D				
• Importance Code C	359,000	8,000	10,000	3,000
• Importance Code B	4,252,000	2,139,000	2,686,000	2,696,000
• Importance Code A	1,564,000	164,000	303,000	286,000
Total	\$6,175,000	\$2,311,000	\$2,999,000	\$2,985,000
Elevators/Escalators	298,000	298,000	298,000	298,000
Mechanical	1,084,000	561,000	1,207,000	570,000
• Electrical	762,000	350,000	1,036,000	149,000
Interior Architecture	2,610,000	1,021,000	261,000	1,759,000
Exterior Architecture	1,419,000	81,000	196,000	209,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020

\* Investment necessary to bring assets to a State of Good Repair

# **BROOKLYN PUBLIC LIBRARY - 038**

#### Project Type: BROOKLYN PUBLIC LIBRARY

LIBRARIES	:	32
Total Assets in AIMS	:	32

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	6,746,000	2,122,000
Interior Architecture	1,979,000	2,092,000
Electrical	4,442,000	15,556,000
Mechanical	2,023,000	7,380,000
Total	\$15,191,000 *	\$27,150,000
Importance Code A	6,746,000	2,295,000
Importance Code B	8,356,000	24,749,000
• Importance Code C	89,000	106,000
Total	\$15,191,000 *	\$27,150,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	1,116,000	23,000	104,000	84,000
Interior Architecture	864,000	34,000	84,000	512,000
Electrical	246,000	51,000	348,000	66,000
Mechanical	337,000	183,000	440,000	198,000
Elevators/Escalators	136,000	136,000	136,000	136,000
Total	\$2,699,000	\$426,000	\$1,111,000	\$997,000
Importance Code A	1,184,000	82,000	169,000	143,000
Importance Code B	1,256,000	337,000	939,000	852,000
• Importance Code C	259,000	7,000	3,000	1,000
Importance Code D				
Total	\$2,699,000	\$426,000	\$1,111,000	\$997,000

\* Investment necessary to bring assets to a State of Good Repair

# **QUEENS PUBLIC LIBRARY - 039**

17

17

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Project Type : Q	UEENS PUBLIC LIBRARY	
LIBRAR	IES	:

**Total Assets in AIMS** 

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	2,565,000	1,696,000
Interior Architecture	1,234,000	1,712,000
• Electrical	4,327,000	3,532,000
Mechanical	2,988,000	1,640,000
Total	\$11,115,000 *	\$8,580,000
• Importance Code A	2,565,000	1,799,000
• Importance Code B	7,959,000	6,707,000
• Importance Code C	590,000	74,000
Total	\$11,115,000 *	\$8,580,000
EXPENSE	FY 2017 FY 2018	FY 2019 FY 2020

Total	\$1,310,000	\$685,000	\$820,000	\$518,000
Importance Code D				
• Importance Code C	36,000	2,000	2,000	1,000
• Importance Code B	944,000	570,000	714,000	454,000
• Importance Code A	331,000	113,000	103,000	63,000
Total	\$1,310,000	\$685,000	\$820,000	\$518,000
Elevators/Escalators	63,000	63,000	63,000	63,000
Mechanical	270,000	166,000	333,000	167,000
Electrical	220,000	124,000	264,000	44,000
Interior Architecture	463,000	248,000	91,000	210,000
Exterior Architecture	295,000	84,000	69,000	34,000
EXPENSE	112017	112010	112015	112020

\* Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT OF EDUCATION - 040**

Project Type : EDUCATION		
PRIMARY SCHOOLS	:	807
INTERMEDIATE/JUNIOR HIGH SCHOOLS	:	201
HIGH SCHOOLS	:	180
ADMINISTRATIVE BUILDINGS	:	10
PIERS/BULKHEADS	:	2
Total Assets in AIMS	:	1,200

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	450,756,000	344,569,000
Interior Architecture	710,687,000	579,607,000
Electrical	611,320,000	1,364,444,000
Mechanical	247,347,000	1,077,390,000
• Bulkheads	1,084,000	1,053,000
Total	\$2,021,194,000 *	\$3,367,063,000
• Importance Code A	503,215,000	498,234,000
• Importance Code B	1,398,333,000	2,809,693,000
• Importance Code C	119,646,000	59,136,000

#### Total

\$2,021,194,000 \*

### \$3,367,063,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	28,815,000	5,325,000	6,386,000	4,840,000
Interior Architecture	58,452,000	9,416,000	11,861,000	16,400,000
Electrical	16,141,000	11,710,000	12,138,000	12,077,000
Mechanical	50,298,000	31,600,000	42,774,000	32,874,000
Bulkheads	4,000	0		
Elevators/Escalators	4,958,000	4,935,000	4,935,000	4,935,000
Total	\$158,668,000	\$62,986,000	\$78,092,000	\$71,126,000
Importance Code A	38,995,000	16,803,000	17,872,000	16,324,000
Importance Code B	99,023,000	45,443,000	58,918,000	54,087,000
• Importance Code C	20,650,000	740,000	1,302,000	716,000
Importance Code D	, ,	,	, ,	,
Total	\$158,668,000	\$62,986,000	\$78,092,000	\$71,126,000

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. The AIMS Report represents a small percentage of a comprehensive inspection utilized by the School Construction Authority in assessing capital planning priorities. The AIMS Report offers supplemental inspection data as an additional reference but does not claim to represent the full context of capital needs in New York City public schools.

# **CITY UNIVERSITY OF NEW YORK - 042**

#### Project Type: CITY UNIVERSITY OF NEW YORK

COMMUNITY COLLEGE BUILDINGS	:	84
PIERS/BULKHEADS	:	3
PARKING GARAGES	:	1
Total Assets in AIMS	:	88

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	38,156,000	24,756,000
Interior Architecture	17,948,000	22,714,000
Electrical	18,361,000	95,552,000
Mechanical	24,246,000	88,166,000
• Bulkheads	403,000	1,054,000
Miscellaneous Buildings	190,000	182,000
Total	\$99,303,000 *	\$232,424,000
• Importance Code A	42,908,000	27,245,000
• Importance Code B	54,046,000	202,077,000
• Importance Code C	2,160,000	2,920,000
• Importance Code D	190,000	182,000
Total	\$99,303,000 *	\$232,424,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	2,522,000	325,000	437,000	332,000
Interior Architecture	3,621,000	639,000	3,237,000	3,115,000
• Electrical	1,184,000	828,000	786,000	855,000
Mechanical	3,022,000	2,213,000	2,711,000	2,225,000
• Bulkheads	10,000	11,000	10,000	
Miscellaneous Buildings	33,000	9,000	13,000	9,000
Elevators/Escalators	776,000	776,000	776,000	776,000
Total	¢11 170 000	¢ 4 002 000	¢7.070.000	¢7 212 000
Total	\$11,168,000	\$4,802,000	\$7,970,000	\$7,313,000
Importance Code A	2,946,000	\$ <b>4,802,000</b> 646,000	<b>\$7,970,000</b> 737,000	\$7, <b>313,000</b> 697,000
• Importance Code A	2,946,000	646,000	737,000	697,000
<ul> <li>Importance Code A</li> <li>Importance Code B</li> </ul>	2,946,000 7,644,000	646,000 4,089,000	737,000 7,168,000	697,000 6,564,000

\* Investment necessary to bring assets to a State of Good Repair

# **POLICE DEPARTMENT - 056**

Project Type : POLICE		
PRECINCT HOUSES	:	79
POLICE BUILDINGS NON-PRECINCT	:	68
PIERS/BULKHEADS	:	3
MARINAS/DOCKS	:	4
Total Assets in AIMS	:	154

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	32,838,000	14,133,000
Interior Architecture	25,750,000	21,468,000
• Electrical	13,994,000	88,136,000
Mechanical	11,707,000	53,644,000
• Piers	2,024,000	242,000
Bulkheads		558,000
Miscellaneous Buildings	3,956,000	3,205,000
Marinas/Docks	79,000	1,925,000
Total	\$90,348,000 *	\$183,312,000
• Importance Code A	33,985,000	17,378,000
Importance Code B	49,192,000	161,565,000
Importance Code C	3,215,000	1,164,000
Importance Code D	3,956,000	3,205,000
Total	\$90,348,000 *	\$183,312,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	3,248,000	498,000	374,000	329,000
Interior Architecture	3,909,000	274,000	343,000	555,000
• Electrical	1,373,000	1,212,000	956,000	755,000
Mechanical	2,740,000	1,923,000	2,246,000	2,137,000
• Piers	18,000			
• Bulkheads	60,000	1,000		4,000
Miscellaneous Buildings	294,000	97,000	148,000	102,000
Elevators/Escalators	338,000	338,000	338,000	338,000
Marinas/Docks	172,000	24,000	57,000	132,000
Total	\$12,152,000	\$4,369,000	\$4,463,000	\$4,352,000
• Importance Code A	3,748,000	773,000	675,000	691,000
Importance Code B	6,602,000	3,465,000	3,577,000	3,529,000
• Importance Code C	1,509,000	33,000	62,000	30,000
• Importance Code D	294,000	97,000	148,000	102,000
Total	\$12,152,000	\$4,369,000	\$4,463,000	\$4,352,000

\* Investment necessary to bring assets to a State of Good Repair

# FIRE DEPARTMENT - 057

Project Type : FIRE DEPARTMENT		
FIRE DEPARTMENT BUILDINGS	:	50
PIERS/BULKHEADS	:	3
FIREHOUSES	:	57
MARINAS/DOCKS	:	1
FIREBOATS	:	5
Total Assets in AIMS	:	116

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	10,895,000	5,330,000
Interior Architecture	4,038,000	3,257,000
• Electrical	2,844,000	8,801,000
Mechanical	967,000	2,883,000
• Piers	736,000	101,000
Bulkheads	52,000	
• Vessels		
Miscellaneous Buildings	382,000	186,000
Marinas/Docks	193,000	234,000
Total	\$20,107,000 *	\$20,792,000
Importance Code A	11,710,000	5,871,000
Importance Code B	7,250,000	13,809,000
• Importance Code C	765,000	926,000
• Importance Code D	382,000	186,000
Total	\$20,107,000 *	\$20,792,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	3,006,000	127,000	350,000	148,000
Interior Architecture	4,338,000	74,000	217,000	156,000
• Electrical	863,000	351,000	382,000	179,000
Mechanical	1,249,000	488,000	749,000	382,000
• Piers	95,000		7,000	5,000
• Bulkheads	27,000	1,000		0
• Vessels	583,000	600,000	1,622,000	637,000
Miscellaneous Buildings	39,000	11,000	19,000	10,000
Elevators/Escalators	67,000	29,000	29,000	29,000
Marinas/Docks	1,000	0	6,000	0
Total	\$10,265,000	\$1,680,000	\$3,381,000	\$1,547,000

\* Investment necessary to bring assets to a State of Good Repair

FIRE DEPARTMENT - 057				
• Importance Code A	3,825,000	817,000	2,064,000	874,000
• Importance Code B	4,836,000	847,000	1,281,000	635,000
• Importance Code C	1,565,000	4,000	16,000	28,000
• Importance Code D	39,000	11,000	19,000	10,000
Total	\$10,265,000	\$1,680,000	\$3,381,000	\$1,547,000

\* Investment necessary to bring assets to a State of Good Repair

# **ADMIN. FOR CHILDREN'S SERVICES - 068**

### Project Type : CHILDREN'S SERVICES

SHELTERS	:	2
NON-SHELTERS	:	2
DAY CARE CENTERS	:	5
Total Assets in AIMS	:	9

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
• Exterior Architecture		531,000		262,000
Interior Architecture		412,000		520,000
• Electrical		153,000		850,000
Mechanical		130,000		1,042,000
Total		\$1,226,000 *		\$2,674,000
Importance Code A		531,000		332,000
• Importance Code B		479,000		2,132,000
• Importance Code C		216,000		210,000
Total		\$1,226,000 *		\$2,674,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	354,000	12,000	8,000	9,000
Interior Architecture	266,000	17,000	42,000	16,000
• Electrical	33,000	25,000	61,000	59,000
Mechanical	179,000	70,000	112,000	133,000
Elevators/Escalators	49,000	49,000	49,000	49,000
Total	\$881,000	\$173,000	\$272,000	\$266,000
Importance Code A	385,000	22,000	19,000	20,000
• Importance Code B	415,000	149,000	251,000	245,000
• Importance Code C	82,000	2,000	3,000	1,000
Importance Code D				
Total	\$881,000	\$173,000	\$272,000	\$266,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPT. OF HOMELESS SERVICES - 071**

Project Type : HOMELESS SERVICES		
SHELTERS	:	61
NON-SHELTERS	:	2
Total Assets in AIMS	:	63

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture	29,725,000			11,751,000
Interior Architecture	20,561,000 24,			24,676,000
• Electrical		12,314,000		158,511,000
Mechanical		5,658,000		29,204,000
Total		\$68,259,000 *		\$224,142,000
• Importance Code A		30,391,000		13,636,000
• Importance Code B		33,318,000		207,501,000
• Importance Code C		4,550,000		3,005,000
Total		\$68,259,000 *		\$224,142,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	1,753,000	308,000	284,000	111,000
Interior Architecture	1,871,000	367,000	256,000	458,000
• Electrical	634,000	407,000	432,000	621,000
Mechanical	1,701,000	1,018,000	1,412,000	1,264,000
Elevators/Escalators	385,000	385,000	385,000	385,000
Total	\$6,345,000	\$2,485,000	\$2,768,000	\$2,839,000
Importance Code A	2,039,000	595,000	567,000	396,000
• Importance Code B	3,634,000	1,856,000	2,171,000	2,403,000
• Importance Code C	671,000	34,000	31,000	40,000
• Importance Code D				
Total	\$6,345,000	\$2,485,000	\$2,768,000	\$2,839,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT OF CORRECTION - 072**

Project Type : CORRECTION		
<b>RIKERS ISLAND FACILITIES</b>	:	34
CORRECTION FACILITIES	:	5
PIERS/BULKHEADS	:	2
<b>RIKERS ISLAND UTILITIES</b>	:	6
MARINAS/DOCKS	:	1
Total Assets in AIMS	:	<b>48</b>

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture		210,353,000		166,711,000
Interior Architecture		51,219,000		54,852,000
• Electrical		11,627,000		371,219,000
Mechanical		19,941,000		76,825,000
• Piers		2,063,000		44,000
• Bulkheads		2,742,000		1,814,000
Rikers Island Utilities		5,200,000		
Marinas/Docks		41,000		314,000
Total		\$303,186,000 *		\$671,777,000
Importance Code A		214,616,000		172,663,000
Importance Code B		75,415,000		495,896,000
• Importance Code C		13,155,000		3,219,000
Total		\$303,186,000 *		\$671,777,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	601.000	43 000	61 000	8 000

Total	\$7,333,000	\$4,030,000	\$4,653,000	\$4,173,000
• Importance Code D				
• Importance Code C	706,000	5,000	46,000	41,000
• Importance Code B	5,430,000	3,526,000	4,011,000	3,667,000
• Importance Code A	1,196,000	499,000	595,000	465,000
Total	\$7,333,000	\$4,030,000	\$4,653,000	\$4,173,000
Marinas/Docks	42,000	4,000	42,000	7,000
Rikers Island Utilities	1,750,000	1,750,000	1,750,000	1,750,000
Elevators/Escalators	514,000	514,000	514,000	514,000
Bulkheads	89,000	0	0	5,000
• Piers	106,000	2,000		22,000
Mechanical	1,709,000	998,000	1,476,000	891,000
• Electrical	927,000	644,000	638,000	597,000
Interior Architecture	1,594,000	75,000	172,000	378,000
Exterior Architecture	601,000	43,000	61,000	8,000

\* Investment necessary to bring assets to a State of Good Repair

# **HUMAN RESOURCES ADMINISTRATION - 096**

Project Type : HUMAN RESOURCES		
SHELTERS	:	8
NON-SHELTERS	:	8
Total Assets in AIMS	:	16

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture		7,810,000		2,019,000
Interior Architecture		4,957,000		2,949,000
• Electrical		4,021,000		12,797,000
Mechanical		2,127,000		3,862,000
Total		\$18,915,000 *		\$21,627,000
• Importance Code A		8,392,000		2,369,000
• Importance Code B		9,234,000		18,950,000
• Importance Code C		1,288,000		308,000
Total		\$18,915,000 *		\$21,627,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	811,000	61,000	54,000	
Interior Architecture	928,000	80,000	37,000	167,000
• Electrical	63,000	121,000	148,000	50,000
Mechanical	304,000	189,000	320,000	167,000
Elevators/Escalators	41,000	41,000	41,000	41,000
Total	\$2,148,000	\$493,000	\$602,000	\$426,00
Importance Code A	855,000	130,000	102,000	47,000
Importance Code B	1,066,000	350,000	494,000	379,000
• Importance Code C	227,000	12,000	6,000	
• Importance Code D				
Total	\$2,148,000	\$493,000	\$602,000	\$426,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT FOR THE AGING - 125**

:

:

13

13

Project Type : AGING SENIOR CENTER

**Total Assets in AIMS** 

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture		642,000		262,000
Interior Architecture		295,000		319,000
Electrical		274,000		1,978,000
Mechanical		83,000		636,000
Miscellaneous Buildings		502,000		342,000
Total		\$1,797,000 *		\$3,538,000
Importance Code A		642,000		341,000
Importance Code B		587,000		2,855,000
• Importance Code C		66,000		
• Importance Code D		502,000		342,000
Total		\$1,797,000 *		\$3,538,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	172,000	15,000	8,000	
Interior Architecture	878,000	15,000	12,000	40,000
• Electrical	118,000	70,000	65,000	26,000
Mechanical	193,000	122,000	165,000	46,000
Miscellaneous Buildings	51,000	21,000	27,000	20,000
Elevators/Escalators	42,000	42,000	42,000	42,000
Total	\$1,455,000	\$285,000	\$320,000	\$175,000
Importance Code A	204,000	24,000	19,000	9,000
• Importance Code B	1,104,000	238,000	272,000	144,000
• Importance Code C	96,000	2,000	2,000	2,000
• Importance Code D	51,000	21,000	27,000	20,000
Total	\$1,455,000	\$285,000	\$320,000	\$175,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT OF CULTURAL AFFAIRS - 126**

#### Project Type: CULTURAL AFFAIRS

MUSEUM/GALLERY FACILITIES	:	65
CULTURAL FACILITIES	:	224
Total Assets in AIMS	:	289

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture		71,318,000		33,717,000
Interior Architecture		22,089,000		75,867,000
• Electrical		20,423,000		76,514,000
Mechanical		13,625,000		57,737,000
Miscellaneous Buildings		3,527,000		2,912,000
Total		\$130,983,000 *		\$246,746,000
• Importance Code A		71,688,000		36,834,000
• Importance Code B		51,806,000		147,513,000
• Importance Code C		3,962,000		59,488,000
• Importance Code D		3,527,000		2,912,000
Total		\$130,983,000 *		\$246,746,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	4,283,000	818,000	496,000	535,000
Interior Architecture	7,848,000	993,000	4,328,000	1,269,000
• Electrical	1,727,000	1,272,000	1,376,000	1,032,000
Mechanical	4,300,000	2,685,000	2,900,000	2,366,000
Miscellaneous Buildings	637,000	176,000	155,000	160,000
Elevators/Escalators	1,174,000	1,174,000	1,174,000	1,174,000
Total	\$19,970,000	\$7,117,000	\$10,430,000	\$6,536,000
Importance Code A	4,544,000	1,041,000	760,000	763,000
• Importance Code B	13,474,000	5,890,000	9,419,000	5,575,000
• Importance Code C	1,315,000	11,000	95,000	38,000
Importance Code D	637,000	176,000	155,000	160,000
Total	\$19,970,000	\$7,117,000	\$10,430,000	\$6,536,000

\* Investment necessary to bring assets to a State of Good Repair

# **DIV. OF YOUTH & FAMILY JUSTICE - 130**

#### Project Type : JUVENILE JUSTICE

JUVENILE JUSTICE BUILDINGS : 4

**Total Assets in AIMS** 

: 4

#### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	161,000	857,000
Interior Architecture	336,000	1,608,000
• Electrical	195,000	
Mechanical	209,000	1,916,000
Total	\$901,000 *	\$4,381,000
Importance Code A	161,000	947,000
Importance Code B	740,000	3,341,000
• Importance Code C		93,000
Total	\$901,000 *	\$4,381,000

16,000 <b>\$364,000</b> 174,000 172,000 18,000	16,000 <b>\$262,000</b> 108,000 154,000 0	16,000 <b>\$249,000</b> 36,000 213,000	16,000 <b>\$103,000</b> 13,000 90,000
<b>5364,000</b> 174,000	<b>\$262,000</b> 108,000	<b>\$249,000</b> 36,000	<b>\$103,000</b> 13,000
\$364,000	\$262,000	\$249,000	\$103,000
	,		,
16,000	16,000	16,000	16,000
81,000	60,000	149,000	40,000
31,000	70,000	60,000	31,000
74,000	23,000		15,000
163,000	93,000	24,000	1,000
	74,000 31,000	163,00093,00074,00023,00031,00070,000	163,00093,00024,00074,00023,000

\* Investment necessary to bring assets to a State of Good Repair

# **TAXI & LIMOUSINE COMMISSION - 156**

### Project Type: PUBLIC BUILDINGS

VEHICLE MAINT./STORAGE FACILITIES :

**Total Assets in AIMS** 

:

1

1

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture		659,000		768,000
Interior Architecture		587,000 44		
Electrical		112,000		50,000
Mechanical		184,000		40,000
Total		\$1,542,000 *		\$1,299,000
Importance Code A		659,000		768,000
Importance Code B		690,000		531,000
• Importance Code C		193,000		
Total		\$1,542,000 *		\$1,299,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	43,000	14,000		
Interior Architecture	4,000		53,000	6,000
Electrical	5,000	12,000	4,000	4,000
Mechanical	39,000	4,000	31,000	5,000
Total	\$92,000	\$30,000	\$88,000	\$15,000
Importance Code A	59,000	16,000	3,000	2,000
• Importance Code B	33,000	14,000	85,000	13,000
• Importance Code C	,	,	,	,
Importance Code D				
Total	\$92,000	\$30,000	\$88,000	\$15,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPT. OF SMALL BUSINESS SERV. - 801**

## Project Type: ECONOMIC DEVELOPMENT

SHELTERS	:	1
MUSEUM/GALLERY FACILITIES	:	3
TERMINALS/MARKETS	:	56
PIERS/BULKHEADS	:	177
PARKING GARAGES	:	1
FERRY TERMINAL FACILITIES	:	2
MARINAS/DOCKS	:	6
Total Assets in AIMS	:	246

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026	
• Exterior Architecture		67,102,000		64,709,000	
Interior Architecture		41,142,000		27,843,000	
• Electrical		44,029,000		49,862,000	
Mechanical		20,556,000		22,546,000	
• Piers		17,346,000		13,445,000	
Bulkheads		58,617,000		31,709,000	
Miscellaneous Buildings		338,000		140,000	
Marinas/Docks		524,000		2,820,000	
Total		\$249,654,000 *		\$213,074,000	
Importance Code A		121,429,000		78,358,000	
Importance Code B		113,069,000		131,944,000	
• Importance Code C		14,818,000		2,632,000	
• Importance Code D		338,000		140,000	
Total		\$249,654,000 *		\$213,074,000	
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020	
• Exterior Architecture	1,400,000	137,000	220,000	97,000	
Interior Architecture	2,152,000	39,000	403,000	401,000	
• Electrical	655,000	279,000	436,000	690,000	
Mechanical	1,351,000	944,000	1,151,000	1,016,000	

	Total	\$10,216,000	\$2,041,000	\$2,883,000	\$2,968,000
•	Marinas/Docks	133,000	5,000	42,000	63,000
•	Elevators/Escalators	406,000	406,000	406,000	406,000
•	Miscellaneous Buildings	19,000	9,000	8,000	6,000
•	Bulkheads	3,375,000	199,000	161,000	34,000
•	Piers	725,000	25,000	57,000	255,000
•	Mechanical	1,351,000	944,000	1,151,000	1,016,000

\* Investment necessary to bring assets to a State of Good Repair

	DEPT. OF SMALL BUSINESS SERV 801					
•	Importance Code	А	3,137,000	515,000	564,000	518,000
•	Importance Code	В	6,040,000	1,502,000	2,280,000	2,437,000
•	Importance Code	С	1,020,000	16,000	31,000	6,000
•	Importance Code	D	19,000	9,000	8,000	6,000
	Total		\$10,216,000	\$2,041,000	\$2,883,000	\$2,968,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPT. OF HEALTH & MENTAL HYGIENE - 816**

### Project Type: HEALTH AND MENTAL HYGIENE

ADMINISTRATIVE BUILDINGS	:	1
CLINICS/LABS. CLASSROOMS	:	26
VEHICLE MAINT./STORAGE FACILITIES	:	1
ANIMAL SHELTERS	:	3
Total Assets in AIMS	:	31

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	10,450,000	3,981,000
Interior Architecture	6,865,000	5,754,000
• Electrical	6,183,000	22,207,000
Mechanical	4,355,000	5,924,000
Miscellaneous Buildings	152,000	129,000
Total	\$28,006,000 *	\$37,995,000
Importance Code A	10,450,000	4,220,000
Importance Code B	16,513,000	32,890,000
Importance Code C	890,000	755,000
• Importance Code D	152,000	129,000
Total	\$28,006,000 *	\$37,995,000

#### Total

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	872,000	76,000	113,000	162,000
Interior Architecture	1,031,000	139,000	326,000	147,000
• Electrical	440,000	266,000	349,000	171,000
Mechanical	775,000	429,000	818,000	491,000
Miscellaneous Buildings	16,000	6,000	8,000	8,000
Elevators/Escalators	415,000	415,000	415,000	415,000
Total	\$3,550,000	\$1,332,000	\$2,029,000	\$1,394,000
Importance Code A	937,000	136,000	175,000	218,000
Importance Code B	2,345,000	1,182,000	1,835,000	1,166,000
• Importance Code C	252,000	7,000	12,000	2,000
Importance Code D	16,000	6,000	8,000	8,000
Total	\$3,550,000	\$1,332,000	\$2,029,000	\$1,394,000

\* Investment necessary to bring assets to a State of Good Repair

# **HEALTH AND HOSPITALS CORP. - 819**

## Project Type: HEALTH & HOSPITALS CORP.

HOSPITAL BUILDINGS	:	91
Total Assets in AIMS	:	91

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL		FY 2017 - 2020		FY 2021 - 2026
Exterior Architecture		138,255,000		35,182,000
Interior Architecture		43,645,000		168,133,000
• Electrical		34,685,000		376,351,000
Mechanical		61,380,000		147,348,000
Miscellaneous Buildings		554,000		519,000
Total		\$278,518,000 *		\$727,534,000
Importance Code A		142,992,000		40,771,000
• Importance Code B		126,117,000		632,363,000
• Importance Code C		8,856,000		53,882,000
• Importance Code D		554,000		519,000
Total		\$278,518,000 *		\$727,534,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	2,790,000	323,000	509,000	437,000
Interior Architecture	3,939,000	779,000	3,126,000	1,445,000
• Electrical	2,305,000	1,716,000	1,826,000	1,969,000
Mechanical	6,586,000	4,887,000	7,442,000	4,904,000
Miscellaneous Buildings	64,000	20,000	24,000	21,000
Elevators/Escalators	3,304,000	3,304,000	3,304,000	3,304,000
Total	\$18,988,000	\$11,030,000	\$16,230,000	\$12,080,000
• Importance Code A	3,385,000	1,001,000	1,230,000	1,170,000
• Importance Code B	14,323,000	9,906,000	14,806,000	10,799,000
• Importance Code C	1,216,000	102,000	171,000	90,000
• Importance Code D	64,000	20,000	24,000	21,000
Total	\$18,988,000	\$11,030,000	\$16,230,000	\$12,080,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT OF SANITATION - 827**

Project Type : SANITATION		
PIERS/BULKHEADS	:	32
TRANSFER STATIONS	:	5
VEHICLE MAINT./STORAGE FACILITIES	:	41
FRESH KILLS FACILITIES	:	17
Total Assets in AIMS	:	95

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	71,864,000	12,446,000
Interior Architecture	39,143,000	11,757,000
Electrical	7,004,000	31,450,000
Mechanical	8,657,000	31,197,000
• Piers	13,594,000	877,000
Bulkheads	6,348,000	1,520,000
Miscellaneous Buildings	345,000	81,000
Total	\$146,956,000 *	\$89,329,000
Importance Code A	81,323,000	14,461,000
• Importance Code B	57,480,000	74,378,000
• Importance Code C	7,808,000	408,000
• Importance Code D	345,000	81,000
Total	\$146,956,000 *	\$89,329,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	1,685,000	27,000	220,000	15,000
Interior Architecture	2,277,000	129,000	127,000	548,000
Electrical	903,000	296,000	268,000	210,000
Mechanical	2,074,000	796,000	1,121,000	589,000
• Piers	757,000	41,000	21,000	129,000
Bulkheads	360,000	4,000	2,000	49,000
Miscellaneous Buildings	41,000	8,000	13,000	8,000
Elevators/Escalators	114,000	114,000	114,000	114,000
Total	\$8,211,000	\$1,416,000	\$1,886,000	\$1,663,000
• Importance Code A	2,156,000	207,000	398,000	181,000
• Importance Code B	4,928,000	1,186,000	1,470,000	1,444,000
Importance Code C	1,086,000	15,000	6,000	30,000
Importance Code D	41,000	8,000	13,000	8,000
Total	\$8,211,000	\$1,416,000	\$1,886,000	\$1,663,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT OF TRANSPORTATION - 841**

Project Type : WATERWAY BRIDGES		
BRIDGES, WATERWAYS	:	38
HIGHWAY BRIDGES AND TUNNELS	:	2
Project Type : FERRIES		
FERRIES/BARGES	:	8
PIERS/BULKHEADS	:	16
FERRY TERMINAL FACILITIES	:	5
MARINAS/DOCKS	:	15
Project Type : ELECTRIC CONTROL		
STREET LIGHTING SYSTEMS	:	1
Project Type : HIGHWAY BRIDGES		
HIGHWAY BRIDGES AND TUNNELS	:	84
Project Type : HIGHWAYS		
PIERS/BULKHEADS	:	10
HIGHWAY FACILITIES	:	45
PIER FACILITIES	:	3
PARKING GARAGES	:	9
STREET AND CITY OWNED ARTERIALS	:	5
Project Type : TRAFFIC		
TRAFFIC SIGNAL SYSTEMS	:	1
Total Assets in AIMS	:	242

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	12,258,000	13,133,000
Interior Architecture	9,697,000	6,599,000
• Electrical	4,630,000	7,745,000
Mechanical	1,404,000	11,547,000
• Piers	1,886,000	2,449,000
Bulkheads	7,269,000	2,296,000
Bridge Structure	468,475,000	256,347,000
Ferries	27,700,000	
Miscellaneous Buildings	143,000	65,000
Marinas/Docks	3,815,000	15,895,000
Bridge Electrical	9,654,000	13,412,000
Bridge Mechanical	13,603,000	1,175,000
Primary Streets	385,260,000	
Secondary Streets	541,830,000	
Local Streets	1,334,560,000	
Arterial Streets	40,000,000	
Step Streets	26,460,000	
Traffic Signal System	15,346,000	
Street Lighting System	34,966,000	
Total	\$2,938,954,000 *	\$330,661,000

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB. Costs for Streets and Arterials beyond the Four Year Plan are not included in summary.

# **DEPARTMENT OF TRANSPORTATION - 841**

<ul> <li>Importance Code A</li> <li>Importance Code B</li> <li>Importance Code C</li> <li>Importance Code D</li> </ul>	452,206,000111,336,0001,061,627,000102,475,0001,398,519,000116,785,00026,603,00065,000			
Total		\$2,938,954,000 *		\$330,661,000
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	916,000	172,000	116,000	144,000
Interior Architecture	958,000	121,000	130,000	127,000
• Electrical	265,000	217,000	216,000	211,000
Mechanical	497,000	435,000	513,000	430,000
• Piers	519,000	27,000	67,000	20,000
Bulkheads	313,000	7,000	7,000	20,000
Bridge Structure	21,318,000	12,819,000	26,080,000	14,654,000
• Ferries	3,648,000			
Miscellaneous Buildings	178,000	23,000	28,000	28,000
Elevators/Escalators	139,000	139,000	139,000	139,000
Marinas/Docks	357,000	17,000	129,000	85,000
Bridge Electrical	780,000	69,000	100,000	80,000
Bridge Mechanical	1,559,000	86,000	638,000	98,000
Primary Streets				
Secondary Streets				
Local Streets				
Arterial Streets				
Step Streets				
Traffic Signal System	39,066,000	42,322,000	42,322,000	42,322,000
Street Lighting System	23,400,000	23,400,000	23,400,000	23,400,000
Total	\$93,913,000	\$79,854,000	\$93,885,000	\$81,757,000
• Importance Code A	82,958,000	78,360,000	86,110,000	80,118,000
Importance Code B	6,049,000	1,044,000	7,289,000	1,084,000
Importance Code C	4,728,000	426,000	458,000	527,000
Importance Code D	178,000	23,000	28,000	28,000
Total	\$93,913,000	\$79,854,000	\$93,885,000	\$81,757,000

\* Investment necessary to bring assets to a State of Good Repair

Notes : All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars. Special systems include the four East River Bridges, traffic signal systems, street lighting systems and utilities. Due to their critical nature, these systems are not surveyed, but are updated yearly based on the agency's Ten Year Capital Strategy and contract information made available to OMB. Costs for Streets and Arterials beyond the Four Year Plan are not included in summary.

# **DEPT. OF PARKS & RECREATION - 846**

### Project Type: PARKS AND RECREATION

5 51		
MUSEUM/GALLERY FACILITIES	:	16
PIERS/BULKHEADS	:	138
VEHICLE MAINT./STORAGE FACILITIES	:	4
PARK FACILITIES	:	717
STADIUM FACILITIES	:	5
MARINAS/DOCKS	:	26
WALLS	:	276
PARK BRIDGES	:	97
Total Assets in AIMS	:	1,279

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	67,535,000	22,846,000
Interior Architecture	21,670,000	14,884,000
• Electrical	14,372,000	37,166,000
Mechanical	5,443,000	33,969,000
• Piers	5,157,000	10,926,000
Bulkheads	52,677,000	84,996,000
Parks' Walls	45,721,000	452,000
Parks' Boardwalks	56,237,000	57,968,000
Miscellaneous Buildings	37,185,000	14,786,000
Parks' Water and Sewer Utilities	107,299,000	160,949,000
Parks' Electrical Utilities	32,285,000	48,427,000
Parks' Streets and Roads	71,653,000	20,124,000
Park Bridges	25,534,000	8,623,000
Marinas/Docks	12,860,000	10,176,000
Total	\$555,628,000 *	\$526,294,000
Importance Code A	254,125,000	146,389,000
Importance Code B	171,555,000	333,229,000
• Importance Code C	21,109,000	11,766,000
• Importance Code D	108,838,000	34,910,000
Total	\$555,628,000 *	\$526,294,000

\* Investment necessary to bring assets to a State of Good Repair

DEPT. O	F PARKS &	RECREATIO	ON - 846	
EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	5,679,000	587,000	482,000	334,000
Interior Architecture	5,889,000	367,000	762,000	475,000
• Electrical	1,914,000	660,000	617,000	800,000
Mechanical	2,078,000	931,000	1,251,000	1,327,000
• Piers	802,000	75,000	171,000	216,000
Bulkheads	2,538,000	187,000	178,000	122,000
Parks' Walls	3,575,000			
Parks' Boardwalks	109,000			
Miscellaneous Buildings	2,145,000	521,000	438,000	760,000
• Parks' Water and Sewer Utilities	2,682,000	2,682,000	2,682,000	2,682,000
• Parks' Electrical Utilities	808,000	808,000	808,000	808,000
Elevators/Escalators	234,000	234,000	234,000	234,000
Parks' Streets and Roads				
Park Bridges	4,485,000	8,000	6,000	771,000
Marinas/Docks	938,000	214,000	232,000	516,000
Total	\$33,875,000	\$7,274,000	\$7,862,000	\$9,045,000
Importance Code A	11,580,000	1,110,000	927,000	1,028,000
• Importance Code B	16,240,000	5,605,000	6,415,000	6,737,000
• Importance Code C	3,910,000	38,000	81,000	520,000
• Importance Code D	2,145,000	521,000	438,000	760,000
Total	\$33,875,000	\$7,274,000	\$7,862,000	\$9,045,000

\* Investment necessary to bring assets to a State of Good Repair

# **DEPT. OF CITYWIDE ADMIN. SERV. - 856**

### Project Type: REAL PROPERTY

Total Assets in AIMS	:	67
PUBLIC OFFICE BUILDINGS	:	34
COURT BUILDINGS	:	23
PIERS/BULKHEADS	:	10

### Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2017 - 2020	FY 2021 - 2026
Exterior Architecture	71,258,000	35,288,000
Interior Architecture	56,497,000	134,164,000
• Electrical	31,543,000	189,012,000
Mechanical	35,649,000	127,459,000
• Piers	369,000	304,000
Bulkheads	1,560,000	5,855,000
Miscellaneous Buildings	631,000	585,000
Total	\$197,508,000 *	\$492,666,000
• Importance Code A	74,731,000	38,383,000
Importance Code B	109,280,000	407,403,000
• Importance Code C	12,866,000	46,295,000
Importance Code D	631,000	585,000
		<b>\$ 108</b> <<< 0.00

Total

\$197,508,000 \*

\$492,666,000

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
• Exterior Architecture	1,381,000	235,000	343,000	315,000
Interior Architecture	9,694,000	898,000	13,156,000	4,738,000
• Electrical	1,809,000	1,395,000	1,612,000	1,493,000
Mechanical	5,680,000	4,499,000	6,101,000	4,485,000
• Piers	28,000			
Bulkheads	283,000		8,000	0
Miscellaneous Buildings	46,000	30,000	35,000	31,000
Elevators/Escalators	4,889,000	4,889,000	4,889,000	4,889,000
Total	\$23,810,000	\$11,945,000	\$26,144,000	\$15,951,000
Importance Code A	2,117,000	1,040,000	1,209,000	1,119,000
• Importance Code B	20,876,000	10,874,000	24,859,000	14,735,000
• Importance Code C	772,000	2,000	42,000	66,000
• Importance Code D	46,000	30,000	35,000	31,000
Total	\$23,810,000	\$11,945,000	\$26,144,000	\$15,951,000

\* Investment necessary to bring assets to a State of Good Repair

- A. Component Importance Codes for Repair, Replacement and Major Maintenance
- B. Technical Notes and Project Methodology
- C. Legend for Individual Survey Report and Sample Asset Report

Exhibit A Component Importance Codes for Repair, Replacement and Major Maintenance

## Exhibit A Component Importance Codes for Repair, Replacement and Major Maintenance

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
1.1.1	Architecture	Exterior	Exterior Walls	А
1.1.2	Architecture	Exterior	Windows	А
1.1.3	Architecture	Exterior	Parapets	А
1.1.4	Architecture	Exterior	Roof	А
1.2.5	Architecture	Interior	Floors	В
1.2.6	Architecture	Interior	Interior Walls	С
1.2.7	Architecture	Interior	Ceiling	В
1.3.8	Architecture	Site Enclosure	Fence/Gates	С
1.3.9	Architecture	Site Enclosure	Free Standing Walls	С
1.3.10	Architecture	Site Enclosure	Retaining Walls	В
1.4.11	Architecture	Site Pavements	Public Sidewalk	В
1.4.12	Architecture	Site Pavements	On-Site Walkways	С
1.4.13	Architecture	Site Pavements	Parking/Driveway	С
1.4.14	Architecture	Site Pavements	Activity Yard	В
2.1.1	Electrical	Over 600 volts	Service Equipment	А
2.1.2	Electrical	Over 600 volts	Transformers	В
2.1.3	Electrical	Over 600 volts	Switchgear	В
2.1.4	Electrical	Over 600 volts	Feeders	В
2.1.5	Electrical	Over 600 volts	Raceway	В
2.2.1	Electrical	Under 600 Volts	Service Equipment	А
2.2.2	Electrical	Under 600 Volts	Transformers	В
2.2.3	Electrical	Under 600 Volts	Switchgear	В
2.2.5	Electrical	Under 600 Volts	Raceway	В
2.2.6	Electrical	Under 600 Volts	Panelboards	В
2.2.7	Electrical	Under 600 Volts	Wiring	В
2.2.8	Electrical	Under 600 Volts	Motor Controllers	В
2.3.11	Electrical	Ground	Grounding Devices	В
2.4.9	Electrical	Stand-by Power	Transfer Switches	В
2.4.12	Electrical	Stand-by Power	Generators	B
2.4.13	Electrical	Stand-by Power	Batteries	В
2.4.17	Electrical	Stand-by Power	Fuel Storage	В
2.5.10	Electrical	Lighting	Interior Lighting	В
2.5.16	Electrical	Lighting	Egress Lighting	В
2.5.18	Electrical	Lighting	Exterior Lighting	B
2.6.15	Electrical	Lightning Protection	Arresters	B
2.7.19	Electrical	Alarm	Security System	B
2.7.19	Electrical	Alarm	Fire/Smoke Detection	B
3.1.1	Mechanical	Heating	Energy Source	B
3.1.2	Mechanical	Heating	Conversion Equipment	
3.1.2	Mechanical	Heating	Distribution	B
3.1.4	Mechanical	Heating	Terminal Devices	B
J.1. <del>T</del>	wittenanital	incanng	I CIIIIIIal Devices	D

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
3.2.1	Mechanical	Air Conditioning	Energy Source	В
3.2.2	Mechanical	Air Conditioning	Conversion Equipment	
3.2.2	Mechanical	Air Conditioning	Distribution	B
3.2.3	Mechanical	Air Conditioning	Terminal Devices	B
3.2.4	Mechanical	<b>-</b>		B
3.2.3 3.2.24	Mechanical	Air Conditioning	Heat Rejection Dehumidifier	Б В
		Air Conditioning Ventilation	Distribution	
3.3.3	Mechanical Mechanical			B
3.3.6		Ventilation	Exhaust Fans	B
3.4.7	Mechanical	Plumbing	H/C Water Piping	B
3.4.8	Mechanical	Plumbing	Water Heater	B
3.4.9	Mechanical	Plumbing	HW Heat Exchanger	В
3.4.10	Mechanical	Plumbing	Sanitary Piping	В
3.4.11	Mechanical	Plumbing	Storm Drain Piping	В
3.4.12	Mechanical	Plumbing	Sump Pump(s)	В
3.4.13	Mechanical	Plumbing	Pool Filter/Treatment	В
3.4.15	Mechanical	Plumbing	Sewage Ejector(s)	В
3.4.18	Mechanical	Plumbing	<b>Backflow Preventer</b>	В
3.4.19	Mechanical	Plumbing	Fixtures	В
3.5.16	Mechanical	Vertical Transport	Elevators	С
3.5.17	Mechanical	Vertical Transport	Escalators	С
3.6.20	Mechanical	Fire Suppression	Standpipe	В
3.6.21	Mechanical	Fire Suppression	Sprinkler	В
3.6.22	Mechanical	Fire Suppression	Fire Pump	В
3.6.23	Mechanical	Fire Suppression	Chemical System	В
4.1.2	Piers	Structural	Deck	А
4.1.3	Piers	Structural	Deck Surface	С
4.1.5	Piers	Structural	Firewalls	Ā
4.1.6	Piers	Structural	Pile Caps	A
4.1.7	Piers	Structural	Piles and Bracing	A
4.1.11	Piers	Structural	Coping/Curb	C
4.2.1	Piers	Fender	Buffer	B
4.2.4	Piers	Fender	Facing	B
4.2.8	Piers	Fender	Wales and Chocks	B
4.2.9	Piers	Fender	Piles	B
4.2.13	Piers	Fender	Pile Cluster	B
4.3.3	Piers	Deck Elements	Deck Surface	B
4.3.10	Piers	Deck Elements	Railing	B
			•	
4.3.11	Piers Dullahaada	Deck Elements	Coping/Curb	В
5.1.1	Bulkheads	Structural	Relieving Platform Top	
5.1.3	Bulkheads	Structural	Coping	C
5.1.4	Bulkheads	Structural	Facing	C
5.1.6	Bulkheads	Structural	Gravity Wall	A
5.1.7	Bulkheads	Structural	Pile Supported Wall	A
5.1.9	Bulkheads	Structural	Piles and Bracing	A
5.1.10	Bulkheads	Structural	Rip Rap	C
5.1.11	Bulkheads	Structural	Sheet Piles	А

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
5 1 10	ו ווו ת	C 1	XX7 1	
5.1.13	Bulkheads	Structural Structural	Wales Dila Como	A
5.1.15	Bulkheads		Pile Caps	A
5.1.19	Bulkheads	Structural	Lowlevel Pile Caps	A
5.2.5	Bulkheads	Backfill	Fill	B
5.2.12	Bulkheads	Backfill	Surface	B
5.3.2	Bulkheads	Fender	Buffer	B
5.3.4	Bulkheads	Fender	Facing	B
5.3.8	Bulkheads	Fender	Piles	B
5.3.14	Bulkheads	Fender	Wales and Chocks	В
5.3.17	Bulkheads	Fender	Pile Cluster	В
5.4.16	Bulkheads	Deck Elements	Railing	В
5.4.18	Bulkheads	Deck Elements	Parapet	В
6.1.1	Bridge Structure	Abutments	Bridge Seat&pedestals	
6.1.7	Bridge Structure	Abutments	Backwall	С
6.1.9	Bridge Structure	Abutments	Brngs, Ancr Blts, Pads	А
6.1.14	Bridge Structure	Abutments	Footings	В
6.1.17	Bridge Structure	Abutments	Joint with Deck	В
6.1.20	Bridge Structure	Abutments	Mat (scour & erosion)	В
6.1.24	Bridge Structure	Abutments	Pedestals	А
6.1.31	Bridge Structure	Abutments	Stem (breastwall)	В
6.1.32	Bridge Structure	Abutments	Walls	А
6.2.14	Bridge Structure	Wingwalls	Footings	С
6.2.20	Bridge Structure	Wingwalls	Mat (scour & erosion)	С
6.2.25	Bridge Structure	Wingwalls	Piles	С
6.2.32	Bridge Structure	Wingwalls	Walls	С
6.3.8	Bridge Structure	Feature Crossed	Bank Protection	С
6.3.20	Bridge Structure	Feature Crossed	Mat (scour & erosion)	А
6.3.44	Bridge Structure	Feature Crossed	Pier Protection	В
6.4.4	Bridge Structure	Approaches	Pavement	С
6.4.11	Bridge Structure	Approaches	Curbs	А
6.4.13	Bridge Structure	Approaches	Embankment	С
6.4.16	Bridge Structure	Approaches	Guide Railing	А
6.4.20	Bridge Structure	Approaches	Mat (scour & erosion)	А
6.4.21	Bridge Structure	Approaches	Median	А
6.4.28	Bridge Structure	Approaches	Railings/Parapets	А
6.4.30	Bridge Structure	Approaches	Sidewalks/Fascias	С
6.5.2	Bridge Structure	Piers	Cap Beam	А
6.5.5	Bridge Structure	Piers	Pier,Columns	В
6.5.6	Bridge Structure	Piers	Stem,Solid Pier	В
6.5.9	Bridge Structure	Piers	Brngs,Ancr Blts,Pads	А
6.5.14	Bridge Structure	Piers	Footings	В
6.5.20	Bridge Structure	Piers	Mat (scour & erosion)	
6.5.24	Bridge Structure	Piers	Pedestals	В
6.5.25	Bridge Structure	Piers	Piles	А
6.6.11	Bridge Structure	Deck Elements	Curbs	A
6.6.15	Bridge Structure	Deck Elements	Gratings	A
-	0		··· 0	

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
6616	Dridge Structure	Deals Floments	Cuida Dailing	٨
6.6.16	Bridge Structure	Deck Elements Deck Elements	Guide Railing Median	A A
6.6.21	Bridge Structure			
6.6.22	Bridge Structure	Deck Elements	Mono Deck Surface	C
6.6.28	Bridge Structure	Deck Elements	Railings/Parapets	A C
6.6.30	Bridge Structure	Deck Elements Deck Elements	Sidewalks	C C
6.6.33	Bridge Structure		Wearing Surface	C C
6.6.52	Bridge Structure	Deck Elements	Scupper	
6.7.12	Bridge Structure	Superstructure	Deck,Structural	A
6.7.18	Bridge Structure	Superstructure	Joints Drive and March an	C
6.7.27	Bridge Structure	Superstructure	Primary Member	A
6.7.29	Bridge Structure	Superstructure	Secondary Member	В
6.7.50	Bridge Structure	Superstructure	Vertical Lift Tower	A
6.8.10	Bridge Structure	Movable Bridges	Controls	A
6.8.19	Bridge Structure	Movable Bridges	Machinery	A
6.8.26	Bridge Structure	Movable Bridges	Power	A
6.8.45	Bridge Structure	Movable Bridges	Swing Span Truss	A
6.8.46	Bridge Structure	Movable Bridges	Swing Span Pivot Pier	
6.8.47	Bridge Structure	Movable Bridges	Bascule Span	A
6.8.48	Bridge Structure	Movable Bridges	Bascule Span Pier	A
6.8.49	Bridge Structure	Movable Bridges	Vertical Lift Span	A
6.8.50	Bridge Structure	Movable Bridges	Vertical Lift Tower	A
6.8.51	Bridge Structure	Movable Bridges	Vertical Lift Pier	A
9.1.1	Park Wall	Wall	Coping	В
9.1.2	Park Wall	Wall	Wall/Fence	A
9.1.3	Park Wall	Wall	Base	В
10.1.2	Boardwalks	Superstructure	Deck	A
10.1.3	Boardwalks	Superstructure	Railing	В
10.2.4	Boardwalks	Substructure	Beams	А
10.2.5	Boardwalks	Substructure	Piers	A
10.2.6	Boardwalks	Substructure	Girders	А
10.2.7	Boardwalks	Substructure	Underside Enclosure	С
12.1.5	Bridge Electrical	Communication Electrical	Communications	В
12.1.18	Bridge Electrical	Communication Electrical	Intercom	В
12.1.38	Bridge Electrical	Communication Electrical	Telephone	В
12.1.50	Bridge Electrical	Communication Electrical	Jack	В
12.2.6	Bridge Electrical	Control System Electrical	Computer	В
12.2.8	Bridge Electrical	Control System Electrical	Control Console	В
12.2.9	Bridge Electrical	Control System Electrical	Control Devices	В
12.2.10	Bridge Electrical	Control System Electrical	Disconnect Switch	В
12.2.22	Bridge Electrical	Control System Electrical	Limit Switch	В
12.2.23	Bridge Electrical	Control System Electrical	Local Starter	В
12.3.14	Bridge Electrical	Drive	Grating Motor	В
12.3.25	Bridge Electrical	Drive	Machinery Brake	В
12.3.27	Bridge Electrical	Drive	Motor Brake	В
12.3.33	Bridge Electrical	Drive	Span Lock Motor	В
12.3.47	Bridge Electrical	Drive	Wedge Motor	В

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
12 4 24	Duide - Electrical		MCC	р
12.4.24	Bridge Electrical	Electric Power	MCC DemolDecord	B
12.4.28	Bridge Electrical	Electric Power	PanelBoard	B
12.4.31	Bridge Electrical	Electric Power	Service Equipment	B
12.4.37	Bridge Electrical	Electric Power	Switchgear	B
12.4.43	Bridge Electrical	Electric Power	Transfer Switch	B
12.4.44	Bridge Electrical	Electric Power	Transformer	B
12.4.51	Bridge Electrical	Electric Power	Heating	B
12.4.54	Bridge Electrical	Electric Power	Dist Equip/Motor Cont	
12.5.19	Bridge Electrical	Exterior Lighting	Lighting Contactor	B
12.5.20	Bridge Electrical	Exterior Lighting	Lighting Fixture	В
12.5.30	Bridge Electrical	Exterior Lighting	Pole	В
12.5.34	Bridge Electrical	Exterior Lighting	Spot Lighting	В
12.6.15	Bridge Electrical	Ground/Lightning Protection	Ground Bus	В
12.6.16	Bridge Electrical	Ground/Lightning Protection	Ground Rod	В
12.6.17	Bridge Electrical	Ground/Lightning Protection	Ground Wire	В
12.6.21	Bridge Electrical	Ground/Lightning Protection	Lightning Terminals	В
12.7.11	Bridge Electrical	Interior Lighting	Exit Lighting	В
12.7.20	Bridge Electrical	Interior Lighting	Lighting Fixture	В
12.7.49	Bridge Electrical	Interior Lighting	Wiring Device	В
12.8.1	Bridge Electrical	Navigation Lighting	Air Beacon	В
12.8.12	Bridge Electrical	Navigation Lighting	Fender Lighting	В
12.8.29	Bridge Electrical	Navigation Lighting	Pier Lighting	В
12.8.32	Bridge Electrical	Navigation Lighting	Span Lighting	В
12.9.31	Bridge Electrical	Power Over 600V	Service Equipment	В
12.9.44	Bridge Electrical	Power Over 600V	Transformer	В
12.10.3	Bridge Electrical	Raceway	Box	В
12.10.4	Bridge Electrical	Raceway	Collector Ring	В
12.10.5	Bridge Electrical	Raceway	Communications	В
12.10.7	Bridge Electrical	Raceway	Conduit	В
12.10.35	Bridge Electrical	Raceway	Submarine Ctrl Cables	В
12.10.36	Bridge Electrical	Raceway	Submarine Power Cabl	e B
12.10.45	Bridge Electrical	Raceway	Trough	В
12.10.46	Bridge Electrical	Raceway	Under Ground Structur	e B
12.10.48	Bridge Electrical	Raceway	Wires	В
12.10.52	Bridge Electrical	Raceway	Wiring	В
12.11.26	Bridge Electrical	Span Lock	Motor	В
12.12.13	Bridge Electrical	Stand-by Power	Generator	В
12.12.43	Bridge Electrical	Stand-by Power	Transfer Switch	В
12.13.2	Bridge Electrical	Traffic System Electrical	Barrier Gate Lighting	В
12.13.39	Bridge Electrical	Traffic System Electrical	Traffic Gate Lighting	В
12.13.40	Bridge Electrical	Traffic System Electrical	Traffic Gong	В
12.13.41	Bridge Electrical	Traffic System Electrical	Traffic Sign	В
12.13.42	Bridge Electrical	Traffic System Electrical	Traffic Signal	В
12.14.53	Bridge Electrical	Lighting	Lighting Devices	В
13.1.7	Bridge Mechanical	Bascule	Counter Weight	B
13.1.9	Bridge Mechanical	Bascule	Emergency Drive	B
	<u> </u>		0 19 111	

D.S.C.	Discipline (D)	System (S)	Component (C) Im	portance
13.1.12	Bridge Mechanical	Bascule	Fuel Tanks	В
13.1.12	Bridge Mechanical	Bascule	Houses	B
13.1.13	Bridge Mechanical	Bascule	Lock Bars	B
13.1.14	Bridge Mechanical	Bascule		B B
13.1.15	Bridge Mechanical	Bascule	Main Drive System Rack	B
13.1.20	Bridge Mechanical	Bascule	Live Load Supports	B
	Bridge Mechanical	Bascule	Track	B
13.1.22	0	Bascule	Traffic Devices	Б В
13.1.23	Bridge Mechanical			
13.1.24	Bridge Mechanical	Bascule	Trunnion	B
13.3.4	Bridge Mechanical	Swing	Center Latch	B
13.3.5	Bridge Mechanical	Swing	Center Lift	B
13.3.6	Bridge Mechanical	Swing	Center Pivot	B
13.3.9	Bridge Mechanical	Swing	Emergency Drive	B
13.3.10	Bridge Mechanical	Swing	End Lift	B
13.3.12	Bridge Mechanical	Swing	Fuel Tanks	В
13.3.13	Bridge Mechanical	Swing	Houses	В
13.3.15	Bridge Mechanical	Swing	Main Drive System	В
13.3.16	Bridge Mechanical	Swing	Rack	В
13.3.20	Bridge Mechanical	Swing	Live Load Supports	В
13.3.23	Bridge Mechanical	Swing	Traffic Devices	В
13.4.1	Bridge Mechanical	Vertical Lift	Buffers	В
13.4.2	Bridge Mechanical	Vertical Lift	CTRWT Ropes&Guides	В
13.4.7	Bridge Mechanical	Vertical Lift	Counter Weight	В
13.4.8	Bridge Mechanical	Vertical Lift	Elevators	В
13.4.9	Bridge Mechanical	Vertical Lift	Emergency Drive	В
13.4.11	Bridge Mechanical	Vertical Lift	End Locks	В
13.4.12	Bridge Mechanical	Vertical Lift	Fuel Tanks	В
13.4.13	Bridge Mechanical	Vertical Lift	Houses	В
13.4.15	Bridge Mechanical	Vertical Lift	Main Drive System	В
13.4.19	Bridge Mechanical	Vertical Lift	Sheaves	В
13.4.20	Bridge Mechanical	Vertical Lift	Live Load Supports	В
13.4.21	Bridge Mechanical	Vertical Lift	Towers	В
13.4.23	Bridge Mechanical	Vertical Lift	Traffic Devices	В
14.1.2	Marinas/Docks	Access Walkways	Deck	А
14.1.5	Marinas/Docks	Access Walkways	Gangways	В
14.1.8	Marinas/Docks	Access Walkways	Pile Caps	А
14.1.11	Marinas/Docks	Access Walkways	Piles and Bracing	А
14.1.15	Marinas/Docks	Access Walkways	Fender Piles, Wales/Chocks	s A
14.2.1	Marinas/Docks	Floating Docks	Anchor Piles	А
14.2.2	Marinas/Docks	Floating Docks	Deck	А
14.2.3	Marinas/Docks	Floating Docks	Fenders	С
14.2.4	Marinas/Docks	Floating Docks	Floats/Frames	A
14.2.7	Marinas/Docks	Floating Docks	Mooring Piles	В
14.2.10	Marinas/Docks	Floating Docks	Railing	A
14.2.16	Marinas/Docks	Floating Docks	Barge	A
14.3.3	Marinas/Docks	Launch/Haulout	Fenders	В

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
14.3.11	Marinas/Docks	Launch/Haulout	Piles and Bracing	А
14.3.11	Marinas/Docks	Launch/Haulout	Ramp	B
14.3.12	Marinas/Docks	Launch/Haulout	Runway	A
14.3.13	Marinas/Docks	Protective Structure	Fenders	A
14.4.6	Marinas/Docks	Protective Structure	Ice Breaker	A
14.4.9	Marinas/Docks	Protective Structure	Piles Cluster	C
14.4.14	Marinas/Docks	Protective Structure	Wave Attenuator	A
14.4.14	Marinas/Docks	Protective Structure	Donut Fender	A
14.4.28	Marinas/Docks	Deck Elements	Railing	A
14.5.10	Marinas/Docks	Electrical	Conduit	A
14.6.21	Marinas/Docks	Electrical	Lighting Fixture	A
14.0.21	Marinas/Docks	Electrical/Mech.	Power Supply/Bollards	
	Marinas/Docks	Fender	Facing	A
14.8.20			Piles	
14.8.22	Marinas/Docks	Fender		A
14.8.26	Marinas/Docks	Fender Gallows Frames	Wales and Chocks	A
14.9.25	Marinas/Docks		Tower Frames	A
14.10.24	Marinas/Docks	Mech./Plumbing	Sanitary Piping	A
14.10.27	Marinas/Docks	Mech./Plumbing	Water Supply	A
14.11.17	Marinas/Docks	Movable Ramps	Bearings	A
14.11.19	Marinas/Docks	Movable Ramps	Deck and Railing	A
16.1.1	Park Bridges	Abutments	Bridge Seat&Pedestals	
16.1.7	Park Bridges	Abutments	Backwall	С
16.1.9	Park Bridges	Abutments	Brngs,Ancr Blts,Pads	A
16.1.14	Park Bridges	Abutments	Footings	В
16.1.17	Park Bridges	Abutments	Joint with Deck	В
16.1.20	Park Bridges	Abutments	Mat (scour & erosion)	В
16.1.24	Park Bridges	Abutments	Pedestals	A
16.1.31	Park Bridges	Abutments	Stem (breastwall)	В
16.1.32	Park Bridges	Abutments	Walls	В
16.2.14	Park Bridges	Wingwalls	Footings	С
16.2.20	Park Bridges	Wingwalls	Mat (scour & erosion)	С
16.2.25	Park Bridges	Wingwalls	Piles	С
16.2.32	Park Bridges	Wingwalls	Walls	С
16.3.8	Park Bridges	Stream Channel	Bank Protection	С
16.3.20	Park Bridges	Stream Channel	Mat (scour & erosion)	А
16.3.44	Park Bridges	Stream Channel	Pier Protection	В
16.4.4	Park Bridges	Approaches	Pavement	С
16.4.11	Park Bridges	Approaches	Curbs	А
16.4.13	Park Bridges	Approaches	Embankment	С
16.4.16	Park Bridges	Approaches	Guide Railing	А
16.4.20	Park Bridges	Approaches	Mat (scour & erosion)	А
16.4.23	Park Bridges	Approaches	Pavement Base	С
16.4.28	Park Bridges	Approaches	Railings/Parapets	А
16.4.30	Park Bridges	Approaches	Sidewalks	С
16.4.35	Park Bridges	Approaches	Fascias	С
16.4.52	Park Bridges	Approaches	Scupper	С

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
16.5.2	Park Bridges	Piers	Cap beam	А
16.5.5	Park Bridges	Piers	Pier,Columns	B
16.5.6	Park Bridges	Piers	Stem,Solid Pier	B
16.5.9	Park Bridges	Piers	Brngs,Ancr Blts,Pads	A
16.5.14	-	Piers	Footings	B
16.5.20	Park Bridges		•	
	Park Bridges	Piers	Mat (scour & erosion) Pedestals	A
16.5.24	Park Bridges	Piers		B
16.5.25	Park Bridges	Piers	Piles Curbs	A
16.6.11	Park Bridges	Deck Elements		A
16.6.15	Park Bridges	Deck Elements	Gratings	A
16.6.16	Park Bridges	Deck Elements	Guide Railing	A
16.6.21	Park Bridges	Deck Elements	Median	A
16.6.22	Park Bridges	Deck Elements	Mono Deck Surface	С
16.6.28	Park Bridges	Deck Elements	Railings/Parapets	A
16.6.30	Park Bridges	Deck Elements	Sidewalks	C
16.6.33	Park Bridges	Deck Elements	Wearing Surface	С
16.6.35	Park Bridges	Deck Elements	Fascias	С
16.6.52	Park Bridges	Deck Elements	Scupper	С
16.7.12	Park Bridges	Superstructure	Deck,Structural	А
16.7.18	Park Bridges	Superstructure	Joints	С
16.7.27	Park Bridges	Superstructure	Primary Member	А
16.7.29	Park Bridges	Superstructure	Secondary Member	В
	Rikers Island	Electrical		А
	Rikers Island	Gas Mains		В
	Rikers Island	Sanitary System		В
	Rikers Island	Underground Steam Tunnel		В
	Rikers Island	Storm System		В
	Rikers Island	Domestic/Fire Water System		В
	Brooklyn Bridge			А
	Manhattan Bridge			А
	Queensboro Bridge			А
	Williamsburg Bridge			А
	Street Lighting System			А
	Traffic Signal System			А
	Streets and Highways	Primary Streets		В
	Streets and Highways	Secondary Streets		В
	Streets and Highways	Local Streets		С
	Streets and Highways	Arterial Streets		А
	Streets and Highways	Step Streets		D
	Park Utilities	Electrical		А
	Park Utilities	Water and Sewers		В
	Park Streets and Roads			D
	Ferries	Capital Repairs		А
	Ferries	Major Maintenance		А
	Vessels	Capital Repairs		А
	Vessels	Major Maintenance		А

Exhibit B Technical Notes and Project Methodology

## Exhibit B Technical Notes and Project Methodology

#### **Asset Definition**

In single structure assets, the sub-asset and the asset are synonymous. In the agency reports, an "asset" generally has a one-to-one correspondence with a unique structure and has an individual Program Number. In some instances, the initial "asset" was defined as an organizational unit which provided a common service, but consists of numerous individual structures. An example of this would be Bellevue Hospital which is considered to be the "asset", but which has several significant individual structures. Bellevue Hospital is numbered as the "asset" and individual buildings are numbered as "sub-assets". Bridges with individual Bridge Identification Numbers are also considered separate sub-assets. Actual surveying, costing and reporting always occur at the sub-asset level.

#### **Criteria for Survey Selection**

The decision criteria below have been developed and generally followed in determining sub-assets to receive an engineering survey:

- Assets meeting the Charter criteria which had a previous survey conducted four years ago.
- Sub-assets appraised at greater than \$1 million regardless of size
- Sub-assets valued at greater than \$250,000 and greater in size than 10,000 sq. ft.
- Other sub-assets used as an "average cost" group.

· Special requests from agencies.

#### **Repair, Replacement and Major Maintenance**

Repairs, replacements and "major maintenance" costs are all presented at the detailed component level in the maintenance schedules. Repairs are defined as reconstruction or renovation.

#### **Cost Estimating**

In order to have a consistent, standard methodology, all costs were developed on a contracted-out basis adjusted for work in the NYC public sector. Costs were developed for individual component repairs/replacements. Costs presented are considered all-inclusive (i.e. labor, materials, equipment, design, construction management, overhead and profit). The data obtained by the field survey teams and by the estimators was combined in a project computer database. This database was used to generate the

asset cost data. Actual work, when performed by an agency may be on a different basis or packaged in a different manner. Future work, performed on a large scale (i.e., major rehabilitation or modernization), may include other logical work items that are not specifically cited in the agency reports as currently needing major repair or replacement.

#### **Quantity Estimating and Modeling Procedures**

A team of professional construction cost estimators utilized asset plans and other reports to conduct a quantity take-off of selected components in typical assets. This data was used to develop models for calculating the replacement cost of those components in place. When plans were not available, it was necessary for the estimators to visit the site with a field survey team or to have a field survey team obtain quantities when they were at that specific site. It was not practical or cost effective to measure each asset to determine the quantities of the various components and types contained. To address this issue the cost estimating team developed hundreds of models for which they generated detailed quantity relationships. Assets were then assigned models to which they were similar in size and type. Unique assets and recent additions to the inventory generally became their own models.

#### **Average Cost Methods**

Average cost methods are used for small assets where an average cost per square foot, within a project type, is computed for repair in the next fiscal year. Replacement and maintenance costs are calculated on an annual basis over a ten-year period.

#### Life Cycle Projections

The engineers have developed a typical life cycle for each component type based on industry standards and engineering judgment. These were previously shared with each agency and have subsequently been updated to better reflect City practices. The component life cycles, along with survey assessment, are used in the report to estimate the likely point in time that a component may need replacement.

#### **Major Maintenance**

Major Maintenance as presented in the report has a specific meaning to meet the requirements of the Charter. With the exception of bridges, major maintenance is defined as those activities that should be performed at intervals of at least one year or greater and that are required to maintain the useful life and integrity of the component. Major maintenance, as here defined, does not generally include the more frequent annual and on-going normal preventive maintenance activities that should regularly occur as part of a good overall maintenance program. Major maintenance activities are generally large in scope and, depending on the agency, may often be the type of work that would be contracted-out. Major maintenance for bridges was treated differently from all other assets and does include items that are of a preventive

nature. Such activities as cleaning and debris removal are large-scale identifiable items that should not only occur regularly, but would also have a direct impact on the structural integrity of the bridge over time. Major maintenance includes all the items recommended by the project engineers as well as the full preventive maintenance program that was outlined in the bridge engineering report to the City, prepared by the Consortium of New York Engineering Schools, generally known as the "Consortium Report."

#### Major Maintenance Programming:

The recommended date for the start of each maintenance program was developed with consideration of engineering judgment, recommended practice, observed conditions, repairs/replacements, and general practicality. The decision rules, which apply, are as follows:

- If a repair is called for, maintenance starts in the next cycle.
- If two or more observations are rated severe, maintenance starts in the next fiscal year.
- If the replacement year is within five years of the current fiscal year, maintenance starts in the next fiscal year.
- When a component's standard life is the life of the asset, maintenance begins the next fiscal year after a new survey.
- If no repair is needed and less than two observations are rated severe for a component type whose life is the life of the asset, maintenance starts in the next cycle.
- If no repair is needed and maintenance does not start in the next fiscal year, then the maintenance start year is calculated from the year of replacement back to the present, using the maintenance cycle as an interval.
- If replacement year coincides with the maintenance start year, then no maintenance accrues.

#### Major Maintenance Costing:

Generally, the major maintenance programs are priced as a cost per square foot times either the area of the component or area serviced by the component. However, for a number of components, the first step in the maintenance program is to conduct a detailed survey of the component to precisely determine its condition and specific maintenance needs. The cycle frequency of the maintenance survey is much shorter than the actual maintenance cycle, thus it is presumed that the maintenance effort is not required for the whole area of the component in each cycle, but will be required for some portion of the component. As a result, the maintenance program of a certain component (i.e. repointing of exterior wall) may happen more than one time in the ten-year projection to maintain different portions of the component.

#### **Component Observations**

Component observations are meant to qualify the repair and replacement needs of the component, i.e. describing the deficiencies and locations where they occur. Even when there is no repair called for, surveyors have the ability to record observations in the field to better describe the condition of the component type and the extent of its severity.

#### **Special Systems and Reports**

There are a number of special systems and situations within a few agencies that required unique treatment and which did not readily fit within the format of the standard agency report. These assets were treated separately and were reported on in a number of different modes as appropriate to the situation. The methodology required in such cases was sometimes different than the general approach for most assets described in this report. Each of the special reports outlines how the assets were assessed and the resulting cost factors calculated.

The four East River Bridges (i.e., Brooklyn, Manhattan, Queensboro, Williamsburg) are updated yearly based on the agency's Ten Year Plan to bring them up to a state of good repair. DPR's roads and utilities are based on surveys and engineering estimates. Maintenance needs for DOT's Street Lighting and Traffic Signal Systems have been updated yearly to reflect the latest contract information available from the Agency. Streets and Highways are assessed each year based on a reinspection by DOT. Annual maintenance and repair costs for marine vessels from DOT and FDNY, and DOC's underground utilities were provided by the respective agencies.

Agency	Special Systems
Department of Transportation (DOT) FY 2016	<ul> <li>Four East River Bridges</li> <li>yearly report based on DOT's Ten Year Plan to bring them to a state of good repair</li> </ul>
Department of Transportation (DOT) FY 2016	Street and City Owned Arterial System <ul> <li>report produced by DOT</li> </ul>
Department of Transportation (DOT) FY 2016	Street Lighting System <ul> <li>agency contract information</li> </ul>
Department of Transportation (DOT) FY 2016	Traffic Signal System <ul> <li>agency contract information</li> </ul>
Department of Transportation (DOT) FY 2016	Ferries <ul> <li>agency contract information</li> </ul>
Parks Department (DPR) FY 2016	<ul><li>Underground Utilities</li><li>narrative report submitted on electrical, sewer, and water utilities</li></ul>
Parks Department (DPR) FY 2016	Streets and Roads in Parks • narrative report submitted
Department of Correction (DOC) FY 2016	Rikers Island Underground Utilities • yearly report based on agency information
Fire Department (FDNY) FY 2016	<ul><li>Fireboats</li><li>yearly report based on agency information</li></ul>

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Exhibit C Legend for Individual Survey Report and Sample Asset Report

## Exhibit C Legend for Individual Survey Report

Print Date: <sup>a</sup>		AGENCY <sup>b</sup> – Fiscal Year <sup>c</sup>	Page: <sup>d</sup>
Asset Name: <sup>1</sup> Address: <sup>2</sup>			
Borough: <sup>3</sup>		Agency's Nu	mber: <sup>8</sup>
Program/Asset #: 4		Yr Built/Rend	vated: <sup>9</sup>
Area Sq Ft: <sup>5</sup>		Project Type:	10
Date of Survey: 6		Landmark St	atus: <sup>11</sup>
Areas Surveyed: 7			
Block: <sup>12</sup>	Lot: 13	BIN: <sup>14</sup>	

## Header

a.	Print Date:	Date of report printing
b.	Agency:	Name of agency being reported
c.	Fiscal Year:	Fiscal year of report creation
d.	Page:	Page number of agency report
1.	Asset Name:	The asset name/description
2.	Address:	Self explanatory
3.	Borough:	Self explanatory
4.	Program/Asset #:	The unique number assigned to every sub-asset in the study
5.	Area Sq Ft:	The gross square feet of the asset. Some unique assets (i.e., piers and bulkheads) may also have a second measurement such as linear feet or linear feet fender.
6.	Date of Survey:	Date of last survey
7.	Areas Surveyed:	Sub-basement, basement, and roof are indicated if surveyed. The floors surveyed are indicated by floor number (applicable to buildings only). The codes ATT and PH are used to indicate attic and penthouse.

Print Date: <sup>a</sup>	A	GENCY <sup>b</sup> – Fiscal Year <sup>c</sup>	Page: <sup>d</sup>
Asset Name: <sup>1</sup> Address: <sup>2</sup> Borough: <sup>3</sup> Program/Asset #: <sup>4</sup>		Agency's Number: <sup>8</sup> Yr Built/Renovated: <sup>9</sup>	
Area Sq Ft: <sup>5</sup> Date of Survey: <sup>6</sup>		Project Type: <sup>10</sup> Landmark Status: <sup>11</sup>	
Areas Surveyed: <sup>7</sup> Block: <sup>12</sup>	Lot: <sup>13</sup>	BIN: <sup>14</sup>	

## Header (continued)

8.	Agency's Number:	For cross reference, the internal number within the agency
9.	Yr Built/Renovated:	Year of construction and last major renovation or addition
10.	Project Type:	NYC Capital Budget designation
11.	Landmark Status:	Whether the asset is associated with a landmark designation:
		I – Interior Landmark
		E – Exterior Landmark
		H – Historical Landmark District
		B – Interior and Exterior Landmark
		C – Exterior Landmark in Historical District
		D – Interior, Exterior Landmark in Historical District
		S – Scenic Landmark
		N – Not a Landmark
12.	Block	Tax Block
14.	DIOCK	Tax block
13.	Lot	Tax Lot
14.	BIN	Building/Bridge Identification Number

Discipline <sup>1</sup>	Current Repair	Future Replacement	Maintenance	
System <sup>2</sup>				
Component	% of <sup>3</sup> Fail Date <sup>4</sup> Estimation	ated <sup>5</sup> Year <sup>6</sup> Estimated <sup>7</sup>	Cycle <sup>8</sup> Estimated <sup>9</sup>	Priority <sup>10</sup>
Туре	Total (Years) Cost	FY Cost	(Yrs) Cost	

1.	Discipline:	The name of the discipline being evaluated (i.e. architectural, electrical, mechanical). Some agencies may have additional unique assets, which for the purposes of this report are treated as "disciplines" (i.e. piers, bulkheads, bridges).
2.	System:	The system that is being rated
	Component:	The component of the system
	Туре:	The primary type(s) of material or equipment
3.	% of Total:	The percentage of the total component that is represented by the type.
4.	Fail Date (Years):	Indicates the component rating as follows:
		Now: The Component has failed or is inoperative at the time of the survey.
		<b>0-2:</b> It is predicted, based solely on observation that the component may fail or cease to operate within two years of the survey.
		<b>2-4:</b> It is predicted, based solely on observation that the component may fail or cease to function within a period of two to four years after the survey.
		<b>4+:</b> It is predicted, based solely on observation that the component may fail or cease to function beyond four years after the survey.
5.	Estimated Cost:	The costed dollar amount estimated to fix a component rated as failed or needing a repair.

Discipline <sup>1</sup>	Current Repair	Future Replacement	Maintenance
System <sup>2</sup>			
Component	% of $^3$ Fail Date $^4$ Estimated $^5$	Year <sup>6</sup> Estimated <sup>7</sup>	Cycle <sup>8</sup> Estimated <sup>9</sup> Priority <sup>1</sup>
Туре	Total (Years) Cost	FY Cost	(Yrs) Cost

6.	Year FY:	The estimated fiscal year in which component is projected to need replacement based on standard life, condition as of the last survey, and estimate of % of life remaining, with the assumption that recommended repairs and maintenance activities are performed. Some "life" components are expected to last for the life of the asset and are not normally replaced.
7.	Estimated Cost:	The estimated cost in current dollars to replace the component. Items with a replacement date of "life" are not costed and are shown as **. Only components that have replacement dates projected within the next ten years are shown as cost items.
8.	Cycle (Yrs):	The recommended cycle at which the major maintenance program should be performed.
9.	Estimated Cost:	The estimated maintenance cost over a ten year period, (in current dollars), as calculated on a standard contracting basis.
10.	Priority:	A calculated score given to important components that require urgent repair/replacement based on severity of condition.

### Observations

System <sup>1</sup> Compone Type	ent Observation <sup>2</sup> Location <sup>3</sup>	Extent <sup>4</sup> Area Affected	5
1.	System, Component, Type:	Same as previous report sections.	
2.	Observation:	Observation made by surveyor components of the Asset.	regarding
3.	Location:	Location is given as needed for an observ	vation.
4.	Extent:	Light, Medium, or Severe.	

Extent of observed condition expressed as a 5. Area Affected: percentage of the component or component type.

### Print Date: 22-Oct-2015 **DEPARTMENT OF EDUCATION - FY 2016**

Asset Name	: P. S. 131 - BK		
Address	: 4305 FT HAMILTON PKWY BTWN:	43 ST., 44 ST.	
Borough	: BROOKLYN	Agency's Number	: K131
Program / Asset #	: BOE0437.000 / 1365	Yr Built/Renovated	: 1901 / 2005
Area Sq Ft	: 86,000	Project Type	: EDUCATION
Date of Survey	: 09-Mar-2015	Landmark Status	: NONE
Areas Surveyed	: Basement, Roof, Floors 1,3,4		
Block	: 5603 Lot : 1	BIN	: 3136085

Total	\$3,394,300	\$4,510,900
Importance Code C	\$252,200	
Importance Code B	\$585,700	\$4,274,100
Importance Code A	\$2,556,400	\$236,800
Total	\$3,394,300	\$4,510,900
Mechanical		\$1,238,600
Electrical		\$2,378,900
Interior Architecture	\$837,900	\$693,700
Exterior Architecture	\$2,556,400	\$199,800
CAPITAL	FY 2017 - 2020	FY 2021 - 2026

EXPENSE	FY 2017	FY 2018	FY 2019	FY 2020
Exterior Architecture	\$106,400			
Interior Architecture	\$96,000		\$2,000	\$10,800
Electrical	\$2,200	\$600	\$1,000	\$1,600
Mechanical	\$40,800	\$15,000	\$19,700	\$17,000
Total	\$245,400	\$15,600	\$22,600	\$29,400
Importance Code A	\$115,200	\$8,800	\$8,800	\$8,800
Importance Code B	\$103,700	\$6,900	\$13,900	\$20,600
Importance Code C	\$26,500			
Total	\$245,400	\$15,600	\$22,600	\$29,400



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### P. S. 131 - BK

### Asset # : 1365

rchitecture	Current Repair Future Replacement					t Maintenance		
ystem Component Type	% of Fail Date Total (Years)	Estimated Cost	Year Est FY	imated Cost	Cycle (Yrs)	Estimated Cost	Priorit	
terior								
Exterior Walls Cast Stone/Terra Cotta	5% Now Cracking/Crumbling Location : Through		LIFE , Area Affecte	* * ed : 40%	5	\$60,500		
Masonry: Brick	90% Now Cracking/Crumbling Location : Through Expansion Jnt Failur Location : Through	out e, Extent : Light, A			5	\$139,300	1	
Masonry: Limestone	5% 0-2 Cracking/Crumbling Location : Through		LIFE rea Affected :	* * 30%	5	\$5,800	1	
Windows								
Aluminum	100% Now Ctrwt/Balnc Not Fun Location : Through Hardware Missing, E Location : Through	out Extent : Moderate, 4			5	\$22,300		
Parapets								
Cast Stone/Terra Cotta	5% Now Cracking/Crumbling, Location : Through Jnt Mortar Miss/Ero Location : Through Water Penetration, E Location : Through	out d, Extent : Severe, A out Extent : Severe, Area	Area Affected	: 30%	5	\$5,600	1	
Copper/Terne	10% Now	\$24,900	2061	* *	5	\$3,500		
	Cracking/Crumbling Location : Through		rea Affected :	20%				
Masonry: Brick	75% Now Cracking/Crumbling Location : Through Jnt Mortar Miss/Ero Location : Through	out d, Extent : Light, A			5	\$10,800	1	
Metal Cornice	5% Now Deformed/Dented, E. Location : Through		2054 Affected : 30	* *				
Pre-Cast Concrete	5% Now Cracking/Crumbling Location : Through Expansion Jnt Failur Location : Through	out e, Extent : Severe,			5	\$4,500	1	

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P. S. 131 - BK

Asset # : 1365

rchitecture	Current Repair Future Replacement				Maintenance			
/stem Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	Priorit
terior Roof								
Asphalt Shingle	20%			2035	* *	10	\$1,800	
Built-Up (BUR)	60%	Now	\$30,400	2031	* *	10	<i>41,000</i>	
• · · ·			, Extent : Moderat	e, Area A	ffected : 10%			
		n : Gymnas						
			Extent : Moderate, A	Area Affe	cted : 20%			
<b>C F</b>		n : Through		2041	* *			
Copper/Terne	5% Water Per		\$3,700 Extent : Moderate, A	2041 Area Affe				
		ierranon, E 1 : Through		1100 11990	cieu . 2070			
Modified Bitumen	15%			2031	* *	10	\$8,300	
erior	1070			2001		10	40,000	
Floors								
Cast in Place Concrete	5%			LIFE	* *	5	\$29,000	
Ceramic Tile	3%	Now	\$23,100	2035	* *	5	\$2,000	
		ts, Extent : 1 : Toilet(s)	Moderate, Area A	ffected : .	30%			
		( )	tent : Moderate, A	rea Affec	ted : 30%			
	-	1 : Through		curijjee				
Quarry Tile	2%			2039	* *	5	\$4,000	
Vinyl Tile	55%	Now	\$61,900	2026	\$619,200	3	\$27,300	
	-	-	Extent : Light, Are	ea Affect	ed : 10%			
		n : Through						
Vinyl Tile 9" X 9"	10%		\$7,300	2031	**	3	\$5,000	
	-	Crumbling, 1 : Through	Extent : Severe, A	rea А <del></del> јјес	:tea : 10%			
Wood	25%		\$54,600	2041	* *	5	\$31,000	
Wood			Extent : Moderate,		fected : 10%	5	ψ51,000	
	Location	n : Through	out					
Interior Walls								
Ceramic Tile		Now	\$13,600	2029	**	5	\$2,500	
	-	Crumbling, 1 : Through	Extent : Light, Ard	ea Affecto	ed : 10%			
Masanmu Drialt	2%	0		LIEE	* *			
Masonry: Brick			\$12,900 Extent : Moderate	LIFE Area A				
	-	: Through		, 11/00/19	<i>Jeelea</i> . 1070			
	Jnt Morta	r Miss/Eroo	d, Extent : Modera	te, Area A	Affected : 10%			
	Locatior	1 : Through	out					
Plaster	70%		\$92,600	LIFE	* *	5	\$34,600	
			Extent : Light, Ar	ea Affect	ed : 10%			
		1 : Through		A. CC	1 100/			
		tetration, E 1 : Through	Extent : Severe, Are	a Affecte	d : 10%			
SGFT/Glazed Masonry	25%	Now	\$159,600	LIFE	* *			
SOI 1/ Olazeu Masolil y			Extent : Light, Ard					
	-	: Through	-	55				

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### P. S. 131 - BK

### Asset # : 1365

		Asset # : 1	305				
Architecture	Curr	ent Repair	Futur	e Replacement	Μ	aintenance	
ystem Component Type	% of Fail I Total (Yea	Date Estimated Cost ars)	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	Priorit
terior							
Ceilings AcousTile,Adhered	10% Nov Cracking/Crumb Location : Thre	ling, Extent : Light, Ar	2031 ea Affecte	* * ed : 20%	5	\$6,600	
Plaster	90% Now Cracking/Crumb Location : Thre	w \$469,200 ling, Extent : Light, Ard oughout on, Extent : Severe, Are			5	\$74,500	
Electrical	Curr	ent Repair	Futur	e Replacement	М	aintenance	
ystem Component Type		Date Estimated Cost		Estimated Cost		Estimated Cost	Priorit
nder 600 Volts Service Equipment Fused Disc Sw	Location : Elec	on, Extent : Moderate, 1 strical Room One 2000 Main Discont			5	\$400	
Switchgear / Switchboard Fused Disc Sw	100%		2026	\$171,100	5	\$400	
Raceway Conduit	100%		2026	\$172,600	1		
Panelboards Fused Disc Sw Molded Case Bkrs	10% 80%		2025 2025	\$17,900 \$143,500 * *	5 5	\$200 \$1,800 \$200	
Molded Case Bkrs Wiring	10%		2034		5	\$200	
Thermoplastic Thermoplastic	80% 20%		2026 2036	\$204,400 * *	1 1		
Motor Controllers Locally Mounted Locally Mounted	70% 30%		2024 2031	\$52,900 * *	5 5	\$400 \$200	
ound Grounding Devices Generic	100% Other Observation Location : Base Explanation : M		LIFE Area Affe	* * cted : 100%	5	\$2,500	
ghting							
Interior Lighting Fluorescent		on, Extent : Moderate, A oughout The Building F-12 Lamps	2026 Area Affe	\$963,000 cted : 100%	10	\$79,500	
	1	1					

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# P. S. 131 - BK

### Asset # : 1365

Electrical		Current	Repair	Futur	e Replacement	Μ	aintenance	
System	% of		Estimated Cost		Estimated Cost			Priority
Component	Total	(Years)	Estimated Cost	FY	Estimated Cost	(Yrs)	Estimated Cost	FIIOTIL
Туре		()				()		
Lighting								
Egress Lighting	500/			2026	* *	10	¢10 <b>7</b> 00	
Emergency, Battery	50%			2036	* *	10	\$10,700	
Exit, Service	50%			2036	* *	1		
Exterior Lighting	1000/			2021	<b>#224</b> 000	10	<b>#2</b> 00	
HID	100%			2021	\$324,800	10	\$300	
Alarm								
Security System	0.00/							
No Component	80%			2026	\$52,000	1	¢c 400	
Generic	20%			2026	\$52,000	1	\$6,400	
Fire/Smoke Detection	200/							
No Component	80%			2021	\$178,100			
Generic, Analog	20%			2021	\$178,100			
Mechanical		Current	Repair	Futur	e Replacement	М	aintenance	
System	0/ 6							<b>D</b> • •
Component	% of Total		Estimated Cost		Estimated Cost		Estimated Cost	Priority
Туре	Total	(Years)		FY		(Yrs)		
Heating								
Energy Source								
Fuel Oil No 4	100%			2036	* *	5	\$27,400	
<b>Conversion Equipment</b>								
Steam Boiler	100%			2031	* *	1	\$87,600	
			Extent : Light, Area	Affected	: 100%			
			ıt Boiler Room					
	Explana	tion : 3 Un	its					
Distribution								
Steam Piping/Pump	100%			2026	\$617,700	4	\$6,500	
Terminal Devices								
Air Handler	20%			2026	\$95,400	1	\$10,900	
Convector/Radiator	50%			2031	* *	1	\$14,300	
Fan Coil Unit/Heat	25%			2021	\$331,100	1	\$7,100	
Unit Heater-Stm/HW	5%			2026	\$28,600	4	\$600	
Air Conditioning								
Energy Source	1000			2024	* *			
Electricity	100%			2034	* *	1		
Conversion Equipment	0.00/			2021	¢145 500	1		
Window/Wall Unit	80%			2021	\$145,500	1		
No Component	20%							
Ventilation								
Distribution Ductwork/Diffusers	100%			LIFE	* *	2-5	\$78,100	
	100%			LIFE		2-3	\$78,100	
Exhaust Fans Interior	50%			2026	\$48,900	2	\$1,400	
No Component	50%			2020	\$ <del>4</del> 0,900	2	\$1,400	
Plumbing	50%							
H/C Water Piping								
Brass/Copper	100%			2036	* *	1		
Diass/Copper	100%			2030		1		

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## P. S. 131 - BK

### Asset # : 1365

Mechanical	Current Repai	r Future	e Replacement	Μ	aintenance	
System Component Type	% of Fail Date Esti Total (Years)	mated Cost Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	Priority
Plumbing						
Water Heater						
Gas Fired	100%	2026	\$20,600	2	\$1,300	
	Recent Installation, Extent	: Light, Area Affected	: 100%			
	Location : Basement					
HW Heat Exchanger						
Low Temp	100%	2036	* *	4	\$8,700	
Sanitary Piping						
Cast Iron	100%	LIFE	* *	1		
Storm Drain Piping						
Cast Iron	100%	LIFE	* *	1		
Sump Pump(s)						
Rigid Piping	100%	2031	* *	4	\$1,600	
Fixtures						
Generic	100%					
Fire Suppression						
Sprinkler						
No Component	98%					
Generic	2%	2026	\$20,700	1-2	\$500	

 Note :
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 \*\*
 Replacement cost estimated to be beyond ten years is not included in this report.

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