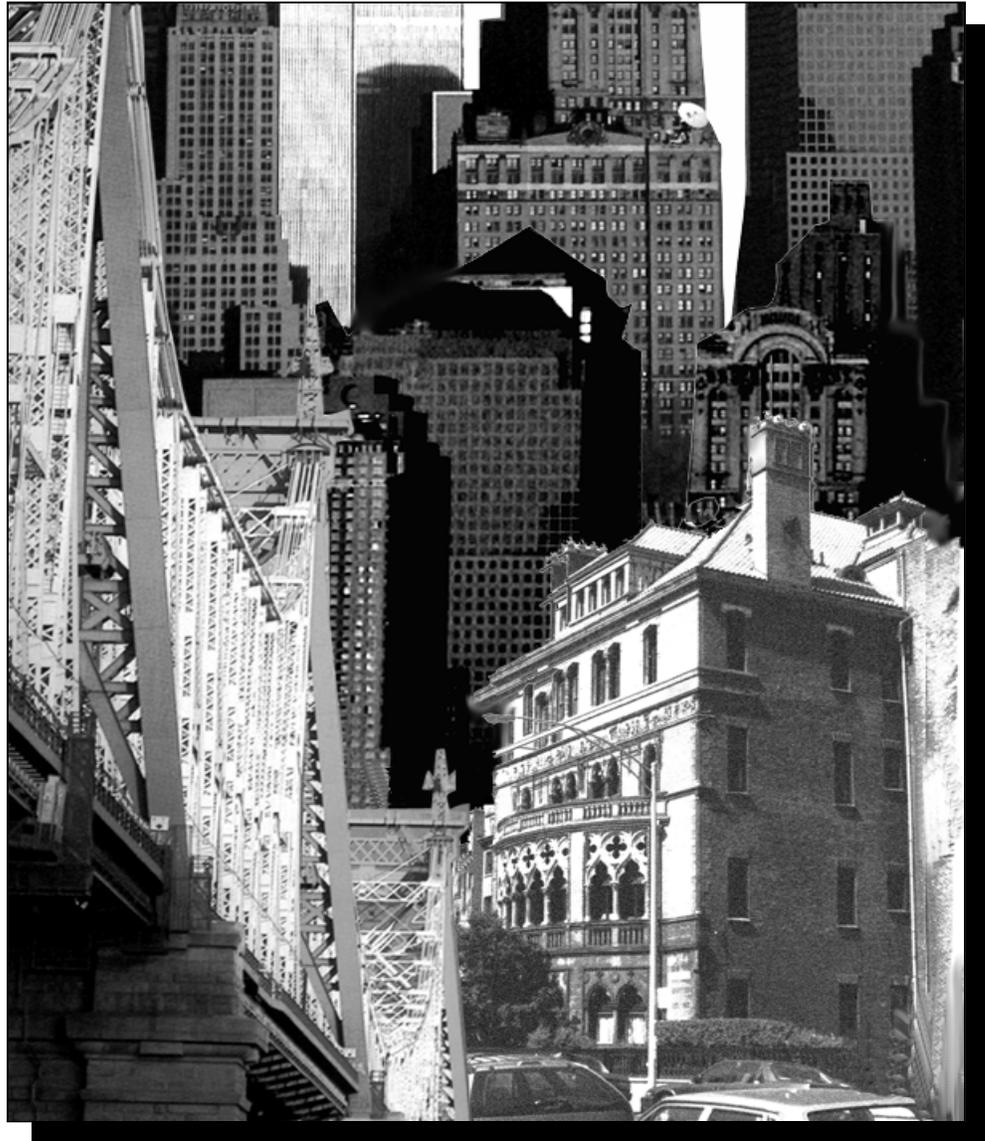




Asset Information Management System (AIMS) Report

Executive Summary





THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

MEMORANDUM

TO: Corey Johnson, Speaker, City Council
Marisa Lago, Chairperson, City Planning Commission
Scott M. Stringer, Comptroller

FROM: Mayor Bill de Blasio 

DATE: November 27, 2019

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 2020. 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 Mayor's 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 2020 comparing total funding recommended in the Fiscal Year 2020 report with the agencies' planned expense program for 2021 and capital program for 2021 through 2024.

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 2020

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Background

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

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

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

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

Report Context and Items Excluded from Study

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

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

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

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

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

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

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

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

Report Organization

Report Schedules

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

Capital and Expense Designations

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

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

Projected Repair Years

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

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

Importance Codes for Repair, Replacement and Major Maintenance

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

Condition Information

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

Professional Certification

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

Table A
Citywide Asset Classes by Agency

New York, Brooklyn, Queens Public Libraries		Shelters	1
Libraries	177	Museum/Gallery Facilities	3
Public Office Buildings	1	Terminals/Markets	54
Department of Education		Piers/Bulkheads	176
Primary Schools	844	Parking Garages	1
Intermediate/Junior High Schools	206	Ferry Terminal Facilities	2
High Schools	189	Marinas/Docks	7
Administrative Buildings	10	Department of Health & Mental Hygiene	
Piers/Bulkheads	2	Administrative Buildings	1
City University of New York		Clinics/Labs. Classrooms	21
Community College Buildings	85	Vehicle Maint./Storage Facilities	1
Piers/Bulkheads	3	Animal Shelters	3
Parking Garages	1	OCME Facilities	4
Police Department		Health and Hospitals Corporation	
Precinct Houses	80	Hospital Buildings	87
Police Buildings Non-Precinct	71	OCME Facilities	1
Piers/Bulkheads	3	Department of Sanitation	
Marinas/Docks	4	Piers/Bulkheads	24
Fire Department		Transfer Stations	3
Fire Department Buildings	94	Vehicle Maint./Storage Facilities	41
Piers/Bulkheads	3	Fresh Kills Facilities	11
Firehouses	217	Public Office Buildings	4
Marinas/Docks	1	Department of Transportation	
Fireboats	5	Bridge/Waterways	41
Administration for Children's Services		Highway Bridges and Tunnels	124
Shelters	2	Highway Facilities	45
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	62	Ferry Terminal Facilities	5
Non-Shelters	2	Piers/Bulkheads	24
Department of Correction		Ferries/Barges	10
Rikers Island Facilities/Utilities	41	Pier Facilities	3
Correction Facilities	5	Parking Garages	9
Piers/Bulkheads	2	Marinas/Docks	14
Marinas/Docks	1	Department of Parks and Recreation	
Human Resources Administration		Museum/Gallery Facilities	16
Shelters	7	Piers/Bulkheads	140
Non-Shelters	8	Vehicle Maint./Storage Facilities	4
Department for the Aging		Park Facilities	778
Senior Center	12	Stadium Facilities	5
Department of Cultural Affairs		Marinas/Docks	27
Museum/Gallery Facilities	64	Walls	284
Cultural Facilities	237	Park Bridges	101
Division of Youth & Family Justice		Dept. of Citywide Administrative Services	
Juvenile Justice Buildings	4	Piers/Bulkheads	12
Taxi & Limousine Commission		Clinics/Labs. Classrooms	1
Vehicle Maint./Storage Facilities	1	Court Buildings	24
Department of Small Business Services		Public Office Buildings	29

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Citywide Summary
Schedule

CITYWIDE SUMMARY SCHEDULE BY AGENCY

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

	CAPITAL FY 2021 - 2024	EXPENSE FY 2021
• NEW YORK PUBLIC LIBRARY	47,703,000	7,701,000
• BROOKLYN PUBLIC LIBRARY	26,644,000	3,613,000
• QUEENS PUBLIC LIBRARY	17,416,000	3,136,000
• DEPARTMENT OF EDUCATION	2,494,915,000	190,343,000
• CITY UNIVERSITY OF NEW YORK	129,996,000	11,848,000
• POLICE DEPARTMENT	179,159,000	17,409,000
• FIRE DEPARTMENT	63,016,000	28,243,000
• ADMIN. FOR CHILDREN'S SERVICES	2,794,000	1,059,000
• DEPT. OF HOMELESS SERVICES	116,236,000	7,578,000
• DEPARTMENT OF CORRECTION	516,263,000	8,487,000
• HUMAN RESOURCES ADMINISTRATION	20,915,000	1,896,000
• DEPARTMENT FOR THE AGING	2,773,000	1,049,000
• DEPARTMENT OF CULTURAL AFFAIRS	288,360,000	22,961,000
• DIV. OF YOUTH & FAMILY JUSTICE	5,699,000	681,000
• TAXI & LIMOUSINE COMMISSION	2,179,000	94,000
• DEPT. OF SMALL BUSINESS SERV.	262,391,000	9,828,000
• DEPT. OF HEALTH & MENTAL HYGIENE	33,359,000	4,661,000
• HEALTH AND HOSPITALS CORP.	396,632,000	19,427,000
• DEPARTMENT OF SANITATION	200,535,000	8,477,000
• DEPARTMENT OF TRANSPORTATION		
Bridges	892,698,000	28,837,000
Facilities & Ferries	76,818,000	11,611,000
Street & Traffic Lighting	49,834,000	68,298,000
Streets & Highways	3,085,560,000	
• DEPT. OF PARKS & RECREATION	634,748,000	37,264,000
• DEPT. OF CITYWIDE ADMIN. SERV.	330,418,000	26,036,000
Total	\$9,877,062,000*	\$520,536,000

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

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

CITYWIDE SUMMARY SCHEDULE

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

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	1,875,800,000	1,071,975,000
• Interior Architecture	1,310,490,000	1,221,007,000
• Electrical	775,035,000	1,842,359,000
• Mechanical	1,108,333,000	3,185,214,000
• Piers	35,720,000	32,218,000
• Bulkheads	167,864,000	154,221,000
• Bridge Structure	854,278,000	280,691,000
• Ferries	23,875,000	
• Vessels	2,400,000	
• Parks' Walls	21,739,000	187,000
• Parks' Boardwalks	53,976,000	24,327,000
• Miscellaneous Buildings	63,208,000	24,304,000
• Parks' Water and Sewer Utilities	120,321,000	180,481,000
• Parks' Electrical Utilities	32,356,000	48,533,000
• Site Enclosure	8,570,000	894,000
• Site Pavements	54,679,000	15,780,000
• Elevators/Escalators		
• Parks' Streets and Roads	48,020,000	17,640,000
• Rikers Island Utilities	56,000,000	
• Park Bridges	62,751,000	5,207,000
• Marinas/Docks	27,764,000	37,698,000
• Bridge Electrical	18,023,000	11,453,000
• Bridge Mechanical	20,465,000	19,836,000
• Primary Streets	467,650,000	
• Secondary Streets	683,440,000	
• Local Streets	1,861,570,000	
• Arterial Streets	40,000,000	
• Step Streets	32,900,000	
• Traffic Signal System	17,747,000	
• Street Lighting System	32,087,000	
Total	\$9,877,062,000 *	\$8,174,026,000
• Importance Code A	3,125,056,000	1,576,671,000
• Importance Code B	4,338,520,000	6,145,106,000
• Importance Code C	2,269,358,000	410,305,000
• Importance Code D	144,128,000	41,944,000
Total	\$9,877,062,000 *	\$8,174,026,000

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

Note : Costs are in current dollars and are not escalated for potential future inflation.
Dollars beyond the 4 year plan for Streets and City owned Arterials are not included in summary.

CITYWIDE SUMMARY SCHEDULE (cont.)

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

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	73,095,000	9,605,000	9,989,000	11,466,000
• Interior Architecture	135,501,000	17,795,000	35,182,000	41,647,000
• Electrical	38,655,000	28,692,000	24,883,000	29,945,000
• Mechanical	99,083,000	57,113,000	77,630,000	58,373,000
• Piers	2,333,000	261,000	332,000	557,000
• Bulkheads	6,395,000	466,000	318,000	268,000
• Bridge Structure	26,529,000	13,234,000	26,044,000	14,330,000
• Ferries	6,825,000	8,965,000	8,105,000	4,470,000
• Vessels	1,126,000	1,346,000	1,654,000	1,737,000
• Parks' Walls	3,505,000			
• Parks' Boardwalks	150,000			
• Miscellaneous Buildings	2,836,000	1,300,000	1,132,000	1,131,000
• Parks' Water and Sewer Utilities	3,008,000	3,008,000	3,008,000	3,008,000
• Parks' Electrical Utilities	809,000	809,000	809,000	809,000
• Site Enclosure	6,852,000	80,000	34,000	0
• Site Pavements	15,892,000	30,000	192,000	92,000
• Elevators/Escalators	19,251,000	19,251,000	19,251,000	19,251,000
• Parks' Streets and Roads				
• Rikers Island Utilities	2,300,000	2,300,000	2,300,000	2,300,000
• Park Bridges	4,004,000	7,000	11,000	1,046,000
• Marinas/Docks	1,730,000	431,000	460,000	714,000
• Bridge Electrical	644,000	64,000	127,000	176,000
• Bridge Mechanical	1,715,000		733,000	
• Primary Streets				
• Secondary Streets				
• Local Streets				
• Arterial Streets				
• Step Streets				
• Traffic Signal System	36,356,000	36,356,000	36,356,000	36,356,000
• Street Lighting System	31,942,000	31,942,000	31,942,000	31,942,000
Total	\$520,536,000	\$233,056,000	\$280,490,000	\$259,616,000
• Importance Code A	190,815,000	117,099,000	124,431,000	115,935,000
• Importance Code B	264,532,000	112,511,000	151,632,000	139,299,000
• Importance Code C	62,353,000	2,146,000	3,295,000	3,251,000
• Importance Code D	2,836,000	1,300,000	1,132,000	1,131,000
Total	\$520,536,000	\$233,056,000	\$280,490,000	\$259,616,000

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Report Schedules
by Agency

NEW YORK PUBLIC LIBRARY - 035

Project Type : NEW YORK PUBLIC LIBRARY

LIBRARIES	:	73
PUBLIC OFFICE BUILDINGS	:	1
Total Assets in AIMS	:	74

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	20,956,000	7,770,000
• Interior Architecture	5,649,000	8,649,000
• Electrical	6,316,000	14,529,000
• Mechanical	14,727,000	41,184,000
• Site Enclosure		180,000
• Site Pavements	55,000	49,000
Total	\$47,703,000 *	\$72,360,000
• Importance Code A	22,181,000	8,582,000
• Importance Code B	24,523,000	60,710,000
• Importance Code C	1,000,000	3,068,000
Total	\$47,703,000 *	\$72,360,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	2,096,000	171,000	115,000	191,000
• Interior Architecture	3,095,000	334,000	729,000	2,504,000
• Electrical	630,000	885,000	437,000	244,000
• Mechanical	1,191,000	693,000	1,107,000	573,000
• Site Enclosure	150,000			
• Site Pavements	224,000			
• Elevators/Escalators	314,000	314,000	314,000	314,000
Total	\$7,701,000	\$2,397,000	\$2,703,000	\$3,826,000
• Importance Code A	2,260,000	271,000	243,000	287,000
• Importance Code B	4,862,000	2,125,000	2,449,000	3,532,000
• Importance Code C	578,000	1,000	10,000	7,000
• Importance Code D				
Total	\$7,701,000	\$2,397,000	\$2,703,000	\$3,826,000

** 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.*

BROOKLYN PUBLIC LIBRARY - 038

Project Type : **BROOKLYN PUBLIC LIBRARY**

LIBRARIES : 49

Total Assets in AIMS : 49

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	12,928,000	3,415,000
• Interior Architecture	2,557,000	2,792,000
• Electrical	3,818,000	5,128,000
• Mechanical	7,268,000	14,525,000
• Site Pavements	74,000	
Total	\$26,644,000 *	\$25,859,000
• Importance Code A	12,987,000	3,803,000
• Importance Code B	13,313,000	21,385,000
• Importance Code C	343,000	670,000
Total	\$26,644,000 *	\$25,859,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	1,196,000	163,000	16,000	219,000
• Interior Architecture	1,193,000	120,000	108,000	107,000
• Electrical	364,000	152,000	76,000	742,000
• Mechanical	464,000	231,000	357,000	557,000
• Site Enclosure	82,000			
• Site Pavements	174,000			
• Elevators/Escalators	140,000	140,000	140,000	140,000
Total	\$3,613,000	\$805,000	\$696,000	\$1,765,000
• Importance Code A	1,302,000	228,000	85,000	311,000
• Importance Code B	1,766,000	575,000	600,000	1,452,000
• Importance Code C	545,000	2,000	11,000	2,000
• Importance Code D				
Total	\$3,613,000	\$805,000	\$696,000	\$1,765,000

* 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.

QUEENS PUBLIC LIBRARY - 039

Project Type : **QUEENS PUBLIC LIBRARY**
 LIBRARIES : 55
 Total Assets in AIMS : 55

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	6,955,000	4,256,000
• Interior Architecture	1,635,000	2,877,000
• Electrical	1,711,000	4,488,000
• Mechanical	7,079,000	10,987,000
• Site Enclosure	35,000	
Total	\$17,416,000 *	\$22,607,000
• Importance Code A	7,033,000	4,570,000
• Importance Code B	10,164,000	17,004,000
• Importance Code C	219,000	1,034,000
Total	\$17,416,000 *	\$22,607,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	882,000	168,000	41,000	71,000
• Interior Architecture	1,243,000	162,000	274,000	281,000
• Electrical	399,000	327,000	197,000	189,000
• Mechanical	454,000	260,000	422,000	237,000
• Site Enclosure	6,000			
• Site Pavements	73,000			
• Elevators/Escalators	79,000	79,000	79,000	79,000
Total	\$3,136,000	\$995,000	\$1,012,000	\$857,000
• Importance Code A	967,000	213,000	87,000	116,000
• Importance Code B	1,905,000	779,000	920,000	738,000
• Importance Code C	263,000	4,000	6,000	2,000
• Importance Code D				
Total	\$3,136,000	\$995,000	\$1,012,000	\$857,000

** 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.*

DEPARTMENT OF EDUCATION - 040

Project Type : EDUCATION	
PRIMARY SCHOOLS	: 844
INTERMEDIATE/JUNIOR HIGH SCHOOLS	: 206
HIGH SCHOOLS	: 189
ADMINISTRATIVE BUILDINGS	: 10
PIERS/BULKHEADS	: 2
Total Assets in AIMS	: 1,251

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	610,749,000	525,203,000
• Interior Architecture	796,830,000	609,246,000
• Electrical	514,298,000	968,419,000
• Mechanical	540,893,000	1,872,623,000
• Bulkheads	1,256,000	262,000
• Site Enclosure	3,672,000	402,000
• Site Pavements	27,215,000	12,826,000
Total	\$2,494,915,000 *	\$3,988,981,000
• Importance Code A	677,844,000	748,739,000
• Importance Code B	1,643,506,000	3,155,649,000
• Importance Code C	173,565,000	84,593,000
Total	\$2,494,915,000 *	\$3,988,981,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	29,319,000	4,982,000	6,091,000	6,463,000
• Interior Architecture	65,543,000	11,185,000	11,703,000	17,336,000
• Electrical	18,978,000	14,322,000	13,233,000	14,604,000
• Mechanical	57,091,000	31,043,000	43,201,000	31,104,000
• Bulkheads	46,000	0		
• Site Enclosure	4,218,000	52,000		
• Site Pavements	9,581,000	0	19,000	5,000
• Elevators/Escalators	5,567,000	5,567,000	5,567,000	5,567,000
Total	\$190,343,000	\$67,151,000	\$79,815,000	\$75,079,000
• Importance Code A	40,023,000	16,256,000	17,345,000	17,801,000
• Importance Code B	121,204,000	49,832,000	60,727,000	56,346,000
• Importance Code C	29,116,000	1,063,000	1,742,000	933,000
• Importance Code D				
Total	\$190,343,000	\$67,151,000	\$79,815,000	\$75,079,000

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

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

CITY UNIVERSITY OF NEW YORK - 042

Project Type : CITY UNIVERSITY OF NEW YORK			
COMMUNITY COLLEGE BUILDINGS	:		85
PIERS/BULKHEADS	:		3
PARKING GARAGES	:		1
Total Assets in AIMS	:		89

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	48,402,000	27,182,000
• Interior Architecture	23,498,000	22,785,000
• Electrical	13,849,000	58,995,000
• Mechanical	42,016,000	124,231,000
• Bulkheads	849,000	2,058,000
• Miscellaneous Buildings	239,000	200,000
• Site Enclosure	64,000	
• Site Pavements	1,079,000	
Total	\$129,996,000 *	\$235,451,000
• Importance Code A	49,621,000	29,696,000
• Importance Code B	76,434,000	202,236,000
• Importance Code C	3,701,000	3,319,000
• Importance Code D	239,000	200,000
Total	\$129,996,000 *	\$235,451,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	1,963,000	462,000	28,000	493,000
• Interior Architecture	4,638,000	821,000	3,331,000	936,000
• Electrical	1,132,000	1,138,000	653,000	1,107,000
• Mechanical	2,896,000	2,246,000	2,825,000	2,466,000
• Bulkheads	17,000	23,000		0
• Miscellaneous Buildings	19,000	11,000	10,000	13,000
• Site Enclosure	138,000	3,000		
• Site Pavements	241,000	0	0	0
• Elevators/Escalators	804,000	804,000	804,000	804,000
Total	\$11,848,000	\$5,506,000	\$7,651,000	\$5,818,000
• Importance Code A	2,302,000	745,000	293,000	758,000
• Importance Code B	8,224,000	4,741,000	7,251,000	4,999,000
• Importance Code C	1,303,000	10,000	97,000	48,000
• Importance Code D	19,000	11,000	10,000	13,000
Total	\$11,848,000	\$5,506,000	\$7,651,000	\$5,818,000

** 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.*

POLICE DEPARTMENT - 056

Project Type : POLICE

PRECINCT HOUSES	:	80
POLICE BUILDINGS NON-PRECINCT	:	71
PIERS/BULKHEADS	:	3
MARINAS/DOCKS	:	4

Total Assets in AIMS : 158

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	77,147,000	30,307,000
• Interior Architecture	33,648,000	23,364,000
• Electrical	13,593,000	60,221,000
• Mechanical	38,433,000	82,764,000
• Piers	4,024,000	242,000
• Bulkheads	1,016,000	595,000
• Miscellaneous Buildings	5,245,000	2,989,000
• Site Enclosure	923,000	139,000
• Site Pavements	4,826,000	
• Marinas/Docks	304,000	1,972,000
Total	\$179,159,000 *	\$202,594,000

• Importance Code A	81,337,000	36,407,000
• Importance Code B	81,468,000	160,765,000
• Importance Code C	11,109,000	2,432,000
• Importance Code D	5,245,000	2,989,000
Total	\$179,159,000 *	\$202,594,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	3,975,000	398,000	169,000	540,000
• Interior Architecture	5,792,000	278,000	288,000	654,000
• Electrical	1,672,000	1,533,000	605,000	1,499,000
• Mechanical	4,087,000	2,260,000	2,385,000	3,101,000
• Piers	19,000			
• Bulkheads	37,000		1,000	5,000
• Miscellaneous Buildings	197,000	120,000	95,000	134,000
• Site Enclosure	363,000	8,000		
• Site Pavements	644,000			
• Elevators/Escalators	428,000	428,000	428,000	428,000
• Marinas/Docks	196,000	47,000	22,000	153,000
Total	\$17,409,000	\$5,073,000	\$3,993,000	\$6,514,000

** 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.

POLICE DEPARTMENT - 056

• Importance Code A	4,578,000	770,000	486,000	967,000
• Importance Code B	9,862,000	4,143,000	3,304,000	5,381,000
• Importance Code C	2,773,000	40,000	107,000	32,000
• Importance Code D	197,000	120,000	95,000	134,000
Total	\$17,409,000	\$5,073,000	\$3,993,000	\$6,514,000

** 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.

FIRE DEPARTMENT - 057

Project Type : FIRE DEPARTMENT

FIRE DEPARTMENT BUILDINGS	:	94
PIERS/BULKHEADS	:	3
FIREHOUSES	:	217
MARINAS/DOCKS	:	1
FIREBOATS	:	5

Total Assets in AIMS : 320

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	37,751,000	14,966,000
• Interior Architecture	13,093,000	7,086,000
• Electrical	2,231,000	11,772,000
• Mechanical	1,681,000	13,397,000
• Vessels	2,400,000	
• Miscellaneous Buildings	2,805,000	1,200,000
• Site Enclosure	542,000	
• Site Pavements	2,468,000	1,145,000
• Marinas/Docks	45,000	314,000
Total	\$63,016,000 *	\$49,879,000

• Importance Code A	40,670,000	16,785,000
• Importance Code B	14,558,000	27,959,000
• Importance Code C	4,983,000	3,935,000
• Importance Code D	2,805,000	1,200,000
Total	\$63,016,000 *	\$49,879,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	9,316,000	698,000	463,000	465,000
• Interior Architecture	11,406,000	271,000	307,000	345,000
• Electrical	1,569,000	1,120,000	564,000	1,484,000
• Mechanical	3,147,000	2,033,000	1,054,000	1,383,000
• Piers	14,000			
• Bulkheads				
• Vessels	1,126,000	1,346,000	1,654,000	1,737,000
• Miscellaneous Buildings	111,000	49,000	54,000	51,000
• Site Enclosure	549,000	0	17,000	0
• Site Pavements	940,000	11,000	11,000	19,000
• Elevators/Escalators	37,000	37,000	37,000	37,000
• Marinas/Docks	28,000	0	3,000	4,000
Total	\$28,243,000	\$5,564,000	\$4,163,000	\$5,525,000

** 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.

FIRE DEPARTMENT - 057

• Importance Code A	10,926,000	2,235,000	2,306,000	2,402,000
• Importance Code B	12,046,000	3,253,000	1,727,000	3,019,000
• Importance Code C	5,159,000	28,000	77,000	54,000
• Importance Code D	111,000	49,000	54,000	51,000
Total	\$28,243,000	\$5,564,000	\$4,163,000	\$5,525,000

** 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.*

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 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	1,132,000	531,000
• Interior Architecture	741,000	763,000
• Electrical	69,000	598,000
• Mechanical	795,000	2,386,000
• Site Enclosure	57,000	
• Site Pavements		48,000
Total	\$2,794,000 *	\$4,327,000
• Importance Code A	1,310,000	1,076,000
• Importance Code B	1,408,000	2,924,000
• Importance Code C	76,000	326,000
Total	\$2,794,000 *	\$4,327,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	368,000	16,000	13,000	7,000
• Interior Architecture	326,000	24,000	22,000	41,000
• Electrical	75,000	29,000	97,000	77,000
• Mechanical	193,000	107,000	99,000	154,000
• Site Enclosure	31,000			
• Site Pavements	18,000	0	0	0
• Elevators/Escalators	49,000	49,000	49,000	49,000
Total	\$1,059,000	\$225,000	\$280,000	\$329,000
• Importance Code A	401,000	36,000	25,000	43,000
• Importance Code B	474,000	188,000	252,000	285,000
• Importance Code C	185,000	1,000	4,000	1,000
• Importance Code D				
Total	\$1,059,000	\$225,000	\$280,000	\$329,000

** 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 HOMELESS SERVICES - 071

Project Type : HOMELESS SERVICES	
SHELTERS	: 62
NON-SHELTERS	: 2
Total Assets in AIMS	: 64

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	47,856,000	16,457,000
• Interior Architecture	29,118,000	28,021,000
• Electrical	22,270,000	51,308,000
• Mechanical	16,032,000	49,107,000
• Site Enclosure	204,000	
• Site Pavements	755,000	81,000
Total	\$116,236,000 *	\$144,974,000
• Importance Code A	50,792,000	21,124,000
• Importance Code B	58,928,000	119,221,000
• Importance Code C	6,516,000	4,629,000
Total	\$116,236,000 *	\$144,974,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	2,011,000	206,000	225,000	336,000
• Interior Architecture	2,386,000	290,000	214,000	498,000
• Electrical	766,000	517,000	474,000	556,000
• Mechanical	1,712,000	989,000	1,362,000	1,222,000
• Site Enclosure	62,000			
• Site Pavements	256,000			
• Elevators/Escalators	385,000	385,000	385,000	385,000
Total	\$7,578,000	\$2,387,000	\$2,660,000	\$2,997,000
• Importance Code A	2,285,000	497,000	511,000	625,000
• Importance Code B	4,253,000	1,842,000	2,134,000	2,336,000
• Importance Code C	1,040,000	48,000	15,000	36,000
• Importance Code D				
Total	\$7,578,000	\$2,387,000	\$2,660,000	\$2,997,000

** 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.*

DEPARTMENT OF CORRECTION - 072

Project Type : CORRECTION		
RIKERS ISLAND FACILITIES	:	35
CORRECTION FACILITIES	:	5
PIERS/BULKHEADS	:	2
RIKERS ISLAND UTILITIES	:	6
MARINAS/DOCKS	:	1
Total Assets in AIMS	:	49

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	311,574,000	126,981,000
• Interior Architecture	59,481,000	72,525,000
• Electrical	32,269,000	163,719,000
• Mechanical	48,152,000	119,980,000
• Piers	1,637,000	44,000
• Bulkheads	3,818,000	1,738,000
• Rikers Island Utilities	56,000,000	
• Marinas/Docks	3,332,000	975,000
Total	\$516,263,000 *	\$485,961,000

• Importance Code A	332,474,000	134,235,000
• Importance Code B	170,914,000	348,628,000
• Importance Code C	12,875,000	3,099,000
Total	\$516,263,000 *	\$485,961,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	651,000	99,000	10,000	35,000
• Interior Architecture	1,340,000	58,000	93,000	393,000
• Electrical	1,209,000	948,000	918,000	959,000
• Mechanical	2,162,000	1,203,000	1,641,000	1,019,000
• Piers	117,000			22,000
• Bulkheads	140,000	0	0	6,000
• Site Enclosure				
• Site Pavements				
• Elevators/Escalators	514,000	514,000	514,000	514,000
• Rikers Island Utilities	2,300,000	2,300,000	2,300,000	2,300,000
• Marinas/Docks	52,000	35,000	13,000	2,000
Total	\$8,487,000	\$5,157,000	\$5,489,000	\$5,250,000
• Importance Code A	1,365,000	687,000	607,000	614,000
• Importance Code B	6,547,000	4,469,000	4,816,000	4,634,000
• Importance Code C	574,000	1,000	66,000	2,000
• Importance Code D				
Total	\$8,487,000	\$5,157,000	\$5,489,000	\$5,250,000

** 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.*

HUMAN RESOURCES ADMINISTRATION - 096

Project Type : HUMAN RESOURCES

SHELTERS : 7

NON-SHELTERS : 8

Total Assets in AIMS : 15

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	9,024,000	1,918,000
• Interior Architecture	4,577,000	3,800,000
• Electrical	2,687,000	8,275,000
• Mechanical	4,237,000	10,040,000
• Site Pavements	390,000	
Total	\$20,915,000 *	\$24,033,000
• Importance Code A	10,155,000	2,887,000
• Importance Code B	10,273,000	20,369,000
• Importance Code C	488,000	778,000
Total	\$20,915,000 *	\$24,033,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	481,000	103,000	63,000	24,000
• Interior Architecture	777,000	102,000	36,000	159,000
• Electrical	156,000	126,000	61,000	68,000
• Mechanical	351,000	160,000	276,000	230,000
• Site Enclosure	38,000			
• Site Pavements	49,000			
• Elevators/Escalators	42,000	42,000	42,000	42,000
Total	\$1,896,000	\$533,000	\$477,000	\$524,000
• Importance Code A	570,000	167,000	127,000	88,000
• Importance Code B	1,013,000	354,000	345,000	435,000
• Importance Code C	313,000	12,000	5,000	
• Importance Code D				
Total	\$1,896,000	\$533,000	\$477,000	\$524,000

* 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.

DEPARTMENT OF CULTURAL AFFAIRS - 126

Project Type : CULTURAL AFFAIRS

MUSEUM/GALLERY FACILITIES : 64

CULTURAL FACILITIES : 237

Total Assets in AIMS : 301

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	158,007,000	38,330,000
• Interior Architecture	35,634,000	114,631,000
• Electrical	13,036,000	67,996,000
• Mechanical	73,702,000	127,282,000
• Miscellaneous Buildings	5,836,000	3,731,000
• Site Enclosure	476,000	174,000
• Site Pavements	1,669,000	
Total	\$288,360,000 *	\$352,143,000
• Importance Code A	160,380,000	43,591,000
• Importance Code B	111,441,000	208,556,000
• Importance Code C	10,703,000	96,266,000
• Importance Code D	5,836,000	3,731,000
Total	\$288,360,000 *	\$352,143,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	4,895,000	736,000	847,000	706,000
• Interior Architecture	8,019,000	1,025,000	2,431,000	5,563,000
• Electrical	2,025,000	1,226,000	1,351,000	1,320,000
• Mechanical	5,288,000	2,380,000	3,862,000	2,544,000
• Miscellaneous Buildings	556,000	138,000	174,000	141,000
• Site Enclosure	215,000			
• Site Pavements	674,000	2,000	20,000	17,000
• Elevators/Escalators	1,289,000	1,289,000	1,289,000	1,289,000
Total	\$22,961,000	\$6,796,000	\$9,974,000	\$11,582,000
• Importance Code A	5,309,000	973,000	1,134,000	1,076,000
• Importance Code B	14,787,000	5,651,000	8,560,000	10,210,000
• Importance Code C	2,309,000	35,000	106,000	155,000
• Importance Code D	556,000	138,000	174,000	141,000
Total	\$22,961,000	\$6,796,000	\$9,974,000	\$11,582,000

** 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.

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 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	3,949,000	473,000
• Interior Architecture	1,296,000	1,534,000
• Electrical		6,418,000
• Mechanical	454,000	3,866,000
Total	\$5,699,000 *	\$12,291,000
• Importance Code A	3,987,000	749,000
• Importance Code B	1,506,000	11,494,000
• Importance Code C	206,000	48,000
Total	\$5,699,000 *	\$12,291,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	237,000	44,000	4,000	0
• Interior Architecture	228,000	11,000		14,000
• Electrical	89,000	32,000	42,000	27,000
• Mechanical	111,000	83,000	104,000	28,000
• Site Enclosure				
• Site Pavements				
• Elevators/Escalators	16,000	16,000	16,000	16,000
Total	\$681,000	\$185,000	\$166,000	\$85,000
• Importance Code A	288,000	56,000	16,000	12,000
• Importance Code B	332,000	128,000	150,000	74,000
• Importance Code C	61,000	1,000		
• Importance Code D				
Total	\$681,000	\$185,000	\$166,000	\$85,000

* 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.

TAXI & LIMOUSINE COMMISSION - 156

Project Type : PUBLIC BUILDINGS

VEHICLE MAINT./STORAGE FACILITIES : 1

Total Assets in AIMS : 1

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	1,150,000	1,844,000
• Interior Architecture	662,000	467,000
• Electrical	50,000	69,000
• Mechanical	318,000	44,000
Total	\$2,179,000 *	\$2,423,000
• Importance Code A	1,150,000	1,844,000
• Importance Code B	824,000	579,000
• Importance Code C	206,000	
Total	\$2,179,000 *	\$2,423,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	20,000	15,000		
• Interior Architecture	23,000		56,000	6,000
• Electrical	7,000	7,000	4,000	4,000
• Mechanical	43,000	4,000	32,000	4,000
Total	\$94,000	\$25,000	\$92,000	\$14,000
• Importance Code A	48,000	17,000	3,000	2,000
• Importance Code B	34,000	9,000	88,000	12,000
• Importance Code C	12,000			
• Importance Code D				
Total	\$94,000	\$25,000	\$92,000	\$14,000

* 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 SMALL BUSINESS SERV. - 801

Project Type : ECONOMIC DEVELOPMENT

SHELTERS	:	1
MUSEUM/GALLERY FACILITIES	:	3
TERMINALS/MARKETS	:	54
PIERS/BULKHEADS	:	176
PARKING GARAGES	:	1
FERRY TERMINAL FACILITIES	:	2
MARINAS/DOCKS	:	7
Total Assets in AIMS	:	244

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	78,618,000	104,053,000
• Interior Architecture	45,647,000	31,808,000
• Electrical	33,849,000	82,078,000
• Mechanical	31,921,000	31,157,000
• Piers	11,771,000	16,538,000
• Bulkheads	55,506,000	41,437,000
• Miscellaneous Buildings	395,000	202,000
• Site Enclosure	104,000	
• Site Pavements	2,775,000	
• Marinas/Docks	1,805,000	4,916,000
Total	\$262,391,000 *	\$312,188,000
• Importance Code A	125,977,000	126,147,000
• Importance Code B	110,729,000	182,144,000
• Importance Code C	25,290,000	3,695,000
• Importance Code D	395,000	202,000
Total	\$262,391,000 *	\$312,188,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	1,262,000	78,000	128,000	138,000
• Interior Architecture	1,358,000	748,000	397,000	449,000
• Electrical	962,000	258,000	446,000	763,000
• Mechanical	1,424,000	965,000	1,311,000	1,013,000
• Piers	736,000	128,000	67,000	185,000
• Bulkheads	3,142,000	186,000	119,000	40,000
• Miscellaneous Buildings	18,000	7,000	6,000	7,000
• Site Enclosure	11,000			
• Site Pavements	215,000			
• Elevators/Escalators	465,000	465,000	465,000	465,000
• Marinas/Docks	235,000	30,000	49,000	50,000
Total	\$9,828,000	\$2,864,000	\$2,986,000	\$3,110,000

** 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 SMALL BUSINESS SERV. - 801

• Importance Code A	2,800,000	478,000	496,000	478,000
• Importance Code B	5,807,000	2,318,000	2,483,000	2,588,000
• Importance Code C	1,204,000	61,000	1,000	38,000
• Importance Code D	18,000	7,000	6,000	7,000
Total	\$9,828,000	\$2,864,000	\$2,986,000	\$3,110,000

** 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 HEALTH & MENTAL HYGIENE - 816

Project Type : HEALTH AND MENTAL HYGIENE

ADMINISTRATIVE BUILDINGS	:	1
CLINICS/LABS. CLASSROOMS	:	21
VEHICLE MAINT./STORAGE FACILITIES	:	1
ANIMAL SHELTERS	:	3
OCME FACILITIES	:	4

Total Assets in AIMS : 30

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	10,174,000	5,069,000
• Interior Architecture	6,929,000	6,263,000
• Electrical	3,121,000	8,136,000
• Mechanical	12,963,000	11,568,000
• Miscellaneous Buildings	172,000	117,000
• Site Pavements		68,000
Total	\$33,359,000 *	\$31,222,000
• Importance Code A	10,174,000	5,324,000
• Importance Code B	21,681,000	24,730,000
• Importance Code C	1,332,000	1,050,000
• Importance Code D	172,000	117,000
Total	\$33,359,000 *	\$31,222,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	906,000	118,000	48,000	236,000
• Interior Architecture	1,849,000	115,000	101,000	259,000
• Electrical	511,000	340,000	205,000	437,000
• Mechanical	823,000	506,000	698,000	517,000
• Miscellaneous Buildings	12,000	7,000	7,000	10,000
• Site Enclosure	3,000			
• Site Pavements	145,000	0	4,000	1,000
• Elevators/Escalators	412,000	412,000	412,000	412,000
Total	\$4,661,000	\$1,497,000	\$1,475,000	\$1,873,000
• Importance Code A	983,000	165,000	93,000	287,000
• Importance Code B	3,131,000	1,323,000	1,348,000	1,573,000
• Importance Code C	536,000	1,000	27,000	3,000
• Importance Code D	12,000	7,000	7,000	10,000
Total	\$4,661,000	\$1,497,000	\$1,475,000	\$1,873,000

** 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.*

HEALTH AND HOSPITALS CORP. - 819

Project Type : HEALTH & HOSPITALS CORP.

HOSPITAL BUILDINGS	:	87
OCME FACILITIES	:	1
Total Assets in AIMS	:	88

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	141,548,000	44,384,000
• Interior Architecture	69,591,000	128,277,000
• Electrical	55,792,000	174,382,000
• Mechanical	128,116,000	277,260,000
• Miscellaneous Buildings	767,000	635,000
• Site Enclosure	156,000	
• Site Pavements	662,000	
Total	\$396,632,000 *	\$624,938,000
• Importance Code A	141,944,000	50,407,000
• Importance Code B	231,654,000	546,884,000
• Importance Code C	22,267,000	27,012,000
• Importance Code D	767,000	635,000
Total	\$396,632,000 *	\$624,938,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	2,481,000	321,000	397,000	401,000
• Interior Architecture	3,842,000	601,000	2,777,000	2,105,000
• Electrical	2,640,000	2,094,000	2,289,000	2,219,000
• Mechanical	6,244,000	5,129,000	6,927,000	5,200,000
• Miscellaneous Buildings	78,000	24,000	28,000	28,000
• Site Enclosure	191,000			
• Site Pavements	760,000			
• Elevators/Escalators	3,191,000	3,191,000	3,191,000	3,191,000
Total	\$19,427,000	\$11,359,000	\$15,609,000	\$13,144,000
• Importance Code A	3,110,000	932,000	1,032,000	1,070,000
• Importance Code B	14,166,000	10,320,000	14,376,000	11,907,000
• Importance Code C	2,073,000	83,000	172,000	138,000
• Importance Code D	78,000	24,000	28,000	28,000
Total	\$19,427,000	\$11,359,000	\$15,609,000	\$13,144,000

** 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.

DEPARTMENT OF SANITATION - 827

Project Type : SANITATION	
PIERS/BULKHEADS	: 24
TRANSFER STATIONS	: 3
VEHICLE MAINT./STORAGE FACILITIES	: 41
FRESH KILLS FACILITIES	: 11
PUBLIC OFFICE BUILDINGS	: 4
Total Assets in AIMS	: 83

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	89,542,000	24,606,000
• Interior Architecture	55,237,000	13,303,000
• Electrical	9,973,000	19,744,000
• Mechanical	22,702,000	39,248,000
• Piers	9,955,000	707,000
• Bulkheads	6,344,000	1,549,000
• Miscellaneous Buildings	360,000	88,000
• Site Enclosure	941,000	
• Site Pavements	5,481,000	460,000
Total	\$200,535,000 *	\$99,704,000
• Importance Code A	101,273,000	28,568,000
• Importance Code B	81,536,000	69,599,000
• Importance Code C	17,367,000	1,449,000
• Importance Code D	360,000	88,000
Total	\$200,535,000 *	\$99,704,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	1,501,000	11,000	181,000	161,000
• Interior Architecture	2,422,000	101,000	110,000	1,280,000
• Electrical	883,000	520,000	422,000	458,000
• Mechanical	2,363,000	863,000	1,367,000	732,000
• Piers	209,000	24,000	5,000	95,000
• Bulkheads	398,000	12,000	9,000	26,000
• Miscellaneous Buildings	38,000	6,000	8,000	6,000
• Site Enclosure	203,000			
• Site Pavements	298,000			
• Elevators/Escalators	163,000	163,000	163,000	163,000
Total	\$8,477,000	\$1,699,000	\$2,266,000	\$2,922,000

** 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.*

DEPARTMENT OF SANITATION - 827

• Importance Code A	1,932,000	166,000	348,000	312,000
• Importance Code B	5,077,000	1,528,000	1,905,000	2,565,000
• Importance Code C	1,429,000		4,000	38,000
• Importance Code D	38,000	6,000	8,000	6,000
Total	\$8,477,000	\$1,699,000	\$2,266,000	\$2,922,000

** 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.

DEPARTMENT OF TRANSPORTATION - 841

Project Type : WATERWAY BRIDGES		
BRIDGES, WATERWAYS	:	41
HIGHWAY BRIDGES AND TUNNELS	:	2
Project Type : FERRIES		
FERRIES/BARGES	:	10
PIERS/BULKHEADS	:	14
FERRY TERMINAL FACILITIES	:	5
MARINAS/DOCKS	:	14
Project Type : ELECTRIC CONTROL		
STREET LIGHTING SYSTEMS	:	1
Project Type : HIGHWAY BRIDGES		
HIGHWAY BRIDGES AND TUNNELS	:	122
Project Type : HIGHWAYS		
PIERS/BULKHEADS	:	10
HIGHWAY FACILITIES	:	45
PIER FACILITIES	:	3
PARKING GARAGES	:	9
STREET AND CITY OWNED ARTERIALS	:	5
Project Type : TRAFFIC		
TRAFFIC SIGNAL SYSTEMS	:	1
Total Assets in AIMS	:	282

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	10,294,000	10,779,000
• Interior Architecture	14,926,000	5,488,000
• Electrical	3,935,000	9,260,000
• Mechanical	3,430,000	20,489,000
• Piers	3,208,000	3,109,000
• Bulkheads	9,697,000	3,470,000
• Bridge Structure	854,210,000	280,691,000
• Ferries	23,875,000	
• Miscellaneous Buildings	400,000	165,000
• Site Enclosure	81,000	
• Marinas/Docks	6,972,000	16,417,000
• Bridge Electrical	18,023,000	11,453,000
• Bridge Mechanical	20,465,000	19,836,000
• Primary Streets	467,650,000	
• Secondary Streets	683,440,000	
• Local Streets	1,861,570,000	
• Arterial Streets	40,000,000	
• Step Streets	32,900,000	
• Traffic Signal System	17,747,000	
• Street Lighting System	32,087,000	
Total	\$4,104,910,000 *	\$381,156,000

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

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

DEPARTMENT OF TRANSPORTATION - 841

• Importance Code A	905,879,000	126,547,000
• Importance Code B	1,249,280,000	123,012,000
• Importance Code C	1,916,452,000	131,433,000
• Importance Code D	33,300,000	165,000
Total	\$4,104,910,000 *	\$381,156,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	1,265,000	183,000	115,000	61,000
• Interior Architecture	963,000	106,000	46,000	97,000
• Electrical	331,000	165,000	127,000	333,000
• Mechanical	540,000	469,000	555,000	495,000
• Piers	530,000	27,000	111,000	46,000
• Bulkheads	330,000	7,000	11,000	29,000
• Bridge Structure	26,478,000	13,234,000	26,044,000	14,330,000
• Ferries	6,825,000	8,965,000	8,105,000	4,470,000
• Miscellaneous Buildings	109,000	16,000	15,000	15,000
• Site Enclosure	21,000			
• Site Pavements	142,000	1,000	13,000	1,000
• Elevators/Escalators	137,000	137,000	137,000	137,000
• Marinas/Docks	416,000	20,000	136,000	62,000
• Bridge Electrical	644,000	64,000	127,000	176,000
• Bridge Mechanical	1,715,000		733,000	
• Primary Streets				
• Secondary Streets				
• Local Streets				
• Arterial Streets				
• Step Streets				
• Traffic Signal System	36,356,000	36,356,000	36,356,000	36,356,000
• Street Lighting System	31,942,000	31,942,000	31,942,000	31,942,000
Total	\$108,746,000	\$91,690,000	\$104,571,000	\$88,548,000
• Importance Code A	95,054,000	90,146,000	96,880,000	86,262,000
• Importance Code B	7,172,000	899,000	7,126,000	1,312,000
• Importance Code C	6,411,000	630,000	550,000	959,000
• Importance Code D	109,000	16,000	15,000	15,000
Total	\$108,746,000	\$91,690,000	\$104,571,000	\$88,548,000

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

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

DEPT. OF PARKS & RECREATION - 846

Project Type : PARKS AND RECREATION

MUSEUM/GALLERY FACILITIES	:	16
PIERS/BULKHEADS	:	140
VEHICLE MAINT./STORAGE FACILITIES	:	4
PARK FACILITIES	:	778
STADIUM FACILITIES	:	5
MARINAS/DOCKS	:	27
WALLS	:	284
PARK BRIDGES	:	101
Total Assets in AIMS	:	1,355

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	77,332,000	25,338,000
• Interior Architecture	36,540,000	15,132,000
• Electrical	7,022,000	26,088,000
• Mechanical	16,206,000	42,108,000
• Piers	5,124,000	11,253,000
• Bulkheads	85,681,000	96,658,000
• Bridge Structure	68,000	
• Parks' Walls	21,739,000	187,000
• Parks' Boardwalks	53,976,000	24,327,000
• Miscellaneous Buildings	46,307,000	14,487,000
• Parks' Water and Sewer Utilities	120,321,000	180,481,000
• Parks' Electrical Utilities	32,356,000	48,533,000
• Site Enclosure	1,097,000	
• Site Pavements	4,902,000	1,104,000
• Parks' Streets and Roads	48,020,000	17,640,000
• Park Bridges	62,751,000	5,207,000
• Marinas/Docks	15,306,000	13,105,000
Total	\$634,748,000 *	\$521,649,000
• Importance Code A	262,776,000	118,833,000
• Importance Code B	236,802,000	358,874,000
• Importance Code C	40,843,000	11,816,000
• Importance Code D	94,327,000	32,127,000
Total	\$634,748,000 *	\$521,649,000

** 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 PARKS & RECREATION - 846

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	6,839,000	402,000	825,000	641,000
• Interior Architecture	7,534,000	396,000	595,000	578,000
• Electrical	2,098,000	1,054,000	660,000	866,000
• Mechanical	2,281,000	941,000	1,299,000	1,312,000
• Piers	708,000	82,000	150,000	208,000
• Bulkheads	2,007,000	238,000	175,000	161,000
• Bridge Structure	51,000			
• Parks' Walls	3,505,000			
• Parks' Boardwalks	150,000			
• Miscellaneous Buildings	1,652,000	905,000	709,000	710,000
• Parks' Water and Sewer Utilities	3,008,000	3,008,000	3,008,000	3,008,000
• Parks' Electrical Utilities	809,000	809,000	809,000	809,000
• Site Enclosure	479,000	18,000	17,000	
• Site Pavements	1,097,000	16,000	125,000	48,000
• Elevators/Escalators	238,000	238,000	238,000	238,000
• Parks' Streets and Roads				
• Park Bridges	4,004,000	7,000	11,000	1,046,000
• Marinas/Docks	803,000	299,000	238,000	443,000
Total	\$37,264,000	\$8,414,000	\$8,860,000	\$10,069,000
• Importance Code A	12,201,000	1,043,000	1,309,000	1,383,000
• Importance Code B	18,037,000	6,394,000	6,594,000	7,263,000
• Importance Code C	5,373,000	71,000	248,000	713,000
• Importance Code D	1,652,000	905,000	709,000	710,000
Total	\$37,264,000	\$8,414,000	\$8,860,000	\$10,069,000

* 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 : REAL PROPERTY

PIERS/BULKHEADS	:	12
CLINICS/LABS. CLASSROOMS	:	1
COURT BUILDINGS	:	24
PUBLIC OFFICE BUILDINGS	:	29

Total Assets in AIMS : 66

Report on Estimated Cost for Repairs, Replacements, Major Maintenance

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
• Exterior Architecture	119,161,000	57,622,000
• Interior Architecture	73,026,000	121,547,000
• Electrical	35,026,000	99,023,000
• Mechanical	96,810,000	289,180,000
• Piers		324,000
• Bulkheads	3,699,000	6,454,000
• Miscellaneous Buildings	152,000	123,000
• Site Enclosure	216,000	
• Site Pavements	2,328,000	
Total	\$330,418,000 *	\$574,274,000
• Importance Code A	123,564,000	66,083,000
• Importance Code B	187,019,000	478,415,000
• Importance Code C	19,683,000	29,652,000
• Importance Code D	152,000	123,000
Total	\$330,418,000 *	\$574,274,000

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
• Exterior Architecture	1,249,000	234,000	206,000	278,000
• Interior Architecture	11,006,000	1,042,000	11,532,000	8,018,000
• Electrical	2,036,000	1,802,000	1,931,000	1,976,000
• Mechanical	6,079,000	4,459,000	6,618,000	4,457,000
• Piers				
• Bulkheads	278,000		3,000	0
• Miscellaneous Buildings	6,000	5,000	6,000	6,000
• Site Enclosure	91,000			
• Site Pavements	352,000			
• Elevators/Escalators	4,938,000	4,938,000	4,938,000	4,938,000
Total	\$26,036,000	\$12,482,000	\$25,234,000	\$19,673,000
• Importance Code A	1,913,000	1,008,000	995,000	1,029,000
• Importance Code B	23,165,000	11,415,000	24,190,000	18,551,000
• Importance Code C	951,000	53,000	44,000	87,000
• Importance Code D	6,000	5,000	6,000	6,000
Total	\$26,036,000	\$12,482,000	\$25,234,000	\$19,673,000

** 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.*

Exhibits A - C

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

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

Exhibit A

Component Importance Codes for Repair, Replacement and Major Maintenance

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
1.1.1	Architecture	Exterior	Exterior Walls	A
1.1.2	Architecture	Exterior	Windows	A
1.1.3	Architecture	Exterior	Parapets	A
1.1.4	Architecture	Exterior	Roof	A
1.1.15	Architecture	Exterior	Soffits	A
1.2.5	Architecture	Interior	Floors	B
1.2.6	Architecture	Interior	Interior Walls	C
1.2.7	Architecture	Interior	Ceiling	B
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	B
1.4.11	Architecture	Site Pavements	Public Sidewalk	B
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	Activity Yard	B
2.1.1	Electrical	Over 600 volts	Service Equipment	A
2.1.2	Electrical	Over 600 volts	Transformers	B
2.1.3	Electrical	Over 600 volts	Switchgear	B
2.1.4	Electrical	Over 600 volts	Feeders	B
2.1.5	Electrical	Over 600 volts	Raceway	B
2.2.1	Electrical	Under 600 Volts	Service Equipment	A
2.2.2	Electrical	Under 600 Volts	Transformers	B
2.2.3	Electrical	Under 600 Volts	Switchgear	B
2.2.5	Electrical	Under 600 Volts	Raceway	B
2.2.6	Electrical	Under 600 Volts	Panelboards	B
2.2.7	Electrical	Under 600 Volts	Wiring	B
2.2.8	Electrical	Under 600 Volts	Motor Controllers	B
2.3.11	Electrical	Ground	Grounding Devices	B
2.4.9	Electrical	Stand-by Power	Transfer Switches	B
2.4.12	Electrical	Stand-by Power	Generators	B
2.4.13	Electrical	Stand-by Power	Batteries	B
2.4.17	Electrical	Stand-by Power	Fuel Storage	B
2.5.10	Electrical	Lighting	Interior Lighting	B
2.5.16	Electrical	Lighting	Egress Lighting	B
2.5.18	Electrical	Lighting	Exterior Lighting	B
2.6.15	Electrical	Lightning Protection	Arresters	B
2.7.19	Electrical	Alarm	Security System	B
2.7.20	Electrical	Alarm	Fire/Smoke Detection	B
3.1.1	Mechanical	Heating	Energy Source	B
3.1.2	Mechanical	Heating	Conversion Equipment	A
3.1.3	Mechanical	Heating	Distribution	B
3.1.4	Mechanical	Heating	Terminal Devices	B
3.2.1	Mechanical	Air Conditioning	Energy Source	B

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
3.2.2	Mechanical	Air Conditioning	Conversion Equipment	B
3.2.3	Mechanical	Air Conditioning	Distribution	B
3.2.4	Mechanical	Air Conditioning	Terminal Devices	B
3.2.5	Mechanical	Air Conditioning	Heat Rejection	B
3.2.24	Mechanical	Air Conditioning	Dehumidifier	B
3.3.3	Mechanical	Ventilation	Distribution	B
3.3.6	Mechanical	Ventilation	Exhaust Fans	B
3.4.7	Mechanical	Plumbing	H/C Water Piping	B
3.4.8	Mechanical	Plumbing	Water Heater	B
3.4.9	Mechanical	Plumbing	HW Heat Exchanger	B
3.4.10	Mechanical	Plumbing	Sanitary Piping	B
3.4.11	Mechanical	Plumbing	Storm Drain Piping	B
3.4.12	Mechanical	Plumbing	Sump Pump(s)	B
3.4.13	Mechanical	Plumbing	Pool Filter/Treatment	B
3.4.15	Mechanical	Plumbing	Sewage Ejector(s)	B
3.4.18	Mechanical	Plumbing	Backflow Preventer	B
3.4.19	Mechanical	Plumbing	Fixtures	B
3.4.25	Mechanical	Plumbing	Instantaneous Hot Water	B
3.5.16	Mechanical	Vertical Transport	Elevators	C
3.5.17	Mechanical	Vertical Transport	Escalators	C
3.6.20	Mechanical	Fire Suppression	Standpipe	B
3.6.21	Mechanical	Fire Suppression	Sprinkler	B
3.6.22	Mechanical	Fire Suppression	Fire Pump	B
3.6.23	Mechanical	Fire Suppression	Chemical System	B
4.1.2	Piers	Structural	Deck	A
4.1.3	Piers	Structural	Deck Surface	C
4.1.5	Piers	Structural	Firewalls	A
4.1.6	Piers	Structural	Pile Caps	A
4.1.7	Piers	Structural	Piles and Bracing	A
4.1.11	Piers	Structural	Coping/Curb	C
4.2.1	Piers	Fender	Buffer	B
4.2.4	Piers	Fender	Facing	B
4.2.8	Piers	Fender	Wales and Chocks	B
4.2.9	Piers	Fender	Piles	B
4.2.13	Piers	Fender	Pile Cluster	B
4.3.3	Piers	Deck Elements	Deck Surface	B
4.3.10	Piers	Deck Elements	Railing	B
4.3.11	Piers	Deck Elements	Coping/Curb	B
4.4.12	Piers	Protective Structure	Donut Fender	A
4.5.14	Piers	Electrical	Conduit	A
4.5.15	Piers	Electrical	Lighting Fixture	A
4.6.16	Piers	Electrical/Mechanical	Power Supply/Bollards	A
4.7.17	Piers	Mechanical/Plumbing	Sanitary Piping	A
4.7.18	Piers	Mechanical/Plumbing	Water Supply	A
5.1.1	Bulkheads	Structural	Relieving Platform Top	A
5.1.3	Bulkheads	Structural	Coping	C
5.1.4	Bulkheads	Structural	Facing	C
5.1.6	Bulkheads	Structural	Gravity Wall	A

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
5.1.7	Bulkheads	Structural	Pile Supported Wall	A
5.1.9	Bulkheads	Structural	Piles and Bracing	A
5.1.10	Bulkheads	Structural	Revetment	C
5.1.11	Bulkheads	Structural	Sheet Piles	A
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
5.2.12	Bulkheads	Backfill	Surface	B
5.3.2	Bulkheads	Fender	Buffer	B
5.3.4	Bulkheads	Fender	Facing	B
5.3.8	Bulkheads	Fender	Piles	B
5.3.14	Bulkheads	Fender	Wales and Chocks	B
5.3.17	Bulkheads	Fender	Pile Cluster	B
5.4.16	Bulkheads	Deck Elements	Railing	B
5.4.18	Bulkheads	Deck Elements	Parapet	B
5.5.20	Bulkheads	Electrical	Conduit	A
5.5.21	Bulkheads	Electrical	Lighting Fixture	A
5.6.22	Bulkheads	Protective Structure	Breakwater	A
6.1.1	Bridge Structure	Abutments	Bridge Seat&pedestals	A
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	B
6.1.17	Bridge Structure	Abutments	Joint with Deck	B
6.1.20	Bridge Structure	Abutments	Mat (scour & erosion)	B
6.1.24	Bridge Structure	Abutments	Pedestals	A
6.1.31	Bridge Structure	Abutments	Stem (breastwall)	B
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)	C
6.2.25	Bridge Structure	Wingwalls	Piles	C
6.2.32	Bridge Structure	Wingwalls	Walls	C
6.3.8	Bridge Structure	Feature Crossed	Bank Protection	C
6.3.20	Bridge Structure	Feature Crossed	Mat (scour & erosion)	A
6.3.44	Bridge Structure	Feature Crossed	Pier Protection	B
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
6.4.52	Bridge Structure	Approaches	Scupper	C
6.5.2	Bridge Structure	Piers	Cap Beam	A
6.5.5	Bridge Structure	Piers	Pier,Columns	B
6.5.6	Bridge Structure	Piers	Stem,Solid Pier	B
6.5.9	Bridge Structure	Piers	Brngs,Ancr Blts,Pads	A

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
6.5.14	Bridge Structure	Piers	Footings	B
6.5.20	Bridge Structure	Piers	Mat (scour & erosion)	A
6.5.24	Bridge Structure	Piers	Pedestals	B
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
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	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	B
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	B
9.1.2	Park Wall	Wall	Wall/Fence	A
9.1.3	Park Wall	Wall	Base	B
10.1.2	Boardwalks	Superstructure	Deck	A
10.1.3	Boardwalks	Superstructure	Railing	B
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	C
10.2.8	Boardwalks	Substructure	Guide Railing	A
12.1.5	Bridge Electrical	Communication Electrical	Communications	B
12.1.18	Bridge Electrical	Communication Electrical	Intercom	B
12.1.38	Bridge Electrical	Communication Electrical	Telephone	B
12.1.50	Bridge Electrical	Communication Electrical	Jack	B
12.2.6	Bridge Electrical	Control System Electrical	Computer	B
12.2.8	Bridge Electrical	Control System Electrical	Control Console	B
12.2.9	Bridge Electrical	Control System Electrical	Control Devices	B
12.2.10	Bridge Electrical	Control System Electrical	Disconnect Switch	B
12.2.22	Bridge Electrical	Control System Electrical	Limit Switch	B
12.2.23	Bridge Electrical	Control System Electrical	Local Starter	B

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
12.3.14	Bridge Electrical	Drive	Grating Motor	B
12.3.25	Bridge Electrical	Drive	Machinery Brake	B
12.3.27	Bridge Electrical	Drive	Motor Brake	B
12.3.33	Bridge Electrical	Drive	Span Lock Motor	B
12.3.47	Bridge Electrical	Drive	Wedge Motor	B
12.4.24	Bridge Electrical	Electric Power	MCC	B
12.4.28	Bridge Electrical	Electric Power	PanelBoard	B
12.4.31	Bridge Electrical	Electric Power	Service Equipment	B
12.4.37	Bridge Electrical	Electric Power	Switchgear	B
12.4.43	Bridge Electrical	Electric Power	Transfer Switch	B
12.4.44	Bridge Electrical	Electric Power	Transformer	B
12.4.51	Bridge Electrical	Electric Power	Heating	B
12.4.54	Bridge Electrical	Electric Power	Dist Equip/Motor Cont.	B
12.5.19	Bridge Electrical	Exterior Lighting	Lighting Contactor	B
12.5.20	Bridge Electrical	Exterior Lighting	Lighting Fixture	B
12.5.30	Bridge Electrical	Exterior Lighting	Pole	B
12.5.34	Bridge Electrical	Exterior Lighting	Spot Lighting	B
12.6.15	Bridge Electrical	Ground/Lightning Protection	Ground Bus	B
12.6.16	Bridge Electrical	Ground/Lightning Protection	Ground Rod	B
12.6.17	Bridge Electrical	Ground/Lightning Protection	Ground Wire	B
12.6.21	Bridge Electrical	Ground/Lightning Protection	Lightning Terminals	B
12.7.11	Bridge Electrical	Interior Lighting	Exit Lighting	B
12.7.20	Bridge Electrical	Interior Lighting	Lighting Fixture	B
12.7.49	Bridge Electrical	Interior Lighting	Wiring Device	B
12.8.1	Bridge Electrical	Navigation Lighting	Air Beacon	B
12.8.12	Bridge Electrical	Navigation Lighting	Fender Lighting	B
12.8.29	Bridge Electrical	Navigation Lighting	Pier Lighting	B
12.8.32	Bridge Electrical	Navigation Lighting	Span Lighting	B
12.9.31	Bridge Electrical	Power Over 600V	Service Equipment	B
12.9.44	Bridge Electrical	Power Over 600V	Transformer	B
12.10.3	Bridge Electrical	Raceway	Box	B
12.10.4	Bridge Electrical	Raceway	Collector Ring	B
12.10.5	Bridge Electrical	Raceway	Communications	B
12.10.7	Bridge Electrical	Raceway	Conduit	B
12.10.35	Bridge Electrical	Raceway	Submarine Ctrl Cables	B
12.10.36	Bridge Electrical	Raceway	Submarine Power Cable	B
12.10.45	Bridge Electrical	Raceway	Trough	B
12.10.46	Bridge Electrical	Raceway	Under Ground Structure	B
12.10.48	Bridge Electrical	Raceway	Wires	B
12.10.52	Bridge Electrical	Raceway	Wiring	B
12.11.26	Bridge Electrical	Span Lock	Motor	B
12.12.13	Bridge Electrical	Stand-by Power	Generator	B
12.12.43	Bridge Electrical	Stand-by Power	Transfer Switch	B
12.13.2	Bridge Electrical	Traffic System Electrical	Barrier Gate Lighting	B
12.13.39	Bridge Electrical	Traffic System Electrical	Traffic Gate Lighting	B
12.13.40	Bridge Electrical	Traffic System Electrical	Traffic Gong	B
12.13.41	Bridge Electrical	Traffic System Electrical	Traffic Sign	B
12.13.42	Bridge Electrical	Traffic System Electrical	Traffic Signal	B

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
12.14.53	Bridge Electrical	Lighting	Lighting Devices	B
13.1.7	Bridge Mechanical	Bascule	Counter Weight	B
13.1.9	Bridge Mechanical	Bascule	Emergency Drive	B
13.1.12	Bridge Mechanical	Bascule	Fuel Tanks	B
13.1.13	Bridge Mechanical	Bascule	Houses	B
13.1.14	Bridge Mechanical	Bascule	Lock Bars	B
13.1.15	Bridge Mechanical	Bascule	Main Drive System	B
13.1.16	Bridge Mechanical	Bascule	Rack	B
13.1.20	Bridge Mechanical	Bascule	Live Load Supports	B
13.1.22	Bridge Mechanical	Bascule	Track	B
13.1.23	Bridge Mechanical	Bascule	Traffic Devices	B
13.1.24	Bridge Mechanical	Bascule	Trunnion	B
13.3.4	Bridge Mechanical	Swing	Center Latch	B
13.3.5	Bridge Mechanical	Swing	Center Lift	B
13.3.6	Bridge Mechanical	Swing	Center Pivot	B
13.3.9	Bridge Mechanical	Swing	Emergency Drive	B
13.3.10	Bridge Mechanical	Swing	End Lift	B
13.3.12	Bridge Mechanical	Swing	Fuel Tanks	B
13.3.13	Bridge Mechanical	Swing	Houses	B
13.3.15	Bridge Mechanical	Swing	Main Drive System	B
13.3.16	Bridge Mechanical	Swing	Rack	B
13.3.20	Bridge Mechanical	Swing	Live Load Supports	B
13.3.23	Bridge Mechanical	Swing	Traffic Devices	B
13.4.1	Bridge Mechanical	Vertical Lift	Buffers	B
13.4.2	Bridge Mechanical	Vertical Lift	CTRWT Ropes&Guides	B
13.4.7	Bridge Mechanical	Vertical Lift	Counter Weight	B
13.4.8	Bridge Mechanical	Vertical Lift	Elevators	B
13.4.9	Bridge Mechanical	Vertical Lift	Emergency Drive	B
13.4.11	Bridge Mechanical	Vertical Lift	End Locks	B
13.4.12	Bridge Mechanical	Vertical Lift	Fuel Tanks	B
13.4.13	Bridge Mechanical	Vertical Lift	Houses	B
13.4.15	Bridge Mechanical	Vertical Lift	Main Drive System	B
13.4.19	Bridge Mechanical	Vertical Lift	Sheaves	B
13.4.20	Bridge Mechanical	Vertical Lift	Live Load Supports	B
13.4.21	Bridge Mechanical	Vertical Lift	Towers	B
13.4.23	Bridge Mechanical	Vertical Lift	Traffic Devices	B
14.1.2	Marinas/Docks	Access Walkways	Deck	A
14.1.5	Marinas/Docks	Access Walkways	Gangways	B
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/Chocks	A
14.2.1	Marinas/Docks	Floating Docks	Anchor Piles	A
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	B
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)	Importance
14.3.3	Marinas/Docks	Launch/Haulout	Fenders	B
14.3.11	Marinas/Docks	Launch/Haulout	Piles and Bracing	A
14.3.12	Marinas/Docks	Launch/Haulout	Ramp	B
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 Attenuator	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/Bollards	A
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	A
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	B
16.1.17	Park Bridges	Abutments	Joint with Deck	B
16.1.20	Park Bridges	Abutments	Mat (scour & erosion)	B
16.1.24	Park Bridges	Abutments	Pedestals	A
16.1.31	Park Bridges	Abutments	Stem (breastwall)	B
16.1.32	Park Bridges	Abutments	Walls	B
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	Feature Crossed	Bank Protection	C
16.3.20	Park Bridges	Feature Crossed	Mat (scour & erosion)	A
16.3.44	Park Bridges	Feature Crossed	Pier Protection	B
16.4.4	Park Bridges	Approaches	Pavement	C
16.4.11	Park Bridges	Approaches	Curbs	A
16.4.13	Park Bridges	Approaches	Embankment	C
16.4.16	Park Bridges	Approaches	Guide Railing	A
16.4.20	Park Bridges	Approaches	Mat (scour & erosion)	A
16.4.23	Park Bridges	Approaches	Pavement Base	C
16.4.28	Park Bridges	Approaches	Railings/Parapets	A
16.4.30	Park Bridges	Approaches	Sidewalks	C
16.4.35	Park Bridges	Approaches	Fascias	C
16.4.52	Park Bridges	Approaches	Scupper	C
16.5.2	Park Bridges	Piers	Cap beam	A

D.S.C.	Discipline (D)	System (S)	Component (C)	Importance
16.5.5	Park Bridges	Piers	Pier,Columns	B
16.5.6	Park Bridges	Piers	Stem,Solid Pier	B
16.5.9	Park Bridges	Piers	Brngs,Ancr Blts,Pads	A
16.5.14	Park Bridges	Piers	Footings	B
16.5.20	Park Bridges	Piers	Mat (scour & erosion)	A
16.5.24	Park Bridges	Piers	Pedestals	B
16.5.25	Park Bridges	Piers	Piles	A
16.6.11	Park Bridges	Deck Elements	Curbs	A
16.6.15	Park Bridges	Deck Elements	Gratings	A
16.6.16	Park Bridges	Deck Elements	Guide Railing	A
16.6.21	Park Bridges	Deck Elements	Median	A
16.6.22	Park Bridges	Deck Elements	Mono Deck Surface	C
16.6.28	Park Bridges	Deck Elements	Railings/Parapets	A
16.6.30	Park Bridges	Deck Elements	Sidewalks	C
16.6.33	Park Bridges	Deck Elements	Wearing Surface	C
16.6.35	Park Bridges	Deck Elements	Fascias	C
16.6.52	Park Bridges	Deck Elements	Scupper	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	B
	Rikers Island	Electrical		A
	Rikers Island	Gas Mains		B
	Rikers Island	Sanitary System		B
	Rikers Island	Underground Steam Tunnel		B
	Rikers Island	Storm System		B
	Rikers Island	Domestic/Fire Water System		B
	Brooklyn Bridge			A
	Manhattan Bridge			A
	Queensboro Bridge			A
	Williamsburg Bridge			A
	Street Lighting System			A
	Traffic Signal System			A
	Streets and Highways	Primary Streets		B
	Streets and Highways	Secondary Streets		B
	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		B
	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 2020	Four East River Bridges • <i>yearly report based on DOT's Ten Year Plan to bring them to a state of good repair</i>
Department of Transportation (DOT) FY 2020	Street and City Owned Arterial System • <i>report produced by DOT</i>
Department of Transportation (DOT) FY 2020	Street Lighting System • <i>agency contract information</i>
Department of Transportation (DOT) FY 2020	Traffic Signal System • <i>agency contract information</i>
Department of Transportation (DOT) FY 2020	Ferries • <i>agency contract information</i>
Parks Department (DPR) FY 2020	Underground Utilities • <i>narrative report submitted on electrical, sewer, and water utilities</i>
Parks Department (DPR) FY 2020	Streets and Roads in Parks • <i>narrative report submitted</i>
Department of Correction (DOC) FY 2020	Rikers Island Underground Utilities • <i>yearly report based on agency information</i>
Fire Department (FDNY) FY 2020	Fireboats • <i>yearly report based on agency information</i>

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Exhibit C
Legend for Individual
Survey Report and
Sample Asset Report

Exhibit C Legend for Individual Survey Report

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

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: ^a	AGENCY ^b – Fiscal Year ^c	Page: ^d
Asset Name: ¹		
Address: ²		
Borough: ³		Agency's Number: ⁸
Program/Asset #: ⁴		Yr Built/Renovated: ⁹
Area Sq Ft: ⁵		Project Type: ¹⁰
Date of Survey: ⁶		Landmark Status: ¹¹
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 District*
 - B – Interior and Exterior Landmark*
 - C – Exterior Landmark in Historical District*
 - D – Interior, Exterior Landmark in Historical District*
 - S – Scenic Landmark*
 - N – Not a Landmark*
- 12. Block Tax Block
- 13. Lot Tax Lot
- 14. BIN Building/Bridge Identification Number

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

1. Discipline: The name of the discipline being evaluated (i.e. architectural, electrical, mechanical). Some agencies may have additional unique assets, which for the purposes of this report are treated as “disciplines” (i.e. piers, bulkheads, bridges).

2. System: The system that is being rated
 Component: The component of the system
 Type: The primary type(s) of material or equipment

3. % of Total: The percentage of the total component that is represented by the type.

4. Fail Date (Years): Indicates the component rating as follows:
Now: The Component has failed or is inoperative at the time of the survey.
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.

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

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

Observations

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

Print Date : 08-Nov-2019

QUEENS PUBLIC LIBRARY - FY 2020

Asset Name : FLUSHING BRANCH LIBRARY
Address : 41-17 MAIN STREET @ KISSENA BLVD.
Borough : QUEENS **Agency's Number** : F
Program / Asset # : QPL0002.000 / 4200 **Yr Built/Renovated** : 1998 /
Area Sq Ft : 58,353 **Project Type** : QUEENS PUBLIC LIBRARY
Date of Survey : 14-Dec-2017 **Landmark Status** : NONE
Areas Surveyed : Basement, Sub Basement, Roof, Floors 1,3
Block : 5043 **Lot** : 11 **BIN** : 4114282

CAPITAL	FY 2021 - 2024	FY 2025 - 2030
Exterior Architecture		\$661,100
Interior Architecture		\$232,000
Electrical		\$537,300
Mechanical	\$50,900	\$2,736,100
Total	\$50,900	\$4,166,500
Importance Code A		\$661,100
Importance Code B	\$50,900	\$3,469,900
Importance Code C		\$35,500
Total	\$50,900	\$4,166,500

EXPENSE	FY 2021	FY 2022	FY 2023	FY 2024
Exterior Architecture	\$6,800	\$23,500		\$9,700
Interior Architecture	\$4,700	\$23,500	\$4,600	\$200
Electrical	\$8,300	\$10,100	\$5,800	\$16,000
Mechanical	\$42,700	\$16,700	\$35,900	\$37,800
Elevators/Escalators	\$7,900	\$7,900	\$7,900	\$7,900
Total	\$70,500	\$81,800	\$54,200	\$71,700
Importance Code A	\$9,700	\$26,400	\$2,900	\$12,800
Importance Code B	\$60,800	\$55,400	\$48,900	\$58,900
Importance Code C			\$2,500	
Total	\$70,500	\$81,800	\$54,200	\$71,700



Note : All component repairs \$ estimates are in current dollars and are not escalated for potential future inflation.
 Estimates are rounded to the nearest hundred dollars.
 Maintenance \$ are aggregated over a ten-year period. Site specific cost escalations are not included.
 ** Replacement cost estimated to be beyond ten years is not included in this report.

QUEENS PUBLIC LIBRARY - 039
FLUSHING BRANCH LIBRARY
Asset # : 4200

Architecture		Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	
Exterior								
Exterior Walls								
Masonry: Brick	20%			LIFE	**	5	\$9,300	
Metal/Glass Curt Wall	45%			LIFE	**	5	\$39,300	
Metal Panel	3%			2049	**	5-10	\$9,600	
Metal Coiling Doors	3%			2042	**	5	\$4,400	
Granite Panels	27%			LIFE	**	5	\$9,400	
Window Wall	2%			2049	**	5	\$3,500	
Windows								
Aluminum	98%			2045	**	5	\$22,200	
Metal Louvers	2%			2038	**	10	\$2,800	
Parapets								
Masonry: Brick	5%			LIFE	**	5	\$300	
Metal/Glass Curt Wall	50%			2049	**	5	\$10,800	
Metal Rail	35%			2042	**	5-10	\$35,100	
Granite Panels	10%	Now	\$6,800	LIFE	**	5	\$600	
<i>Jnt Mortar Miss/Erod, Extent : Moderate, Area Affected : 50%</i>								
<i>Location : Coping</i>								
<i>Caulking Deteriorated, Extent : Moderate, Area Affected : 50%</i>								
<i>Location : Coping</i>								
Roof								
Built-Up (BUR)	90%			2029	\$581,300	10	\$40,500	
Plaza Roof: Stone Panels	8%			2049	**			
Skylight, Plastic	2%			2042	**	1		
Soffits								
Metal Panel	40%			2049	**	5-10		
Stucco Cement	60%			2042	**	5		
Interior								
Floors								
Carpet	30%			2028	\$353,800	3	\$39,300	
Cast in Place Concrete	10%			LIFE	**	5	\$19,100	
Ceramic Tile	5%			2038	**	5	\$4,400	
Granite Panels	30%			LIFE	**	5	\$19,700	
Vinyl Tile	18%			2034	**	3	\$5,900	
Vinyl Tile	2%	Now	\$4,700	2034	**	3	\$700	
<i>Patching Evident, Extent : Moderate, Area Affected : 20%</i>								
<i>Location : Treads On Main Stairs</i>								
<i>Worn/Eroded, Extent : Moderate, Area Affected : 20%</i>								
<i>Location : Treads On Main Stairs</i>								
Wood	5%			2057	**	5	\$8,200	
Interior Walls								
Ceramic Tile	5%			2038	**	5	\$4,900	
Concrete Masonry Unit	15%			LIFE	**	5	\$5,900	
Glass: Single Pane	10%			LIFE	**	5	\$7,400	
Gypsum Board	60%			LIFE	**	5	\$35,500	
Metal Panel	5%			LIFE	**			
Wood	5%			LIFE	**	5	\$19,700	

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QUEENS PUBLIC LIBRARY - 039
FLUSHING BRANCH LIBRARY
Asset # : 4200

Architecture		Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	
Interior								
Ceilings								
AcousTileSusp.Lay-In	10%			2042	**	5	\$8,700	
Exposed Concrete	10%			LIFE	**	5	\$1,400	
Gypsum Board	20%			LIFE	**	5	\$21,800	
Metal Panel	15%			LIFE	**	5	\$16,400	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Corridors</i>								
<i>Explanation : Suspension Panels</i>								
Metal Panel	25%			LIFE	**	5	\$27,300	
Wood	20%			LIFE	**	5	\$152,800	
Site Enclosure								
Retaining Walls								
Masonry: Fieldstone	100%			2049	**			
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Planter Area By Entry</i>								
<i>Explanation : This Is Actually Granite Clad Walls</i>								
Site Pavements								
Public Sidewalk								
Cast in Place Concrete	100%			2034	**			
On-Site Walkways								
Masonry: Granite	100%			LIFE	**			
Electrical								
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	Priority
Under 600 Volts								
Service Equipment								
Fused Disc Sw	50%			2049	**	5	\$100	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Electrical Room</i>								
<i>Explanation : One 4000 Ampere Main Disconnect Switch</i>								
Fused Disc Sw	50%			2049	**	5	\$100	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Electrical Room</i>								
<i>Explanation : One 400 Ampere Main Disconnect Switch For Emergency</i>								
Transformers								
Dry Type	100%			2042	**	5	\$200	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : 3rd Floor Mechanical Room</i>								
<i>Explanation : Two 75 Kilovolt-ampere, 208v Pri - 480/266v Sec</i>								
Switchgear / Switchboard								
Fused Disc Sw	100%			2049	**	5	\$300	
Raceway								
Conduit	100%			2049	**	1		

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QUEENS PUBLIC LIBRARY - 039
FLUSHING BRANCH LIBRARY
Asset # : 4200

Electrical		Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	
Under 600 Volts								
Panelboards								
Fused Disc Sw	10%			2045	**	5	\$100	
Molded Case Bkrs	90%			2045	**	5	\$1,400	
Wiring								
Thermoplastic	100%			2049	**	1		
Motor Controllers								
Locally Mounted	10%			2042	**	5		
Motor Control Center	90%			2042	**	5	\$1,400	
Ground								
Grounding Devices								
Generic	100%			LIFE	**	5	\$900	
Stand-by Power								
Transfer Switches								
Automatic	100%			2042	**	1	\$18,000	
Generators								
Diesel	100%	Now	\$3,900	2032	**	1	\$20,300	
<i>Not in Service, Extent : Moderate, Area Affected : 5%</i>								
<i>Location : Rooftop</i>								
<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>								
<i>Location : Roof</i>								
<i>Explanation : One 230 Kilowatt Does Not Operate Due To Fuel Leak</i>								
Batteries								
Lead/Acid	100%			2022	\$1,600	5	\$2,200	
Fuel Storage								
Day Tank	50%	Now	\$900	2037	**	5	\$2,700	
<i>Other Observation, Extent : Light, Area Affected : 5%</i>								
<i>Location : Roof</i>								
<i>Explanation : 75 Gallon Tank Leaks</i>								
Main Tank	50%			2057	**	5	\$900	
<i>Other Observation, Extent : Light, Area Affected : 95%</i>								
<i>Location : Basement</i>								
<i>Explanation : 3000 Gallon Tank</i>								
Lighting								
Interior Lighting								
Fluorescent	80%			2029	\$494,500	10	\$42,800	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Throughout The Building</i>								
<i>Explanation : T-8 Lamps</i>								
Fluorescent	18%			2034	**	10	\$9,600	
<i>Compact Fluorescent Light, Extent : Light, Area Affected : 100%</i>								
<i>Location : Throughout The Building</i>								
Incandescent	2%			2034	**	2		
Egress Lighting								
Emergency, Service	60%			2034	**	1		
Exit, LED	40%			2057	**	1		

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QUEENS PUBLIC LIBRARY - 039
FLUSHING BRANCH LIBRARY
Asset # : 4200

Electrical		Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	

Lighting

Exterior Lighting Fluorescent	5%			2034	**	10	\$300	
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Compact Fluorescent Light, Extent : Light, Area Affected : 100%
Location : Outside Perimeter

HID	15%			2034	**	10		
No Component	80%							

Alarm

Security System No Component	65%							
Generic	35%			2034	**	1	\$7,600	

Fire/Smoke Detection No Component	70%							
Generic, Digital	30%			2034	**	1-3	\$10,800	

Mechanical		Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	

Heating

Energy Source Interruptible Gas/Dual Fuel	100%			2039	**	1		
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Conversion Equipment Hot Water Boiler	100%			2034	**	1	\$28,900	
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Other Observation, Extent : Light, Area Affected : 100%
Location : Basement Boiler Room
Explanation : 2 Units - Providing Chilled Water Also

Distribution Hot Wtr Piping/Pump	100%			2037	**	4	\$4,300	
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Terminal Devices Air Handler	60%			2029	\$487,800	1	\$21,700	
Convactor/Radiator	30%			2034	**	1	\$5,700	
Unit Heater - Steam	10%			2024	\$20,700	4	\$500	

Air Conditioning

Energy Source Natural Gas	100%			2039	**	1		
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Conversion Equipment Absorption Chiller/Direct Fire	99%			2029	\$1,185,000	1	\$62,500	
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Other Observation, Extent : Light, Area Affected : 100%
Location : Boiler Room, Basement
Explanation : 2 Combination Heater - Chiller Units

Split Unit	1%			2029	\$12,300			
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Distribution CW & CHW Wtr Pipe/Pump	100%			2039	**	4	\$2,900	
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QUEENS PUBLIC LIBRARY - 039
FLUSHING BRANCH LIBRARY
Asset # : 4200

Mechanical		Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	Estimated Cost	
Air Conditioning								
Terminal Devices								
Air Handler/Cool/Ht	100%			2029	\$648,400	1	\$36,100	
Heat Rejection								
Water Cooling Tower	100%	Now	\$21,900	2027	\$219,400	2	\$47,000	
<i>Damaged, Extent : Severe, Area Affected : 10%</i>								
<i>Location : Roof Polyvinyl Chloride Piping</i>								
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Roof</i>								
<i>Explanation : 2 Units</i>								
Ventilation								
Distribution								
Ductwork/Diffusers	100%			LIFE	**	2-5	\$32,500	
Exhaust Fans								
Interior	95%			2029	\$195,400	2	\$1,700	
Roof	5%			2029	\$4,800	2	\$100	
Plumbing								
H/C Water Piping								
Brass/Copper	100%			2039	**	1		
Water Heater								
Electric	100%			2024	\$50,900	4	\$300	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Boiler Room</i>								
<i>Explanation : 2 Units</i>								
Sanitary Piping								
Cast Iron	100%			LIFE	**	1		
Storm Drain Piping								
Cast Iron	100%			LIFE	**	1		
Sewage Ejector(s)								
Electric	100%			2029	\$16,700	4	\$3,500	
Backflow Preventer								
No Component	50%							
<i>Other Observation, Extent : Light, Area Affected : 0%</i>								
<i>Location : Water Service Room</i>								
<i>Explanation : Domestic Service</i>								
Generic	50%			2029	\$7,300	1	\$1,800	
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : 1st Floor Sprinkler Room</i>								
<i>Explanation : Fire Service</i>								
Fixtures								
Generic	100%							
Vertical Transport								
Elevators								
Hydraulic	100%			LIFE	**			
<i>Other Observation, Extent : Light, Area Affected : 100%</i>								
<i>Location : C, M, L, 1st To 3rd Floor</i>								
<i>Explanation : Two Units</i>								
Fire Suppression								

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QUEENS PUBLIC LIBRARY - 039
FLUSHING BRANCH LIBRARY
Asset # : 4200

Mechanical		Current Repair		Future Replacement		Maintenance		Priority
System	Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	
Fire Suppression	Sprinkler							
	Generic	100%			2049	* *	1-2	\$16,400

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