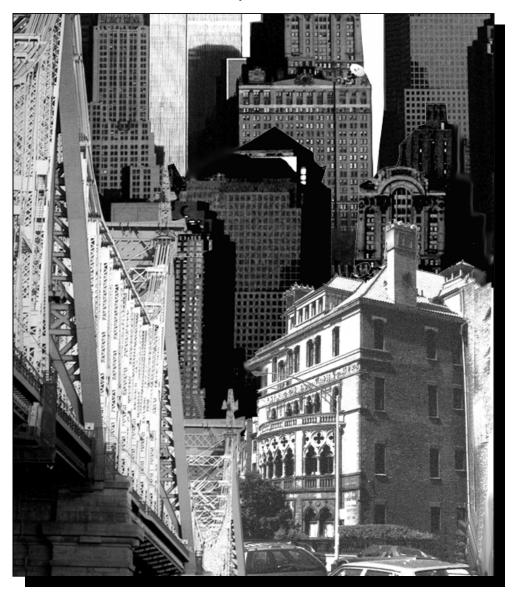


# Asset Information Management System (AIMS) Report

# Executive Summary



The City of New York Bill de Blasio, Mayor



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

FROM:

Bill de Blasio Bill De Blasis

DATE:

December 17, 2014

SUBJECT:

Asset Information Management System (AIMS) 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 2015. 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 2015 comparing total funding recommended in the Fiscal Year 2015 report with the agencies' planned expense program for 2016 and capital program for 2016 through 2019.

# 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 2015

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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, 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.

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# **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	Cup I I II	
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	Expense	
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.

#### Priorities for Repair, Replacement and Major Maintenance

In the citywide report, component repair, replacement and major maintenance are assigned a priority A, B, C or D rating. Each component has been assigned a priority related to its relative 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 priorities 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 A Citywide Asset Classes by Agency

New York, Brooklyn, Queens Public Libraries		Department of Small Business Services	
Libraries	28	Shelters	1
Department of Education		Museum/Gallery Facilities	3
Primary Schools	803	Terminals/Markets	57
Intermediate/Junior High Schools	200	Piers/Bulkheads	179
High Schools	177	Parking Garages	1
Administrative Buildings	17	Ferry Terminal Facilities	2
Piers/Bulkheads	2	Marinas/Docks	6
City University of New York		Department of Health & Mental Hygiene	
Community College Buildings	83	Administrative Buildings	1
Piers/Bulkheads	3	Clinics/Labs. Classrooms	27
Parking Garages	1	Vehicle Maint./Storage Facilities	1
Police Department		Animal Shelters	3
Precinct Houses	79	Health and Hospitals Corporation	
Police Buildings Non-Precinct	67	Hospital Buildings	105
Piers/Bulkheads	3	Department of Sanitation	
Marinas/Docks	4	Piers/Bulkheads	32
Fire Department		Transfer Stations	5
Fire Department Buildings	25	Vehicle Maint./Storage Facilities	40
Piers/Bulkheads	3	Fresh Kills Facilities	17
Firehouses	3	Department of Transportation	
Vessels	5	Bridge/Waterways	39
Administration for Children's Services		Highway Bridges and Tunnels	86
Shelters	2	Highway Facilities	47
Non-Shelters	2	Streets and Arterials (miles)	6,500
Day Care Centers	5	Street Lighting Systems	1
Department of Homeless Services		Traffic Signal Systems	1
Shelters	61	Ferry Terminal Facilities	4
Non-Shelters	2	Piers/Bulkheads	24
Department of Correction		Ferries/Barges	8
Rikers Island Facilities/Utilities	39	Pier Facilities	4
Correction Facilities	5	Parking Garages	10
Piers/Bulkheads	2	Marinas/Docks	15
Marinas/Docks	1	Department of Parks and Recreation	
Human Resources Administration		Museum/Gallery Facilities	16
Shelters	8	Piers/Bulkheads	137
Non-Shelters	8	Vehicle Maint./Storage Facilities	4
Department for the Aging		Park Facilities	709
Senior Center	13	Stadium Facilities	5
Department of Cultural Affairs	10	Marinas/Docks	24
Museum/Gallery Facilities	68	Walls	276
Cultural Facilities	225	Park Bridges	97
Division of Youth & Family Justice		Dept. of Citywide Administrative Services	22
Juvenile Justice Buildings	4	Court Buildings	23
Taxi & Limousine Commission	4	Public Office Buildings	33
Vehicle Maint./Storage Facilities	1	Piers/Bulkheads	10



Citywide Summary Schedule

## **CITYWIDE SUMMARY SCHEDULE BY AGENCY**

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

		CAPITAL FY 2016 - 2019	EXPENSE FY 2016
•	NEW YORK PUBLIC LIBRARY	10,429,000	2,929,000
•	BROOKLYN PUBLIC LIBRARY	6,687,000	1,133,000
•	QUEENS PUBLIC LIBRARY	5,869,000	731,000
•	DEPARTMENT OF EDUCATION	1,649,861,000	148,765,000
•	CITY UNIVERSITY OF NEW YORK	83,230,000	11,668,000
•	POLICE DEPARTMENT	76,874,000	12,560,000
•	FIRE DEPARTMENT	8,390,000	3,621,000
•	ADMIN. FOR CHILDREN'S SERVICES	1,132,000	739,000
•	DEPT. OF HOMELESS SERVICES	59,522,000	6,473,000
•	DEPARTMENT OF CORRECTION	337,286,000	5,781,000
•	HUMAN RESOURCES ADMINISTRATION	14,509,000	2,084,000
•	DEPARTMENT FOR THE AGING	1,745,000	833,000
•	DEPARTMENT OF CULTURAL AFFAIRS	108,265,000	20,800,000
•	DIV. OF YOUTH & FAMILY JUSTICE	848,000	435,000
•	TAXI & LIMOUSINE COMMISSION	1,508,000	90,000
•	DEPT. OF SMALL BUSINESS SERV.	207,863,000	11,136,000
•	DEPT. OF HEALTH & MENTAL HYGIENE	16,049,000	3,477,000
•	HEALTH AND HOSPITALS CORP.	306,595,000	19,108,000
•	DEPARTMENT OF SANITATION	123,063,000	7,244,000
•	DEPARTMENT OF TRANSPORTATION		
	Bridges	522,364,000	29,724,000
	Facilities & Ferries	80,387,000	10,058,000
	Street & Traffic Lighting	57,420,000	57,269,000
	Streets & Highways	2,235,860,000	20 114 000
•	DEPT. OF PARKS & RECREATION	509,671,000	32,114,000
	DEPT. OF CITYWIDE ADMIN. SERV.	155,614,000	20,665,000
	Total	\$6,581,040,000*	\$409,435,000

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.

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

## **CITYWIDE SUMMARY SCHEDULE**

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	1,154,654,000	636,094,000
Interior Architecture	988,398,000	1,175,425,000
• Electrical	600,620,000	1,420,217,000
Mechanical	432,871,000	1,648,389,000
• Piers	42,342,000	27,128,000
• Bulkheads	120,576,000	121,891,000
Bridge Structure	498,322,000	224,353,000
Ferries	31,800,000	
• Vessels	1,032,000	
Parks' Walls	43,609,000	452,000
<ul><li>Parks' Boardwalks</li></ul>	52,287,000	41,142,000
<ul> <li>Miscellaneous Buildings</li> </ul>	39,742,000	15,021,000
<ul> <li>Parks' Water and Sewer Utilities</li> </ul>	105,092,000	157,639,000
<ul> <li>Parks' Electrical Utilities</li> </ul>	31,621,000	47,431,000
<ul> <li>Primary Streets</li> </ul>	375,630,000	
• Secondary Streets	530,380,000	
Local Streets	1,263,260,000	
Arterial Streets	40,000,000	
Step Streets	26,590,000	
Elevators/Escalators		
Parks' Streets and Roads	70,179,000	19,710,000
Rikers Island Utilities	5,200,000	
Park Bridges	28,570,000	4,905,000
Marinas/Docks	18,707,000	67,619,000
Bridge Electrical	9,350,000	15,914,000
Bridge Mechanical	12,788,000	21,768,000
• Traffic Signal System	11,420,000	
Street Lighting System	46,000,000	
Total	\$6,581,040,000 *	\$5,645,098,000
Priority A	1,836,679,000	889,421,00
Priority B	2,549,204,000	3,605,703,000
Priority C	2,058,646,000	1,115,244,00
Priority D	136,511,000	34,731,00
Total	\$6,581,040,000*	\$5,645,098,00

<sup>\*</sup> 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 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	56,036,000	9,193,000	10,210,000	9,023,000
Interior Architecture	99,071,000	17,861,000	37,628,000	39,070,000
• Electrical	32,016,000	25,412,000	25,714,000	26,301,000
<ul> <li>Mechanical</li> </ul>	81,596,000	53,451,000	73,942,000	53,655,000
• Piers	3,117,000	375,000	170,000	380,000
<ul> <li>Bulkheads</li> </ul>	6,531,000	593,000	415,000	269,000
Bridge Structure	27,496,000	12,582,000	24,923,000	15,266,000
<ul> <li>Ferries</li> </ul>	6,365,000	5,948,000		
<ul> <li>Vessels</li> </ul>	2,061,000	1,699,000	1,728,000	1,297,000
<ul> <li>Parks' Walls</li> </ul>	3,592,000			
<ul> <li>Parks' Boardwalks</li> </ul>	105,000			
<ul> <li>Miscellaneous Buildings</li> </ul>	3,446,000	840,000	1,078,000	864,000
<ul> <li>Parks' Water and Sewer Utilities</li> </ul>	2,627,000	2,627,000	2,627,000	2,627,000
<ul> <li>Parks' Electrical Utilities</li> </ul>	791,000	791,000	791,000	791,000
<ul> <li>Primary Streets</li> </ul>				
<ul> <li>Secondary Streets</li> </ul>				
<ul> <li>Local Streets</li> </ul>				
<ul> <li>Arterial Streets</li> </ul>				
<ul> <li>Step Streets</li> </ul>				
<ul> <li>Elevators/Escalators</li> </ul>	17,902,000	17,900,000	17,900,000	17,900,000
<ul> <li>Parks' Streets and Roads</li> </ul>				
<ul> <li>Rikers Island Utilities</li> </ul>	1,750,000	1,750,000	1,750,000	1,750,000
<ul> <li>Park Bridges</li> </ul>	4,050,000	11,000	8,000	761,000
<ul> <li>Marinas/Docks</li> </ul>	1,453,000	457,000	457,000	503,000
<ul> <li>Bridge Electrical</li> </ul>	771,000	114,000	92,000	118,000
<ul> <li>Bridge Mechanical</li> </ul>	1,389,000	99,000	494,000	99,000
<ul> <li>Traffic Signal System</li> </ul>	33,619,000	33,619,000	33,619,000	33,619,000
Street Lighting System	23,650,000	23,650,000	23,650,000	23,650,000
Total	\$409,435,000	\$208,972,000	\$257,196,000	\$227,945,000
• Priority A	148,627,000	87,035,000	89,179,000	83,137,000
• Priority B	174,519,000	105,970,000	132,494,000	105,676,000
• Priority C	82,844,000	15,128,000	34,445,000	38,268,000
• Priority D	3,446,000	840,000	1,078,000	864,000
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Report Schedules by Agency

# **NEW YORK PUBLIC LIBRARY - 035**

**Project Type: NEW YORK PUBLIC LIBRARY** 

LIBRARIES : 16
Total Assets in AIMS : 16

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	4,505,000	2,353,000
Interior Architecture	2,667,000	4,686,000
• Electrical	2,337,000	9,401,000
• Mechanical	919,000	20,395,000
Total	\$10,429,000 *	\$36,835,000
• Priority A	4,505,000	2,353,000
• Priority B	3,843,000	30,745,000
• Priority C	2,080,000	3,737,000
Total	\$10,429,000 *	\$36,835,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	336,000	3,000	49,000	27,000
• Interior Architecture	1,697,000	95,000	238,000	347,000
• Electrical	153,000	108,000	223,000	183,000
• Mechanical	559,000	462,000	586,000	413,000
• Elevators/Escalators	184,000	184,000	184,000	184,000
Total	\$2,929,000	\$852,000	\$1,280,000	\$1,155,000
• Priority A	336,000	3,000	49,000	27,000
• Priority B	1,244,000	754,000	1,038,000	780,000
• Priority C	1,349,000	95,000	192,000	347,000
• Priority D				
Total	\$2.929.000	\$852.000	\$1,280,000	\$1,155,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

# **BROOKLYN PUBLIC LIBRARY - 038**

Project Type: BROOKLYN PUBLIC LIBRARY

LIBRARIES : 7
Total Assets in AIMS : 7

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	3,563,000	1,237,000
• Interior Architecture	1,251,000	1,135,000
• Electrical	329,000	3,053,000
Mechanical	1,544,000	5,169,000
Total	\$6,687,000 *	\$10,594,000
• Priority A	3,563,000	1,237,000
• Priority B	2,166,000	8,517,000
• Priority C	958,000	840,000
Total	\$6,687,000 *	\$10,594,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	386,000		28,000	7,000
Interior Architecture	383,000	21,000	16,000	93,000
• Electrical	88,000	35,000	26,000	56,000
<ul> <li>Mechanical</li> </ul>	206,000	162,000	218,000	151,000
<ul> <li>Elevators/Escalators</li> </ul>	69,000	69,000	69,000	69,000
Total	\$1,133,000	\$287,000	\$357,000	\$376,000
<ul> <li>Priority A</li> </ul>	386,000		28,000	7,000
<ul><li>Priority A</li><li>Priority B</li></ul>	386,000 456,000	275,000	28,000 315,000	7,000 276,000
, . <u>.</u>	<i>'</i>	275,000 12,000	*	<i>'</i>
• Priority B	456,000	,	315,000	276,000

 $<sup>* \</sup> Investment \ necessary \ to \ bring \ assets \ to \ a \ State \ of \ Good \ Repair$ 

# **QUEENS PUBLIC LIBRARY - 039**

Project Type: QUEENS PUBLIC LIBRARY

LIBRARIES : 5
Total Assets in AIMS : 5

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	734,000	1,271,000
Interior Architecture	789,000	715,000
<ul> <li>Electrical</li> </ul>	1,664,000	613,000
<ul> <li>Mechanical</li> </ul>	2,682,000	708,000
Total	\$5,869,000 *	\$3,306,000
• Priority A	734,000	1,271,000
• Priority B	5,032,000	1,570,000
• Priority C	103,000	465,000
Total	\$5,869,000 *	\$3,306,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	128,000		83,000	15,000
Interior Architecture	364,000	14,000	24,000	87,000
• Electrical	54,000	33,000	66,000	71,000
<ul> <li>Mechanical</li> </ul>	149,000	172,000	167,000	174,000
• Elevators/Escalators	36,000	36,000	36,000	36,000
Total	\$731,000	\$254,000	\$376,000	\$382,000
• Priority A	128,000		83,000	15,000
• Priority B	290,000	240,000	274,000	280,000
• Priority C	313,000	14,000	19,000	87,000
• Priority D				
Total	\$731,000	\$254,000	\$376,000	\$382,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

# **DEPARTMENT OF EDUCATION - 040**

**Project Type: EDUCATION** 

PRIMARY SCHOOLS : 803
INTERMEDIATE/JUNIOR HIGH SCHOOLS : 200
HIGH SCHOOLS : 177
ADMINISTRATIVE BUILDINGS : 17
PIERS/BULKHEADS : 2

Total Assets in AIMS : 1,199

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	392,406,000	330,256,000
Interior Architecture	619,674,000	583,419,000
• Electrical	409,347,000	905,832,000
<ul> <li>Mechanical</li> </ul>	227,381,000	945,776,000
• Bulkheads	1,052,000	161,000
Total	\$1,649,861,000 *	\$2,765,446,000
• Priority A	393,231,000	330,256,000
• Priority B	773,173,000	1,930,593,000
• Priority C	483,457,000	504,597,000
Total	\$1,649,861,000 *	\$2,765,446,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	26,111,000	6,206,000	5,816,000	5,556,000
• Interior Architecture	52,982,000	10,131,000	12,037,000	13,937,000
<ul> <li>Electrical</li> </ul>	16,633,000	14,881,000	14,236,000	14,449,000
<ul> <li>Mechanical</li> </ul>	48,050,000	30,943,000	42,249,000	31,081,000
<ul> <li>Bulkheads</li> </ul>	18,000		0	
• Elevators/Escalators	4,971,000	4,971,000	4,971,000	4,971,000
Total	\$148,765,000	\$67,132,000	\$79,310,000	\$69,995,000
• Priority A	26,112,000	6,206,000	5,816,000	5,556,000
<ul> <li>Priority B</li> </ul>	82,524,000	53,158,000	63,720,000	51,810,000
• Priority C	40,129,000	7,768,000	9,774,000	12,628,000
• Priority D				
Total	\$148,765,000	\$67,132,000	\$79,310,000	\$69,995,000

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.

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

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

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

COMMUNITY COLLEGE BUILDINGS : 83
PIERS/BULKHEADS : 3
PARKING GARAGES : 1

Total Assets in AIMS : 87

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	38,999,000	23,262,000
• Interior Architecture	16,378,000	22,542,000
• Electrical	7,775,000	53,251,000
<ul> <li>Mechanical</li> </ul>	19,516,000	85,070,000
• Bulkheads	391,000	1,023,000
<ul> <li>Miscellaneous Buildings</li> </ul>	171,000	147,000
Total	\$83,230,000 *	\$185,294,000
• Priority A	39,390,000	23,262,000
• Priority B	37,303,000	143,022,000
• Priority C	6,366,000	18,863,000
• Priority D	171,000	147,000
Total	\$83,230,000 *	\$185,294,000

Total	\$11,668,000	\$3,912,000	\$5,413,000	\$6,820,000
Priority D	31,000	9,000	9,000	13,000
Priority C	3,057,000	719,000	406,000	3,096,000
Priority B	5,867,000	2,947,000	4,694,000	3,246,000
Priority A	2,712,000	237,000	304,000	465,000
Total	\$11,668,000	\$3,912,000	\$5,413,000	\$6,820,000
Elevators/Escalators	574,000	574,000	574,000	574,000
Miscellaneous Buildings	31,000	9,000	9,000	13,000
Bulkheads	6,000	3,000	11,000	10,000
Mechanical	3,244,000	1,455,000	2,927,000	1,783,000
Electrical	1,007,000	769,000	971,000	792,000
Interior Architecture	4,092,000	865,000	616,000	3,183,000
Exterior Architecture	2,712,000	237,000	304,000	465,000
EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
TYPENCE		EV 2016	EV 2016 EV 2017	EV 2017 EV 2019

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

# **POLICE DEPARTMENT - 056**

Project Type: POLICE

PRECINCT HOUSES : 79
POLICE BUILDINGS NON-PRECINCT : 67
PIERS/BULKHEADS : 3
MARINAS/DOCKS : 4

Total Assets in AIMS : 153

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	31,368,000	14,958,000
Interior Architecture	22,255,000	20,460,000
• Electrical	10,335,000	22,138,000
<ul> <li>Mechanical</li> </ul>	9,064,000	47,493,000
• Piers	1,631,000	1,072,000
<ul> <li>Bulkheads</li> </ul>		304,000
<ul> <li>Miscellaneous Buildings</li> </ul>	1,730,000	1,181,000
<ul> <li>Marinas/Docks</li> </ul>	491,000	2,078,000
Total	\$76,874,000 *	\$109,684,000
• Priority A	32,257,000	16,906,000
• Priority B	29,876,000	71,078,000
• Priority C	13,011,000	20,519,000
• Priority D	1,730,000	1,181,000
Total	\$76,874,000 *	\$109,684,000

Total	\$12,560,000	\$3,265,000	\$5,507,000	\$3,916,000
• Priority D	164,000	65,000	71,000	73,000
• Priority C	3,091,000	164,000	703,000	367,000
• Priority B	5,673,000	2,662,000	4,144,000	3,152,000
• Priority A	3,632,000	374,000	589,000	323,000
Total	\$12,560,000	\$3,265,000	\$5,507,000	\$3,916,000
• Marinas/Docks	107,000	135,000	36,000	39,000
<ul> <li>Elevators/Escalators</li> </ul>	338,000	338,000	338,000	338,000
<ul> <li>Miscellaneous Buildings</li> </ul>	164,000	65,000	71,000	73,000
<ul> <li>Bulkheads</li> </ul>	7,000		1,000	
• Piers	17,000			
<ul> <li>Mechanical</li> </ul>	2,737,000	1,430,000	2,403,000	1,647,000
<ul> <li>Electrical</li> </ul>	1,292,000	813,000	1,307,000	1,050,000
<ul> <li>Interior Architecture</li> </ul>	4,339,000	236,000	787,000	480,000
Exterior Architecture	3,559,000	248,000	563,000	289,000
EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

# **FIRE DEPARTMENT - 057**

**Project Type: FIRE DEPARTMENT** 

FIRE DEPARTMENT BUILDINGS : 25
PIERS/BULKHEADS : 3
FIREHOUSES : 3
FIREBOATS : 5

Total Assets in AIMS : 36

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	4,385,000	2,348,000
Interior Architecture	1,022,000	1,451,000
• Electrical	723,000	1,261,000
<ul> <li>Mechanical</li> </ul>	192,000	909,000
• Piers	714,000	100,000
<ul> <li>Bulkheads</li> </ul>	50,000	
<ul> <li>Vessels</li> </ul>	1,032,000	
<ul> <li>Miscellaneous Buildings</li> </ul>	273,000	110,000
Total	\$8,390,000 *	\$6,179,000
• Priority A	5,926,000	2,414,000
• Priority B	1,440,000	2,170,000
• Priority C	750,000	1,485,000
• Priority D	273,000	110,000
Total	\$8,390,000 *	\$6,179,000

<ul><li>Vessels</li><li>Miscellaneous Buildings</li></ul>	2,061,000 47,000	1,699,000 10,000	1,728,000 14,000	1,297,000 21,000
<ul><li>Miscellaneous Buildings</li><li>Elevators/Escalators</li></ul>	47,000 17,000	10,000 16,000	14,000 16,000	21,000 16,000
•	*			
Total	\$3,621,000	\$2,038,000	\$2,079,000	\$1,887,000
• Priority A	2,495,000	1,794,000	1,766,000	1,473,000
Priority B	539,000	211,000	277,000	352,000
• Priority C	· ·	,	,	<i>'</i>
• Filolity C	539,000	23,000 10,000	22,000 14,000	41,000 21,000

<sup>\*</sup> 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 2016 - 2019	FY 2020 - 2025
Exterior Architecture	378,000	328,000
Interior Architecture	657,000	1,662,000
• Electrical		408,000
• Mechanical	97,000	811,000
Total	\$1,132,000 *	\$3,209,000
• Priority A	378,000	328,000
• Priority B	97,000	1,344,000
• Priority C	657,000	1,536,000
Total	\$1,132,000 *	\$3,209,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	297,000	68,000	25,000	
Interior Architecture	244,000	10,000	18,000	44,000
Electrical	21,000	53,000	23,000	65,000
Mechanical	127,000	111,000	104,000	104,000
<ul> <li>Elevators/Escalators</li> </ul>	49,000	49,000	49,000	49,000
Total	\$739,000	\$291,000	\$220,000	\$263,000
• Priority A	297,000	68,000	25,000	
• Priority B	254,000	216,000	181,000	218,000
• Priority C	187,000	7,000	13,000	44,000
• Priority D				
Total	\$739,000	\$291,000	\$220,000	\$263,000

 $<sup>* \</sup> Investment \ necessary \ to \ bring \ assets \ to \ a \ State \ of \ Good \ Repair$ 

# **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 2016 - 2019	
Exterior Architecture	28,084,000	11,505,000
Interior Architecture	21,365,000	23,466,000
• Electrical	3,920,000	18,750,000
<ul> <li>Mechanical</li> </ul>	6,153,000	24,368,000
Total	\$59,522,000 *	\$78,090,000
• Priority A	28,084,000	11,505,000
• Priority B	17,330,000	47,899,000
• Priority C	14,108,000	18,685,000
Total	\$59,522,000 *	\$78,090,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	1,756,000	196,000	323,000	314,000
• Interior Architecture	1,843,000	265,000	407,000	379,000
• Electrical	655,000	304,000	435,000	453,000
<ul> <li>Mechanical</li> </ul>	1,835,000	717,000	1,217,000	1,190,000
• Elevators/Escalators	385,000	385,000	385,000	385,000
Total	\$6,473,000	\$1,866,000	\$2,767,000	\$2,721,000
• Priority A	1,756,000	196,000	323,000	314,000
• Priority B	3,382,000	1,453,000	2,127,000	2,068,000
• Priority C	1,335,000	217,000	317,000	338,000
• Priority D				
	\$6,473,000	\$1,866,000	\$2,767,000	\$2,721,000

 $<sup>* \</sup> Investment \ necessary \ to \ bring \ assets \ to \ a \ State \ of \ Good \ Repair$ 

# **DEPARTMENT OF CORRECTION - 072**

**Project Type: CORRECTION** 

RIKERS ISLAND FACILITIES : 33
CORRECTION FACILITIES : 5
PIERS/BULKHEADS : 2
RIKERS ISLAND UTILITIES : 6
MARINAS/DOCKS : 1

Total Assets in AIMS : 47

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	169,544,000	24,356,000
Interior Architecture	59,114,000	59,546,000
• Electrical	74,578,000	72,045,000
• Mechanical	24,042,000	58,881,000
• Piers	2,027,000	36,000
• Bulkheads	2,695,000	1,749,000
• Rikers Island Utilities	5,200,000	
<ul> <li>Marinas/Docks</li> </ul>	85,000	261,000
Total	\$337,286,000 *	\$216,875,000
• Priority A	173,054,000	24,402,000
• Priority B	131,829,000	143,600,000
• Priority C	32,403,000	48,873,000
Total	\$337,286,000 *	\$216,875,000

• Priority D	377,000	110,000	00,000	203,000
• Priority C	579,000	118,000	80,000	283,000
• Priority B	4,260,000	4,102,000	4,087,000	3,240,000
• Priority A	942,000	476,000	407,000	390,000
Total	\$5,781,000	\$4,695,000	\$4,574,000	\$3,913,000
• Marinas/Docks	51,000	3,000	4,000	41,000
<ul> <li>Rikers Island Utilities</li> </ul>	1,750,000	1,750,000	1,750,000	1,750,000
<ul> <li>Elevators/Escalators</li> </ul>	494,000	494,000	494,000	494,000
• Bulkheads	105,000	1,000	0	
• Piers	98,000	15,000	2,000	C
<ul> <li>Mechanical</li> </ul>	1,132,000	1,068,000	1,380,000	715,000
• Electrical	898,000	1,071,000	788,000	629,000
• Interior Architecture	774,000	168,000	98,000	283,000
• Exterior Architecture	479,000	125,000	56,000	
EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019

<sup>\*</sup> 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 2016 - 2019	FY 2020 - 2025
Exterior Architecture	6,395,000	1,874,000
• Interior Architecture	4,721,000	2,816,000
• Electrical	1,406,000	2,777,000
• Mechanical	1,987,000	3,862,000
Total	\$14,509,000 *	\$11,330,000
• Priority A	6,395,000	1,874,000
• Priority B	4,512,000	7,189,000
• Priority C	3,602,000	2,266,000
Total	\$14,509,000 *	\$11,330,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	866,000	25,000	62,000	53,000
• Interior Architecture	831,000	81,000	80,000	62,000
• Electrical	34,000	56,000	80,000	154,000
<ul> <li>Mechanical</li> </ul>	311,000	127,000	237,000	264,000
• Elevators/Escalators	41,000	41,000	41,000	41,000
Total	\$2,084,000	\$331,000	\$500,000	\$574,000
• Priority A	866,000	25,000	62,000	53,000
• Priority B	587,000	227,000	387,000	463,000
• Priority C	631,000	79,000	51,000	58,000
• Priority D				
Total	\$2,084,000	\$331,000	\$500,000	\$574,000

 $<sup>* \</sup> Investment \ necessary \ to \ bring \ assets \ to \ a \ State \ of \ Good \ Repair$ 

# **DEPARTMENT FOR THE AGING - 125**

Project Type: AGING

SENIOR CENTER : 13
Total Assets in AIMS : 13

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	425,000	43,000
• Interior Architecture	256,000	409,000
• Electrical	627,000	124,000
<ul> <li>Mechanical</li> </ul>	80,000	993,000
Miscellaneous Buildings	358,000	285,000
Total	\$1,745,000 *	\$1,854,000
• Priority A	425,000	43,000
• Priority B	861,000	1,117,000
• Priority C	101,000	409,000
• Priority D	358,000	285,000
Total	\$1,745,000 *	\$1,854,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	96,000	13,000	16,000	21,000
Interior Architecture	381,000	9,000	17,000	68,000
• Electrical	141,000	16,000	52,000	102,000
<ul> <li>Mechanical</li> </ul>	141,000	56,000	168,000	106,000
<ul> <li>Miscellaneous Buildings</li> </ul>	31,000	18,000	29,000	29,000
• Elevators/Escalators	42,000	42,000	42,000	42,000
Total	\$833,000	\$154,000	\$324,000	\$369,000
• Priority A	96,000	13,000	16,000	21,000
• Priority B	422,000	115,000	266,000	265,000
• Priority C	284,000	8,000	14,000	54,000
• Priority D	31,000	18,000	29,000	29,000
Total	\$833,000	\$154,000	\$324,000	\$369,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

# **DEPARTMENT OF CULTURAL AFFAIRS - 126**

**Project Type: CULTURAL AFFAIRS** 

MUSEUM/GALLERY FACILITIES : 68
CULTURAL FACILITIES : 225
Total Assets in AIMS : 293

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	70,213,000	40,091,000
• Interior Architecture	19,848,000	69,641,000
• Electrical	5,923,000	32,747,000
<ul> <li>Mechanical</li> </ul>	9,481,000	57,845,000
Miscellaneous Buildings	2,801,000	2,148,000
Total	\$108,265,000 *	\$202,472,000
• Priority A	70,213,000	40,091,000
• Priority B	20,216,000	95,046,000
• Priority C	15,035,000	65,188,000
• Priority D	2,801,000	2,148,000
Total	\$108,265,000 *	\$202,472,000

Total	\$20,800,000	\$5,908,000	\$11,201,000	\$9,948,000
• Priority D	768,000	136,000	210,000	148,000
• Priority C	6,145,000	620,000	3,690,000	4,754,000
• Priority B	8,941,000	4,782,000	6,352,000	4,664,000
• Priority A	4,946,000	369,000	949,000	381,000
Total	\$20,800,000	\$5,908,000	\$11,201,000	\$9,948,000
• Elevators/Escalators	1,125,000	1,125,000	1,125,000	1,125,000
<ul> <li>Miscellaneous Buildings</li> </ul>	768,000	136,000	210,000	148,000
<ul> <li>Mechanical</li> </ul>	4,567,000	2,659,000	3,702,000	2,249,000
• Electrical	1,481,000	862,000	1,242,000	1,271,000
• Interior Architecture	7,913,000	757,000	3,973,000	4,774,000
• Exterior Architecture	4,946,000	369,000	949,000	381,000
EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019

 $<sup>* \</sup> Investment \ necessary \ to \ bring \ assets \ to \ a \ State \ of \ Good \ Repair$ 

# **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 2016 - 2019	FY 2020 - 2025
Exterior Architecture	121,000	847,000
Interior Architecture	329,000	1,573,000
• Electrical	195,000	
• Mechanical	203,000	1,860,000
Total	\$848,000 *	\$4,279,000
• Priority A	121,000	847,000
• Priority B	444,000	2,047,000
• Priority C	282,000	1,386,000
Total	\$848,000 *	\$4,279,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	218,000	0	93,000	24,000
Interior Architecture	90,000	5,000	23,000	11,000
• Electrical	38,000	31,000	69,000	49,000
<ul> <li>Mechanical</li> </ul>	73,000	51,000	111,000	96,000
<ul> <li>Elevators/Escalators</li> </ul>	16,000	16,000	16,000	16,000
Total	\$435,000	\$103,000	\$311,000	\$196,000
• Priority A	218,000	0	93,000	24,000
• Priority B	158,000	98,000	195,000	161,000
• Priority C	59,000	5,000	23,000	11,000
• Priority D				
Total	\$435,000	\$103,000	\$311,000	\$196,000

 $<sup>* \</sup> Investment \ necessary \ to \ bring \ assets \ to \ a \ State \ of \ Good \ Repair$ 

# **TAXI & LIMOUSINE COMMISSION - 156**

**Project Type: PUBLIC BUILDINGS** 

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	639,000	746,000
• Interior Architecture	569,000	431,000
• Electrical	121,000	50,000
• Mechanical	178,000	39,000
Total	\$1,508,000 *	\$1,266,000
• Priority A	639,000	746,000
• Priority B	510,000	89,000
• Priority C	359,000	431,000
Total	\$1,508,000 *	\$1,266,000

Total	\$90,000	\$11,000	\$53,000	\$68,000
• Priority D				
• Priority C	2,000			57,000
• Priority B	46,000	11,000	39,000	11,000
• Priority A	42,000		14,000	
Total	\$90,000	\$11,000	\$53,000	\$68,000
Mechanical	36,000	7,000	28,000	7,000
<ul> <li>Electrical</li> </ul>	5,000	4,000	11,000	4,000
<ul> <li>Interior Architecture</li> </ul>	6,000			57,000
• Exterior Architecture	42,000		14,000	
EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019

<sup>\*</sup> 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 57 PIERS/BULKHEADS 179 PARKING GARAGES 1 2 FERRY TERMINAL FACILITIES MARINAS/DOCKS 6 **Total Assets in AIMS** 249

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	61,359,000	55,655,000
Interior Architecture	38,172,000	28,551,000
• Electrical	16,062,000	31,751,000
<ul> <li>Mechanical</li> </ul>	17,880,000	30,593,000
• Piers	18,510,000	14,434,000
<ul> <li>Bulkheads</li> </ul>	55,294,000	30,252,000
<ul> <li>Miscellaneous Buildings</li> </ul>	287,000	117,000
<ul> <li>Marinas/Docks</li> </ul>	298,000	8,426,000
Total	\$207,863,000 *	\$199,778,000
• Priority A	114,239,000	71,473,000
• Priority B	63,073,000	100,302,000
• Priority C	30,263,000	27,886,000
• Priority D	287,000	117,000
Total	\$207,863,000 *	\$199,778,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	1,416,000	125,000	129,000	120,000
• Interior Architecture	2,224,000	192,000	629,000	549,000
• Electrical	1,072,000	530,000	284,000	568,000
<ul> <li>Mechanical</li> </ul>	1,610,000	1,046,000	1,313,000	1,018,000
• Piers	1,039,000	195,000	25,000	114,000
• Bulkheads	3,236,000	231,000	202,000	145,000
Miscellaneous Buildings	20,000	5,000	9,000	6,000
<ul> <li>Elevators/Escalators</li> </ul>	405,000	405,000	405,000	405,000
<ul> <li>Marinas/Docks</li> </ul>	114,000	90,000	25,000	33,000
Total	\$11,136,000	\$2,818,000	\$3,019,000	\$2,958,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

	DEPT. OF SMALL BUSINESS SERV 801						
<ul> <li>Priority</li> </ul>	A	3,079,000	245,000	248,000	155,000		
<ul> <li>Priority</li> </ul>	у В	5,778,000	2,341,000	2,124,000	2,265,000		
<ul> <li>Priority</li> </ul>	y C	2,259,000	227,000	638,000	532,000		
• Priority	y D	20,000	5,000	9,000	6,000		
Total		\$11,136,000	\$2,818,000	\$3,019,000	\$2,958,000		

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

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

Project Type: HEALTH AND MENTAL HYGIENE

ADMINISTRATIVE BUILDINGS : 1
CLINICS/LABS. CLASSROOMS : 27
VEHICLE MAINT./STORAGE FACILITIES : 1
ANIMAL SHELTERS : 3

Total Assets in AIMS : 32

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	9,882,000	3,795,000
Interior Architecture	3,852,000	7,099,000
• Electrical	1,227,000	5,257,000
<ul> <li>Mechanical</li> </ul>	905,000	11,884,000
<ul> <li>Miscellaneous Buildings</li> </ul>	183,000	125,000
Total	\$16,049,000 *	\$28,160,000
• Priority A	9,882,000	3,795,000
• Priority B	4,277,000	17,895,000
• Priority C	1,707,000	6,345,000
• Priority D	183,000	125,000
Total	\$16,049,000 *	\$28,160,000

	\$3,477,000	\$1,421,000		\$1,875,000
Priority D	16,000	14,000	12,000	12,000
Priority C	632,000	180,000	102,000	284,000
Priority B	2,019,000	1,132,000	1,405,000	1,471,000
Priority A	810,000	95,000	84,000	107,000
Total	\$3,477,000	\$1,421,000	\$1,602,000	\$1,875,000
Elevators/Escalators	412,000	412,000	412,000	412,000
Miscellaneous Buildings	16,000	14,000	12,000	12,000
Mechanical	707,000	489,000	605,000	641,000
Electrical	545,000	191,000	337,000	409,000
Interior Architecture	988,000	219,000	153,000	293,000
Exterior Architecture	810,000	95,000	84,000	107,000
PENSE	FY 2016	FY 2017	FY 2018	FY 2019
	Exterior Architecture Interior Architecture Electrical Mechanical Miscellaneous Buildings Elevators/Escalators  Total  Priority A Priority B Priority C	Exterior Architecture       810,000         Interior Architecture       988,000         Electrical       545,000         Mechanical       707,000         Miscellaneous Buildings       16,000         Elevators/Escalators       412,000         Total       \$3,477,000         Priority A       810,000         Priority B       2,019,000         Priority C       632,000	Exterior Architecture       810,000       95,000         Interior Architecture       988,000       219,000         Electrical       545,000       191,000         Mechanical       707,000       489,000         Miscellaneous Buildings       16,000       14,000         Elevators/Escalators       412,000       412,000         Total       \$3,477,000       \$1,421,000         Priority A       810,000       95,000         Priority B       2,019,000       1,132,000         Priority C       632,000       180,000	Exterior Architecture         810,000         95,000         84,000           Interior Architecture         988,000         219,000         153,000           Electrical         545,000         191,000         337,000           Mechanical         707,000         489,000         605,000           Miscellaneous Buildings         16,000         14,000         12,000           Elevators/Escalators         412,000         412,000         412,000           Total         \$3,477,000         \$1,421,000         \$1,602,000           Priority A         810,000         95,000         84,000           Priority B         2,019,000         1,132,000         1,405,000           Priority C         632,000         180,000         102,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

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

Project Type: HEALTH & HOSPITALS CORP.

HOSPITAL BUILDINGS : 105

Total Assets in AIMS : 105

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	143,047,000	38,966,000
Interior Architecture	59,510,000	180,422,000
• Electrical	38,157,000	164,214,000
<ul> <li>Mechanical</li> </ul>	65,411,000	161,735,000
<ul> <li>Miscellaneous Buildings</li> </ul>	471,000	385,000
Total	\$306,595,000 *	\$545,723,000
• Priority A	143,047,000	38,966,000
• Priority B	125,018,000	341,360,000
• Priority C	38,060,000	165,011,000
• Priority D	471,000	385,000
Total	\$306,595,000 *	\$545,723,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	2,440,000	466,000	415,000	563,000
• Interior Architecture	3,678,000	840,000	1,357,000	3,305,000
• Electrical	3,136,000	2,487,000	2,549,000	2,682,000
<ul> <li>Mechanical</li> </ul>	6,427,000	5,099,000	7,524,000	5,155,000
<ul> <li>Miscellaneous Buildings</li> </ul>	57,000	18,000	23,000	20,000
• Elevators/Escalators	3,371,000	3,371,000	3,371,000	3,371,000
Total	\$19,108,000	\$12,281,000	\$15,239,000	\$15,097,000
• Priority A	2,440,000	466,000	415,000	563,000
• Priority B	13,732,000	11,137,000	13,597,000	11,237,000
• Priority C	2,880,000	659,000	1,203,000	3,276,000
• Priority D	57,000	18,000	23,000	20,000
Total	\$19,108,000	\$12,281,000	\$15,239,000	\$15,097,000

<sup>\*</sup> 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 : 40
FRESH KILLS FACILITIES : 17

Total Assets in AIMS : 94

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	59,668,000	14,268,000
• Interior Architecture	30,372,000	13,190,000
• Electrical	4,371,000	10,724,000
<ul> <li>Mechanical</li> </ul>	9,524,000	29,346,000
• Piers	13,162,000	871,000
• Bulkheads	5,685,000	1,896,000
<ul> <li>Miscellaneous Buildings</li> </ul>	282,000	47,000
Total	\$123,063,000 *	\$70,341,000
• Priority A	68,366,000	14,993,000
• Priority B	39,070,000	43,059,000
• Priority C	15,346,000	12,242,000
• Priority D	282,000	47,000
Total	\$123,063,000 *	\$70,341,000

• Priority B	4,213,000	1,796,000	1,700,000	1,402,000
Total  • Priority A	<b>\$7,244,000</b> 1,490,000	<b>\$2,006,000</b> 114,000	<b>\$2,506,000</b> 51,000	<b>\$1,690,000</b> 158,000
• Elevators/Escalators	118,000	118,000	118,000	118,000
<ul> <li>Miscellaneous Buildings</li> </ul>	29,000	11,000	11,000	14,000
<ul> <li>Bulkheads</li> </ul>	361,000	49,000	4,000	30,000
• Piers	821,000	50,000	41,000	55,000
<ul> <li>Mechanical</li> </ul>	1,935,000	914,000	1,099,000	690,000
• Electrical	795,000	611,000	426,000	512,000
• Interior Architecture	1,827,000	139,000	755,000	117,000
Exterior Architecture	1,357,000	114,000	51,000	154,000
EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

### **DEPARTMENT OF TRANSPORTATION - 841**

**Project Type: WATERWAY BRIDGES** PIERS/BULKHEADS 1 39 BRIDGES, WATERWAYS HIGHWAY BRIDGES AND TUNNELS 2 **Project Type: FERRIES** FERRIES/BARGES 8 PIERS/BULKHEADS 16 4 FERRY TERMINAL FACILITIES 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 7 47 **HIGHWAY FACILITIES** PIER FACILITIES 4 10 **PARKING GARAGES** STREET AND CITY OWNED ARTERIALS 5 **Project Type: TRAFFIC** TRAFFIC SIGNAL SYSTEMS 1 **Total Assets in AIMS** 244

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	14,972,000	11,675,000
Interior Architecture	12,557,000	6,389,000
• Electrical	789,000	3,387,000
<ul> <li>Mechanical</li> </ul>	1,579,000	7,088,000
• Piers	1,360,000	1,438,000
<ul> <li>Bulkheads</li> </ul>	5,501,000	3,198,000
Bridge Structure	498,322,000	224,353,000
• Ferries	31,800,000	
<ul> <li>Miscellaneous Buildings</li> </ul>	264,000	73,000
<ul> <li>Primary Streets</li> </ul>	375,630,000	
<ul> <li>Secondary Streets</li> </ul>	530,380,000	
<ul> <li>Local Streets</li> </ul>	1,263,260,000	
Arterial Streets	40,000,000	
• Step Streets	26,590,000	
<ul> <li>Marinas/Docks</li> </ul>	13,469,000	43,683,000
Bridge Electrical	9,350,000	15,914,000
Bridge Mechanical	12,788,000	21,768,000
<ul> <li>Traffic Signal System</li> </ul>	11,420,000	
Street Lighting System	46,000,000	
Total	\$2,896,031,000 *	\$338,966,000

<sup>\*</sup> 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**

•	Priority A	494,053,000	138,941,000
•	Priority B	1,038,775,000	110,665,000
•	Priority C	1,336,348,000	89,288,000
•	Priority D	26,854,000	73,000

Total \$2,896,031,000 \* \$338,966,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	911,000	113,000	194,000	75,000
• Interior Architecture	798,000	12,000	215,000	84,000
• Electrical	334,000	160,000	210,000	184,000
<ul> <li>Mechanical</li> </ul>	428,000	381,000	529,000	337,000
• Piers	291,000	72,000	27,000	64,000
<ul> <li>Bulkheads</li> </ul>	395,000	39,000	7,000	1,000
Bridge Structure	27,496,000	12,582,000	24,923,000	15,266,000
• Ferries	6,365,000	5,948,000		
<ul> <li>Miscellaneous Buildings</li> </ul>	212,000	17,000	21,000	25,000
<ul> <li>Primary Streets</li> </ul>				
<ul> <li>Secondary Streets</li> </ul>				
<ul> <li>Local Streets</li> </ul>				
<ul> <li>Arterial Streets</li> </ul>				
• Step Streets				
<ul> <li>Elevators/Escalators</li> </ul>	143,000	143,000	143,000	143,000
<ul> <li>Marinas/Docks</li> </ul>	248,000	54,000	16,000	96,000
Bridge Electrical	771,000	114,000	92,000	118,000
<ul> <li>Bridge Mechanical</li> </ul>	1,389,000	99,000	494,000	99,000
<ul> <li>Traffic Signal System</li> </ul>	33,619,000	33,619,000	33,619,000	33,619,000
• Street Lighting System	23,650,000	23,650,000	23,650,000	23,650,000
Total	\$97,051,000	\$77,003,000	\$84,139,000	\$73,760,000
• Priority A	84,686,000	75,470,000	76,479,000	72,052,000
• Priority B	7,206,000	984,000	7,127,000	1,076,000
• Priority C	4,947,000	531,000	512,000	607,000
• Priority D	212,000	17,000	21,000	25,000
Total	\$97,051,000	\$77,003,000	\$84,139,000	\$73,760,000

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.

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

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

#### **Project Type: PARKS AND RECREATION**

MUSEUM/GALLERY FACILITIES 16 PIERS/BULKHEADS 137 VEHICLE MAINT./STORAGE FACILITIES 4 PARK FACILITIES 709 STADIUM FACILITIES 5 MARINAS/DOCKS 24 WALLS 276 PARK BRIDGES 97 **Total Assets in AIMS** 

1,268

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	59,903,000	21,815,000
• Interior Architecture	20,070,000	15,976,000
• Electrical	3,804,000	12,703,000
<ul> <li>Mechanical</li> </ul>	3,927,000	28,485,000
• Piers	4,579,000	8,884,000
<ul> <li>Bulkheads</li> </ul>	49,110,000	77,622,000
• Parks' Walls	43,609,000	452,000
Parks' Boardwalks	52,287,000	41,142,000
<ul> <li>Miscellaneous Buildings</li> </ul>	32,555,000	10,060,000
<ul> <li>Parks' Water and Sewer Utilities</li> </ul>	105,092,000	157,639,000
<ul> <li>Parks' Electrical Utilities</li> </ul>	31,621,000	47,431,000
<ul> <li>Parks' Streets and Roads</li> </ul>	70,179,000	19,710,000
<ul> <li>Park Bridges</li> </ul>	28,570,000	4,905,000
<ul> <li>Marinas/Docks</li> </ul>	4,364,000	13,171,000
Total	\$509,671,000 *	\$459,994,000
• Priority A	193,646,000	129,194,000
• Priority B	185,903,000	281,512,000
• Priority C	27,388,000	19,518,000
• Priority D	102,734,000	29,770,000
Total	\$509,671,000 *	\$459,994,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair

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

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	5,479,000	436,000	583,000	364,000
<ul> <li>Interior Architecture</li> </ul>	5,446,000	296,000	704,000	527,000
<ul> <li>Electrical</li> </ul>	1,626,000	802,000	663,000	662,000
<ul> <li>Mechanical</li> </ul>	2,261,000	998,000	1,269,000	809,000
• Piers	706,000	42,000	75,000	135,000
• Bulkheads	2,232,000	239,000	188,000	83,000
• Parks' Walls	3,592,000			
<ul> <li>Parks' Boardwalks</li> </ul>	105,000			
Miscellaneous Buildings	2,034,000	515,000	637,000	478,000
• Parks' Water and Sewer Utilities	2,627,000	2,627,000	2,627,000	2,627,000
<ul> <li>Parks' Electrical Utilities</li> </ul>	791,000	791,000	791,000	791,000
• Elevators/Escalators	230,000	230,000	230,000	230,000
<ul> <li>Parks' Streets and Roads</li> </ul>				
<ul> <li>Park Bridges</li> </ul>	4,050,000	11,000	8,000	761,000
<ul> <li>Marinas/Docks</li> </ul>	934,000	175,000	376,000	294,000
Total	\$32,114,000	\$7,164,000	\$8,151,000	\$7,761,000
• Priority A	9,821,000	624,000	1,041,000	741,000
• Priority B	14,717,000	5,740,000	5,871,000	5,637,000
• Priority C	5,542,000	285,000	602,000	904,000
• Priority D	2,034,000	515,000	637,000	478,000
Total	\$32,114,000	\$7,164,000	\$8,151,000	\$7,761,000

\* Investment necessary to bring assets to a State of Good Repair All costs are in non-escalated current dollars and are rounded to the nearest thousand dollars.

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

**Project Type: COURTS** 

COURT BUILDINGS : 23

**Project Type: PUBLIC BUILDINGS** 

PUBLIC OFFICE BUILDINGS : 33

**Project Type: REAL PROPERTY** 

PIERS/BULKHEADS : 10

Total Assets in AIMS : 66

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

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	54,064,000	34,446,000
Interior Architecture	52,970,000	129,845,000
• Electrical	16,930,000	69,729,000
<ul> <li>Mechanical</li> </ul>	30,126,000	125,079,000
• Piers	358,000	295,000
<ul> <li>Bulkheads</li> </ul>	798,000	5,685,000
<ul> <li>Miscellaneous Buildings</li> </ul>	368,000	344,000
Total	\$155,614,000 *	\$365,423,000
• Priority A	54,530,000	34,522,000
• Priority B	64,454,000	224,883,000
• Priority C	36,261,000	105,673,000
• Priority D	368,000	344,000
Total	\$155,614,000 *	\$365,423,000

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	1,322,000	258,000	334,000	309,000
• Interior Architecture	7,501,000	3,433,000	15,443,000	10,355,000
• Electrical	1,905,000	1,520,000	1,608,000	1,766,000
<ul> <li>Mechanical</li> </ul>	4,853,000	5,035,000	5,969,000	4,883,000
• Piers	27,000			
<ul> <li>Bulkheads</li> </ul>	140,000	30,000		0
<ul> <li>Miscellaneous Buildings</li> </ul>	36,000	22,000	32,000	26,000
<ul> <li>Elevators/Escalators</li> </ul>	4,881,000	4,881,000	4,881,000	4,881,000
Total	\$20,665,000	\$15,179,000	\$28,267,000	\$22,221,000
• Priority A	1,336,000	258,000	334,000	309,000
• Priority B	12,211,000	11,588,000	12,575,000	11,598,000
• Priority C	7,082,000	3,310,000	15,326,000	10,288,000
• Priority D	36,000	22,000	32,000	26,000
Total	\$20,665,000	\$15,179,000	\$28,267,000	\$22,221,000

<sup>\*</sup> Investment necessary to bring assets to a State of Good Repair



### **Exhibits A - C**

- A. Component Priority 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 Priorities
Codes for Repair,
Replacement and Major
Maintenance

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

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
1 1 1	A 1. 14 4	Fatarian	E de de Welle	
1.1.1	Architecture	Exterior	Exterior Walls	A
1.1.2	Architecture	Exterior	Windows	A
1.1.3	Architecture	Exterior	Parapets	A
1.1.4	Architecture	Exterior	Roof	A
1.2.5	Architecture	Interior	Floors	C
1.2.6	Architecture	Interior	Interior Walls	C
1.2.7	Architecture	Interior	Ceiling	В
1.3.8	Architecture	Site Enclosure	Fence/Gates	C
1.3.9	Architecture	Site Enclosure	Free Standing Walls	C
1.3.10	Architecture	Site Enclosure	Retaining Walls	C
1.4.11	Architecture	Site Pavements	Public Sidewalk	C
1.4.12	Architecture	Site Pavements	On-Site Walkways	C
1.4.13	Architecture	Site Pavements	Parking/Driveway	C
1.4.14	Architecture	Site Pavements	Playyard	C
2.1.1	Electrical	Over 600 volts	Service Equipment	В
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	В
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	<b>Grounding Devices</b>	В
2.4.9	Electrical	Stand-by Power	Transfer Switches	В
2.4.12	Electrical	Stand-by Power	Generators	В
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	В
2.6.15	Electrical	Lightning Protection	Arresters	В
2.7.19	Electrical	Alarm	Security System	В
2.7.20	Electrical	Alarm	Fire/Smoke Detection	В
3.1.1	Mechanical	Heating	Energy Source	В
3.1.2	Mechanical	Heating	Conversion Equipment	В
3.1.3	Mechanical	Heating	Distribution	В
3.1.4	Mechanical	Heating	Terminal Devices	В
		٥		

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
3.2.1	Mechanical	Air Conditioning	Energy Source	В
3.2.2	Mechanical	Air Conditioning	Conversion Equipment	
3.2.3	Mechanical	Air Conditioning	Distribution	В
3.2.4	Mechanical	Air Conditioning	Terminal Devices	В
3.2.5	Mechanical	Air Conditioning	Heat Rejection	В
3.2.24	Mechanical	Air Conditioning	Dehumidifier	В
3.3.3	Mechanical	Ventilation	Distribution	В
3.3.6	Mechanical	Ventilation	Exhaust Fans	В
3.4.7	Mechanical	Plumbing	H/C Water Piping	В
3.4.8	Mechanical	Plumbing	Hot Water Heater	В
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	Backflow Preventer	В
3.4.19	Mechanical	Plumbing	Fixtures	В
3.5.16	Mechanical	Vertical Transport	Elevators	C
3.5.17	Mechanical	Vertical Transport	Escalators	C
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	A
4.1.3	Piers	Structural	Deck Surface	C
4.1.5	Piers	Structural	Firewalls	Č
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	В
4.2.4	Piers	Fender	Facing	В
4.2.8	Piers	Fender	Wales and Chocks	В
4.2.9	Piers	Fender	Piles	В
4.2.13	Piers	Fender	Pile Cluster	В
4.3.3	Piers	Deck Elements	Deck Surface	В
4.3.10	Piers	Deck Elements	Railing	В
4.3.11	Piers	Deck Elements	Coping/Curb	В
5.1.1	Bulkheads	Structural	Relieving Platform Top	o A
5.1.3	Bulkheads	Structural	Coping	С
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	A

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
5.1.13	Bulkheads	Structural	Wales	A
5.1.15	Bulkheads	Structural	Pile Caps	A
5.1.19	Bulkheads	Structural	Lowlevel Pile Caps	A
5.2.5	Bulkheads	Backfill	Fill	B
5.2.3 5.2.12	Bulkheads	Backfill	Surface	В
5.3.2	Bulkheads	Fender	Buffer	В
5.3.4	Bulkheads	Fender	Facing	В
5.3.8	Bulkheads	Fender	Piles	В
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	C
6.1.9	Bridge Structure	Abutments	Brngs,Ancr Blts,Pads	A
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)	
6.1.24	Bridge Structure	Abutments	Pedestals	A
6.1.31	Bridge Structure	Abutments	Stem (breastwall)	В
6.1.32	Bridge Structure	Abutments	Walls	A
6.2.14	Bridge Structure	Wingwalls	Footings	C
6.2.20	Bridge Structure	Wingwalls	Mat (scour & erosion)	
6.2.25	Bridge Structure	Wingwalls	Piles	C
6.2.32	Bridge Structure	Wingwalls	Walls	C
6.3.8	Bridge Structure	Stream Channel	Bank Protection	C
6.3.20	Bridge Structure	Stream Channel	Mat (scour & erosion)	A
6.3.44	Bridge Structure	Stream Channel	Pier Protection	В
6.4.4	Bridge Structure	Approaches	Pavement	C
6.4.11	Bridge Structure	Approaches	Curbs	A
6.4.13	Bridge Structure	Approaches	Embankment	C
6.4.16	Bridge Structure	Approaches	Guide Railing	A
6.4.20	Bridge Structure	Approaches	Mat (scour & erosion)	A
6.4.21	Bridge Structure	Approaches	Median	A
6.4.28	Bridge Structure	Approaches	Railings/Parapets	A
6.4.30	Bridge Structure	Approaches	Sidewalks/Fascias	C
6.5.2	Bridge Structure	Piers	Cap Beam	A
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	A
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	A
6.6.11	Bridge Structure	Deck Elements	Curbs	A
6.6.15	Bridge Structure	Deck Elements	Gratings	A
0.0.15	211050 511001010	2 Con Diemento	21441150	

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
6616	D.: 1 C	Deal Florents	C. H. D. II.	
6.6.16	Bridge Structure	Deck Elements	Guide Railing	A
6.6.21	Bridge Structure	Deck Elements	Median	A
6.6.22	Bridge Structure	Deck Elements	Mono Deck Surface	C
6.6.28	Bridge Structure	Deck Elements	Railings/Parapets	A
6.6.30	Bridge Structure	Deck Elements	Sidewalks/Fascias	C
6.6.33	Bridge Structure	Deck Elements	Wearing Surface	C
6.6.52	Bridge Structure	Deck Elements	Scupper	C
6.7.12	Bridge Structure	Superstructure	Deck,Structural	A
6.7.18	Bridge Structure	Superstructure	Joints	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	· A
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	A
9.1.2	Park Wall	Wall	Wall/Fence	В
9.1.3	Park Wall	Wall	Base	C
10.1.2	Boardwalks	Superstructure	Deck	A
10.1.3	Boardwalks	Superstructure	Railing	C
10.2.4	Boardwalks	Substructure	Beams	A
10.2.5	Boardwalks	Substructure	Piers	A
10.2.6	Boardwalks	Substructure	Girders	A
10.2.7	Boardwalks	Substructure	Underside Enclosure	A
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
12.0.17			., 1001	_

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
12.4.24	Bridge Electrical	Electric Power	MCC	В
12.4.28	Bridge Electrical	Electric Power	PanelBoard	В
12.4.31	Bridge Electrical	Electric Power	Service Equipment	В
12.4.37	Bridge Electrical	Electric Power	Switchgear	В
12.4.43	Bridge Electrical	Electric Power	Transfer Switch	В
12.4.44	Bridge Electrical	Electric Power	Transformer	В
12.4.51	Bridge Electrical	Electric Power	Heating	В
12.4.54	Bridge Electrical	Electric Power	Dist Equip/Motor Cont	. В
12.5.19	Bridge Electrical	Exterior Lighting	Lighting Contactor	В
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	
12.10.45	Bridge Electrical	Raceway	Trough	В
12.10.46	Bridge Electrical	Raceway	Under Ground Structur	
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	В

D.S.C.	Discipline (D)	System (S)	Component (C) Pri	iority
13.1.9	Bridge Mechanical	Bascule	Emergency Drive	В
13.1.12	Bridge Mechanical	Bascule	Fuel Tanks	В
13.1.12	Bridge Mechanical	Bascule	Houses	В
13.1.14	Bridge Mechanical	Bascule	Lock Bars	В
13.1.14	Bridge Mechanical	Bascule	Main Drive System	В
13.1.16	Bridge Mechanical	Bascule	Rack	В
13.1.20	Bridge Mechanical	Bascule	Live Load Supports	В
13.1.20	Bridge Mechanical	Bascule	Track	В
13.1.23	Bridge Mechanical	Bascule	Traffic Devices	В
13.1.24	Bridge Mechanical	Bascule	Trunnion	В
13.3.4	Bridge Mechanical	Swing	Center Latch	В
13.3.5	Bridge Mechanical	Swing	Center Lift	В
13.3.6	Bridge Mechanical	Swing	Center Pivot	В
13.3.9	Bridge Mechanical	=	Emergency Drive	В
	Bridge Mechanical	Swing	End Lift	В
13.3.10 13.3.12	•	Swing	Fuel Tanks	В
	Bridge Mechanical	Swing		
13.3.13	Bridge Mechanical	Swing	Houses	В
13.3.15	Bridge Mechanical	Swing	Main Drive System Rack	В
13.3.16	Bridge Mechanical	Swing		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	A
14.1.5	Marinas/Docks	Access Walkways	Gangways	В
14.1.8	Marinas/Docks	Access Walkways	Pile Caps	A
14.1.11	Marinas/Docks	Access Walkways	Piles and Bracing	A
14.1.15	Marinas/Docks	Access Walkways	Fender Piles, Wales/Chock	
14.2.1	Marinas/Docks	Floating Docks	Anchor Piles	Α
14.2.2	Marinas/Docks	Floating Docks	Deck	A
14.2.3	Marinas/Docks	Floating Docks	Fenders	C
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

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
14.3.3	Marinas/Docks	Launch/Haulout	Fenders	В
14.3.11	Marinas/Docks	Launch/Haulout	Piles and Bracing	A
14.3.12	Marinas/Docks	Launch/Haulout	Ramp	В
14.3.13	Marinas/Docks	Launch/Haulout	Runway	A
14.4.3	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 Breaker	A
14.4.28	Marinas/Docks	Protective Structure	Donut Fender	A
14.5.10	Marinas/Docks	Deck Elements	Railing	A
14.6.18	Marinas/Docks	Electrical	Conduit	A
14.6.21	Marinas/Docks	Electrical	Lighting Fixture	A
14.7.23	Marinas/Docks	Electrical/Mech.	Power Supply/Bollard	
14.8.20	Marinas/Docks	Fender	Facing	A
14.8.22	Marinas/Docks	Fender	Piles	A
14.8.26	Marinas/Docks	Fender	Wales and Chocks	A
14.9.25	Marinas/Docks	Gallows Frames	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	C
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	C
16.2.20	Park Bridges	Wingwalls	Mat (scour & erosion)	C
16.2.25	Park Bridges	Wingwalls	Piles	C
16.2.32	Park Bridges	Wingwalls	Walls	C
16.3.8	Park Bridges	Stream Channel	Bank Protection	C
16.3.20	Park Bridges	Stream Channel	Mat (scour & erosion)	A
16.3.44	Park Bridges	Stream Channel	Pier Protection	В
16.4.4	Park Bridges	Approaches	Pavement	C
16.4.11	•		Curbs	A
16.4.11	Park Bridges Park Bridges	Approaches Approaches	Embankment	C A
16.4.15 16.4.16	Park Bridges Park Bridges	Approaches  Approaches	Guide Railing	A
16.4.16	•	Approaches Approaches	Mat (scour & erosion)	A A
16.4.23	Park Bridges		Pavement Base	A C
16.4.28	Park Bridges	Approaches	Railings/Parapets	
16.4.28	Park Bridges	Approaches Approaches	Sidewalks/Fascias	A C
	Park Bridges			
16.5.2	Park Bridges	Piers	Cap beam	A

D.S.C.	Discipline (D)	System (S)	Component (C)	Priority
1655	Douls Duidoos	Diama	Dian Calumna	D
16.5.5 16.5.6	Park Bridges Park Bridges	Piers Piers	Pier,Columns Stem,Solid Pier	B B
16.5.9	Park Bridges	Piers	Brngs, Ancr Blts, Pads	A
16.5.14	Park Bridges	Piers	Footings	В
16.5.14	_	Piers	Mat (scour & erosion)	
16.5.24	Park Bridges	Piers	Pedestals	A B
	Park Bridges Park Bridges	Piers	Piles	
16.5.25 16.6.11	· ·	Deck Elements	Curbs	A A
	Park Bridges	Deck Elements  Deck Elements		
16.6.15	Park Bridges	Deck Elements  Deck Elements	Gratings	A
16.6.16	Park Bridges		Guide Railing Median	A
16.6.21	Park Bridges	Deck Elements Deck Elements		A C
16.6.22	Park Bridges		Mono Deck Surface	
16.6.28	Park Bridges	Deck Elements	Railings/Parapets	A
16.6.30	Park Bridges	Deck Elements	Sidewalks/Fascias	C
16.6.33	Park Bridges	Deck Elements	Wearing Surface	C
16.6.35	Park Bridges	Deck Elements	Fascias	C
16.7.12	Park Bridges	Superstructure	Deck,Structural	A
16.7.18	Park Bridges	Superstructure	Joints	C
16.7.27	Park Bridges	Superstructure	Primary Member	A
16.7.29	Park Bridges	Superstructure	Secondary Member	В
	Rikers Island	Electrical		A
	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			Α
	Manhattan Bridge			Α
	Queensboro Bridge			A
	Williamsburg Bridge			A
	Street Lighting System			A
	Traffic Signal System			A
	Streets and Highways	Primary Streets		В
	Streets and Highways	Secondary Streets		В
	Streets and Highways	Local Streets		C
	Streets and Highways	Arterial Streets		A
	Streets and Highways	Step Streets		D
	Park Utilities	Electrical		A
	Park Utilities	Water and Sewers		В
	Park Streets and Roads			D
	Ferries	Capital Repairs		A
	Ferries	Major Maintenance		A
	Vessels	Capital Repairs		A
	Vessels	Major Maintenance		A

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 2015	Four East River Bridges • yearly report based on DOT's Ten Year Plan to bring them to a state of good repair
Department of Transportation (DOT) FY 2015	Street and City Owned Arterial System • report produced by DOT
Department of Transportation (DOT) FY 2015	Street Lighting System • agency contract information
Department of Transportation (DOT) FY 2015	Traffic Signal System • agency contract information
Department of Transportation (DOT) FY 2015	Ferries • agency contract information
Parks Department (DPR) FY 2015	Underground Utilities • narrative report submitted on electrical, sewer, and water utilities
Parks Department (DPR) FY 2015	Streets and Roads in Parks • narrative report submitted
Department of Correction (DOC) FY 2015	Rikers Island Underground Utilities • yearly report based on agency information
Fire Department (FDNY) FY 2015	Fireboats • yearly report based on agency information



Exhibit C Legend for Individual Survey Report and Sample Asset Report

# **Exhibit C Legend for Individual Survey Report**

Print Date: AGENCY b – Fiscal Year c Page: d

Asset Name: <sup>1</sup> Address: <sup>2</sup>

Borough: <sup>3</sup>

Program/Asset #: <sup>4</sup>

Area Sq Ft: <sup>5</sup>

Date of Survey: <sup>6</sup>

Agency's Number: <sup>8</sup>

Yr Built/Renovated: <sup>9</sup>

Project Type: <sup>10</sup>

Landmark Status: <sup>11</sup>

Areas Surveyed: 7

Block: <sup>12</sup> Lot: <sup>13</sup> 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: AGENCY b – Fiscal Year c Page: d

Asset Name: <sup>1</sup> Address: <sup>2</sup>

Borough: <sup>3</sup> Agency's Number: <sup>8</sup>
Program/Asset #: <sup>4</sup> Yr Built/Renovated: <sup>9</sup>
Area Sq Ft: <sup>5</sup> Project Type: <sup>10</sup>
Date of Survey: <sup>6</sup> Landmark Status: <sup>11</sup>

Areas Surveyed: 7

Block: 12 Lot: 13 BIN: 14

#### **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 DistrictB – 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

**13.** Lot Tax Lot

**14.** BIN Building Identification Number

Current Re	pair	Future l	Replacement	Mair	ntenance	
% of <sup>3</sup> Fail Date <sup>4</sup>	Estimated <sup>5</sup>	Year <sup>6</sup>	Estimated <sup>7</sup>	Cycle <sup>8</sup>	Estimated 9	Priority <sup>10</sup>
Total (Years)	Cost	FY	Cost	(Yrs)	Cost	Code
	% of <sup>3</sup> Fail Date <sup>4</sup>		% of <sup>3</sup> Fail Date <sup>4</sup> Estimated <sup>5</sup> Year <sup>6</sup>	% of <sup>3</sup> Fail Date <sup>4</sup> Estimated <sup>5</sup> Year <sup>6</sup> Estimated <sup>7</sup>	% of <sup>3</sup> Fail Date <sup>4</sup> Estimated <sup>5</sup> Year <sup>6</sup> Estimated <sup>7</sup> Cycle <sup>8</sup>	% of <sup>3</sup> Fail Date <sup>4</sup> Estimated <sup>5</sup> Year <sup>6</sup> Estimated <sup>7</sup> Cycle <sup>8</sup> Estimated <sup>9</sup>

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

The primary type(s) of material or equipment Type:

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.

0-2: It is predicted, based solely on observation that the component may fail or cease to operate within two years of the

survey.

2-4: 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.

4+: 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.

.....

System <sup>2</sup>	
Component % of <sup>3</sup> Fail Date <sup>4</sup> Estir	mated <sup>5</sup> Year <sup>6</sup> Estimated <sup>7</sup> Cycle <sup>8</sup> Estimated <sup>9</sup> Priority <sup>10</sup>
Type Total (Years) Cos	st FY Cost (Yrs) Cost Code

**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 Code:

An assigned code of A, B, C, or D which generally reflects the relative importance of the component to the structural integrity of the asset.

#### **Observations**

System 1
Component
Type
Observation 2
Location 3
Extent 4
Area Affected 5

**1.** System, Component, Type: Same as previous report sections.

2. Observation: Observation made by surveyor regarding

components of the Asset.

3. Location: Location is given as needed for an observation.

**4.** Extent: Light, Medium, or Severe.

**5.** Area Affected: Extent of observed condition expressed as a

percentage of the component or component type.

Page: 68

#### Print Date: 14-Oct-2014 DEPARTMENT OF CULTURAL AFFAIRS - FY 2015

Asset Name : QUEENS THEATRE IN THE PARK

Address : FLUSHING MEADOWS CORONA PARK

Borough : QUEENS Agency's Number : N/A

Area Sq Ft : 38,272 Project Type : CULTURAL AFFAIRS

Date of Survey : 11-Apr-2014 Landmark Status : NONE

Areas Surveyed : Basement, Roof, Floors 1,1m,2

Block : 2018 Lot : 1 BIN : 4464056

CAPITAL	FY 2016 - 2019	FY 2020 - 2025
Exterior Architecture	\$232,200	\$311,300
Electrical		\$35,400
Mechanical		\$366,700
Total	\$232,200	\$713,400
Priority A	\$232,200	\$311,300
Priority B		\$402,100
Total	\$232,200	\$713,400

EXPENSE	FY 2016	FY 2017	FY 2018	FY 2019
Exterior Architecture	\$49,400	\$200	\$4,300	\$800
Interior Architecture	\$149,400	\$5,700	\$13,800	\$1,000
Electrical	\$10,200	\$3,200	\$3,900	\$4,100
Mechanical	\$24,000	\$16,900	\$21,200	\$15,500
Elevators/Escalators	\$7,900	\$7,900	\$7,900	\$7,900
Total	\$240,900	\$33,900	\$51,200	\$29,200
Priority A	\$49,400	\$200	\$4,300	\$800
Priority B	\$122,000	\$30,800	\$33,000	\$27,500
Priority C	\$69,500	\$2,900	\$13,800	\$1,000
Total	\$240,900	\$33,900	\$51,200	\$29,200



Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.

Asset #: 3008

Architecture	Current I	nt Repair Future Replace		e Replacement	lacement Maintenance		
System Component Type	% of Fail Date Total (Years)	<b>Estimated Cost</b>	Year FY	<b>Estimated Cost</b>	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code
Exterior							
Exterior Walls	<b>5</b> 00/		LIDE	* *	~	ф <b>ол</b> о 000	
Cast in Place Concrete	50%		LIFE	* *	5	\$278,000	A
Cast in Place Concrete	15%	Entract Madenne	LIFE		5	\$83,400	A
	Other Observation, E Location : Lobby A			ciea : 100%			
	Explanation : New						
Cast in Place Concrete	10% Now	\$29,700	LIFE	* *	5	\$27,800	A
Cast III Flace Coliciete	Water Penetration, E				3	\$27,800	А
	Location : Manage			ciea . 1070			
Metal Panel	5%	- Jitee In Baseme	2045	* *	5-10	¢10,100	Α.
Metal Panel	3% 3%		2043	* *	5-10 5-10	\$19,100 \$11,500	A A
Metal Coiling Doors	5%		2031	* *	5	\$8,700	A A
Window Wall	12%		2058	* *	5	\$25,000	A
Windows	12/0		2031			\$23,000	
Aluminum	20%		2047	* *	5	\$300	A
Glass Block	80%		LIFE	* *	5	\$1,700	A
Parapets	3070		LIIL			φ1,700	<u> </u>
Cast in Place Concrete	80%		LIFE	* *	5	\$103,000	A
Copper/Terne	5%		2069	* *	5	\$1,500	A
Metal/Glass Curt Wall	10%		2051	* *	5	\$2,400	A
	Other Observation, I	Extent : Moderate, A		cted : 100%		+-,	
	Location : Over Me		33				
	Explanation: This	Component Is Actu	ally Glas	ss Panel With Meta	l Frame		
Pre-Cast Concrete	5%		LIFE	* *	5	\$3,900	A
Roof						·	
Copper/Terne	5%		2060	* *	10	\$5,400	A
IRMA/Protected	25%		2033	* *	10	\$10,800	A
Membrane							
	Vegetation Growth, I						
	Location : Drain A	t Roof Over Second	Floor O	ffices			
IRMA/Protected	5%		2033	* *	10	\$2,200	A
Membrane							
	Paver Block Ballast,		Area Afj	fected : 100%			
	Location : Over Ne	w Lobby					
Metal Panel	65%		2030	* *	10	\$51,300	A
Interior							
Floors							
Carpet	20%		2024	\$138,600	3	\$17,200	C
Carpet	10%		2026	* *	3	\$8,600	C
Cast in Place Concrete	20%		LIFE	* *	5	\$50,100	C
Ceramic Tile	2%		2034	* *	5	\$1,100	C
Ceramic Tile	3%		2038	* *	5	\$1,700	C
Marble Panels	17%		LIFE	* *	5	\$14,600	C
Vinyl Tile	18%		2030	* *	3	\$3,900	C
Wood	10%		2053	* *	5	\$10,700	С

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.

Asset #: 3008

Architecture		Current Re	pair	Futur	e Replacement	Ma	aintenance	
System Component Type	% of Total	Fail Date I (Years)	Estimated Cost	Year FY	<b>Estimated Cost</b>	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code
Interior								
Interior Walls								
Cast in Place Concrete	10%			LIFE	* *	10	\$9,700	C
Ceramic Tile	3%			2038	* *	5	\$1,200	C
Ceramic Tile	2%			2034	* *	5	\$800	C
Fabric on Framing	28%			2026	* *	5	\$5,400	C
Glass: Single Pane	10%			LIFE	* *	5	\$5,800	C
Gypsum Board	10%			LIFE	* *	5-10	\$6,600	C
Gypsum Board	14%			LIFE	* *	5-10	\$9,200	C
Plaster	18%			LIFE	* *	5-10	\$5,900	C
	Water Per	etration, Ext	ent : Moderate, A	rea Affe	cted : 10%			
	Location: Managers Office In Basement							
Wood	5%			LIFE	* *	5	\$15,500	С
Ceilings								
AcousTileSusp.Lay-In	10%			2042	* *	5	\$5,700	В
Exposed Concrete	10%			LIFE	* *	5-10	\$7,200	В
Exposed Struc: Wood	30%			LIFE	* *	10	\$25,800	В
Gypsum Board	15%			LIFE	* *	5-10	\$29,500	В
Gypsum Board	10%			LIFE	* *	5-10	\$19,700	В
Metal Panel	10%			LIFE	* *	5	\$14,300	В
Plaster	15%			LIFE	* *	5-10	\$14,800	В

Electrical	Current Repair	Future R	eplacement	Ma	aintenance	
System Component Type	% of Fail Date Estimated Total (Years)	l Cost Year Es	stimated Cost	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code
Over 600 Volts						
Service Equipment						
Fused Disc Sw	100%	2045	* *	3	\$100	В
	Other Observation, Extent: Mod	lerate, Area Affecte	d: 100%			
	Location: Electrical Room					
	Explanation : Feeder Switch R	ated @ 600 Ampere	s And 4160 Vol	ts		
Transformers						
Dry Type	100%	2023	\$34,000	3	\$200	В
	Other Observation, Extent: Moderate, Area Affected: 100%					
	Location: Electrical Room					
	4160-2, Explanation : 750 Kva	08/120v				
Feeders						
Cable	100%	2024	\$1,000	1		В
Raceway						
Conduit	100%	2025	\$3,600	1		В
Under 600 Volts						
Service Equipment						
Fused Disc Sw	100%	2025	\$1,600	5	\$200	В
	Other Observation, Extent: Mod	lerate, Area Affecte	d: 100%			
	Location: Electrical Room					
	Explanation : 2- Main Service	Switches Rated @ 2	2500 Amps Eac	h		

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.

Asset #: 3008

Electrical	Current Repair		Future Replacement		Maintenance			
System	% of Fail Date	<b>Estimated Cost</b>	Year	<b>Estimated Cost</b>	Cycle	<b>Estimated Cost</b>	Priority	
Component Type	Total (Years)		FY		(Yrs)		Code	
Inder 600 Volts Transformers								
Dry Type	100%		2038	* *	5	\$100	В	
Dry Type		Extent : Moderate /			3	\$100	Ь	
	Other Observation, Extent : Moderate, Area Affected : 100% Location : Electrical Room							
	Explanation: 75 K							
Switch good / Switch board	Explanation . 75 K	va Ana 30 Kva						
Switchgear / Switchboard Fused Disc Sw	50%		2025	\$10,100	5	\$100	В	
Fused Disc Sw Fused Disc Sw				\$10,100 * *	5			
	45%		2045	* *	5	\$100	В	
Molded Case Bkrs	5%		2045	de de	5	\$100	В	
Raceway	000/		2025	Φ1 <b>7</b> <00			ъ	
Conduit	80%		2025	\$17,600	1		В	
Conduit	20%		2045	* *	1		В	
Panelboards					_		-	
Fused Disc Sw	10%		2041	* *	5	\$100	В	
Molded Case Bkrs	70%		2024	\$12,000	5	\$700	В	
Molded Case Bkrs	15%		2033	* *	5	\$200	В	
Molded Case Bkrs	5%		2041	* *	5	\$100	В	
Wiring								
Thermoplastic	80%		2025	\$12,300	1		В	
Thermoplastic	20%		2045	* *	1		В	
Motor Controllers								
Locally Mounted	40%		2023	\$6,900	5	\$100	В	
Locally Mounted	40%		2030	* *	5	\$100	В	
Variable Frequency	20%		2042	* *			В	
Drive								
round								
Grounding Devices								
Generic	100%		LIFE	* *	5	\$1,100	В	
tand-by Power								
Transfer Switches								
Automatic	50%		2030	* *	1	\$5,900	В	
Automatic	50%		2038	* *	1	\$5,900	В	
Generators	<u> </u>					1 - 1 - 3 -		
Diesel	100%		2034	* *	1	\$14,800	В	
	Other Observation, I	Extent : Moderate. A		ected : 100%	-	, - 1,230	_	
	Location : Outside	,	33					
	Explanation: 218	Kva Diesel Cummin	s Gense	t				
Batteries	· r · · · · · · · · · · · · · · · · · ·							
Lead/Acid	100%		2019	\$600	5	\$1,400	В	
Fuel Storage	200,0		_017	Ψ000		Ψ1,100		
Main Tank	100%		2053	* *	5	\$1,100	В	
mani i ank	Other Observation, Extent: Moderate, Area Affected: 100%							
	Location : Outside							
	Explanation: 200	Gallons Canacity						
ighting	Елрининоп . 200	занонь сирисну						

Lighting

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.

Asset #: 3008

Electrical	Current Repair	Future R	Replacement	Maintenance				
System Component Type	% of Fail Date Estimate Total (Years)	ed Cost Year Es	stimated Cost	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code		
Lighting	•	•						
Interior Lighting								
Fluorescent	10%	2020	\$7,100	10	\$3,500	В		
	T-12 Lamps, Extent : Moderate, Area Affected : 100% Location : Boiler Room							
Fluorescent	10%	2030	* *	10	\$3,500	В		
	Other Observation, Extent : Mo Location : New Addition Explanation : T-5 Lamps	oderate, Area Affecte	ed : 100%					
Fluorescent	20%	2030	* *	10	\$7,000	В		
	T-8 Lamps, Extent : Moderate, Location : Offices	Area Affected : 100%	%		. ,			
Fluorescent	40%	2025	\$28,300	10	\$14,000	В		
	Compact Fluorescent Light, Extent : Moderate, Area Affected : 100% Location : Offices, Hallways							
Incandescent	20%	2025	\$14,100	2	\$200	В		
Egress Lighting								
Emergency, Battery	25%	2020	\$3,300	10	\$2,300	В		
Emergency, Battery	25%	2030	* *	10	\$2,300	В		
Exit, Service	25%	2020	\$1,300	1		В		
Exit, Service	25%	2030	* *	1		В		
Exterior Lighting								
HID	100%	2025	\$2,000	10	\$100	В		
Alarm								
Security System	700/					ъ		
No Component	70%	2020	* *	1	¢4.200	D		
Generic	30%	2030		1	\$4,300	В		
	Other Observation, Extent : Moderate, Area Affected : 100% Location : Hallways And Entrance And Exit Doors							
	Explanation: C C T V Surveillance Cameras							
Fire/Smoke Detection	Explanation. CCT V Surve	mance Cameras						
Generic, Digital	100%	2030	* *			В		
Convince, Digital	Other Observation, Extent : Moderate, Area Affected : 100%							
	Location : Throughout The Building							
	Explanation : Alarm Bells, Manual Pull Station, Strobe Lights And Smoke Detectors							
-			250 1110		_ :::::::::::::::::::::::::::::::::::::			

Mechanical	Current Repair		Future Replacement		Maintenance		
System Component Type	% of Fail Date Total (Years)	<b>Estimated Cost</b>	Year FY	<b>Estimated Cost</b>	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code
Heating							
Energy Source							
Natural Gas	100%		2045	* *	1		В

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.

Asset #: 3008

Mechanical	Current Repair		Future Replacement		Maintenance			
System Component Type		ail Date Years)	<b>Estimated Cost</b>	Year FY	<b>Estimated Cost</b>	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code
Heating Conversion Equipment Hot Water Boiler	Location:	For New	stent : Light, Area Addition, Basemer		**	1	\$9,500	В
Hot Water Boiler		vation, Ex For Old S	stent : Light, Area Section, 2nd Floor			1	\$9,500	В
Distribution	-				di di		4.5.000	
Hot Wtr Piping/Pump Terminal Devices Air Handler Convector/Radiator	80% 10%			2033 2025 2030	\$156,500 **	1 1	\$2,800 \$18,900 \$1,200	B B B
Fan Coil Unit/Heat Air Conditioning	10%			2025	\$54,300	1	\$1,200	В
Energy Source Electricity	100%			2041	* *	1		В
Conversion Equipment Int Pkg Unit - Heating/Cooling	50% R-134a Refri	igerant, E	xtent : Light, Arec	2029 a Affected	* * 1 : 50%	2	\$1,200	В
Reciprocating Compr/Chiller	-	igerant, E	Extent : Light, Arec	2033 a Affected	**	1	\$8,900	В
Distribution	Location : I	Lower Ro	of					
Chilled Wtr Pipe/Pump No Component	50% 50%			2045	* *	4	\$1,400	B D
Terminal Devices Air Handler/Cool/Ht No Component	50% 50%			2025	\$77,000	1	\$11,800	B D
Heat Rejection Air Condenser Unit No Component	50% 50%			2033	* *	2	\$13,300	B D
Ventilation Distribution Ductwork/Diffusers	100%			LIFE	* *	2-5	\$33,800	В
Exhaust Fans Interior Roof	95% 5%			2025 2030	\$38,100 * *	2 2	\$1,100 \$100	B B
Plumbing H/C Water Piping Brass/Copper	100%			2035	* *	1		В
Water Heater Gas Fired	100%			2023	\$8,400	2	\$600	В

Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.

Asset #: 3008

Mechanical	Current l	Repair	Futur	e Replacement	Ma	aintenance		
System Component Type	% of Fail Date Total (Years)	<b>Estimated Cost</b>	Year FY	<b>Estimated Cost</b>	Cycle (Yrs)	<b>Estimated Cost</b>	Priority Code	
Plumbing								
Sanitary Piping								
Cast Iron	100%		LIFE	* *	1		В	
Storm Drain Piping								
Cast Iron	100%		LIFE	* *	1		В	
Sump Pump(s)								
Rigid Piping	100%		2030	* *	4	\$1,600	В	
Sewage Ejector(s)								
Electric	100%		2030	* *	4	\$1,600	В	
Backflow Preventer								
Generic	100%		2030	* *	1	\$2,300	В	
Fixtures								
Generic	100%						В	
Vertical Transport								
Elevators								
Gearless Traction	100%		LIFE	* *			C	
	Other Observation, I	Other Observation, Extent : Light, Area Affected : 100%						
	Location: B-3							
	Explanation: 2 Un	its - 1 Passenger, 1 F	reight					
Fire Suppression								
Standpipe								
Generic	100%		2045	* *	1-5	\$19,300	В	
Sprinkler								
Generic	100%		2045	* *	1-2	\$10,700	В	
Chemical System								
Generic	100%		2024	\$24,800	1-3	\$50,600	В	

<sup>\*\*</sup> Replacement cost estimated to be beyond ten years is not included in this report.