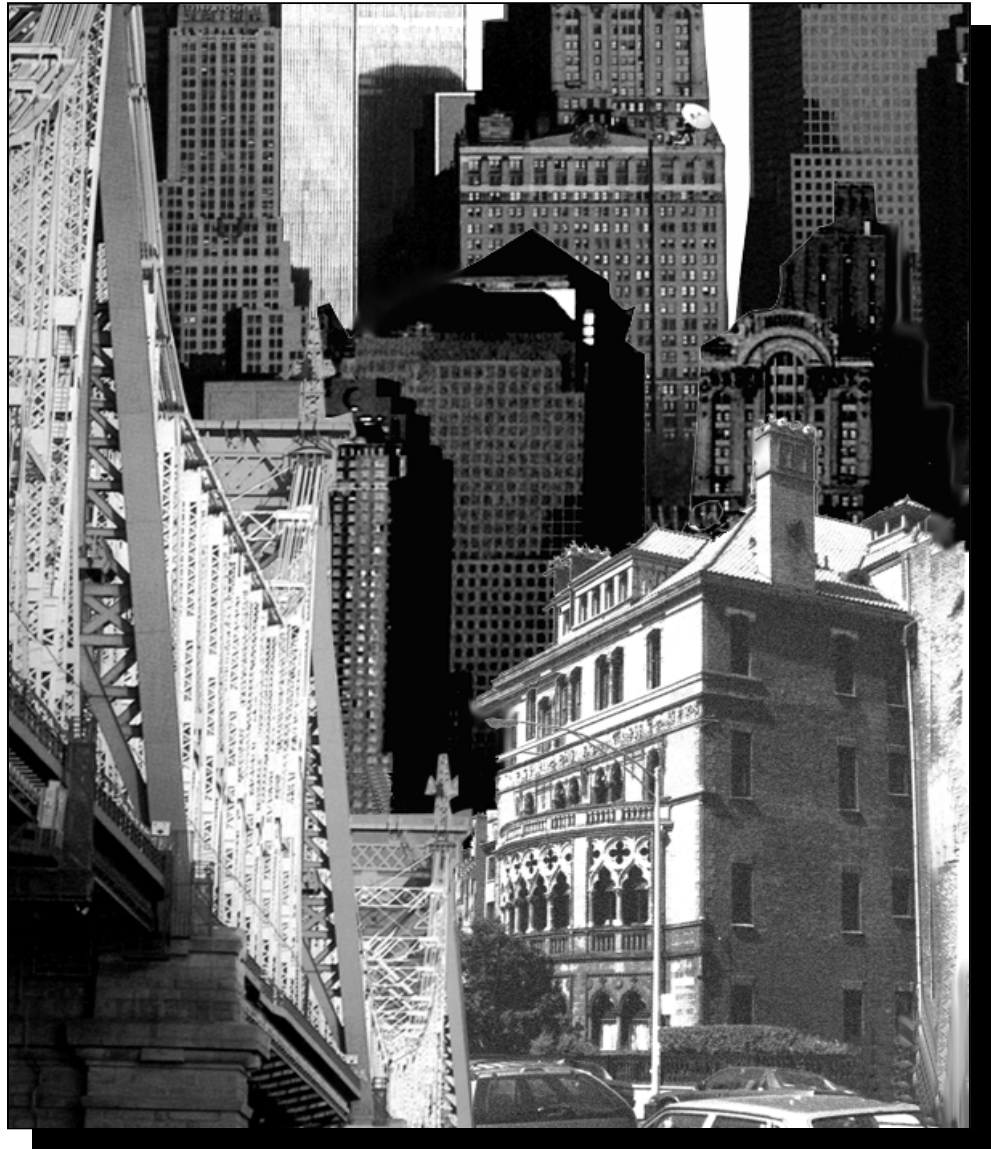




# Asset Information Management System (AIMS) Report

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## *Executive Summary*





THE CITY OF NEW YORK  
OFFICE OF THE MAYOR  
NEW YORK, NY 10007

**MEMORANDUM**

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

**FROM:** Bill de Blasio, Mayor *Bill de Blasio*

**DATE:** December 9, 2016

**SUBJECT:** Asset Information Management System (AIMS) Report

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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 2017. The Charter requires each agency head to submit to the Mayor a condition assessment and maintenance schedule necessary to preserve the structural integrity for each of their capital assets with a replacement cost of at least \$10 million and a useful life in excess of ten years. The summary that I am transmitting relates to those maintenance schedules. Detailed information relating to each specific asset is available for review at the Office of Management and Budget.

Included in the summary is a description of the latest methodology used to compile the condition assessment and maintenance schedules. This summary, together with the details of the maintenance schedules and condition assessments, provides the City with a comprehensive assessment of the condition of its major assets, the projected costs necessary to restore these assets to a state of good repair and schedules detailing the maintenance required to maintain the assets' structural integrity. It does not address priorities or relative importance of any particular asset. A separate document will be published in the Spring of 2017 comparing total funding recommended in the Fiscal Year 2017 report with the agencies' planned expense program for 2018 and capital program for 2018 through 2021.



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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 2017

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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.

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## Report Context and Items Excluded from Study

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

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



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- 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.

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### **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**

<b>New York, Brooklyn, Queens Public Libraries</b>		<b>Department of Small Business Services</b>	
Libraries	103	Shelters	1
Public Office Buildings	1	Museum/Gallery Facilities	3
<b>Department of Education</b>		Terminals/Markets	54
Primary Schools	808	Piers/Bulkheads	178
Intermediate/Junior High Schools	201	Parking Garages	1
High Schools	179	Ferry Terminal Facilities	2
Administrative Buildings	10	Marinas/Docks	5
Piers/Bulkheads	2	<b>Department of Health &amp; Mental Hygiene</b>	
<b>City University of New York</b>		Administrative Buildings	1
Community College Buildings	84	Clinics/Labs. Classrooms	26
Piers/Bulkheads	3	Vehicle Maint./Storage Facilities	1
Parking Garages	1	Animal Shelters	3
<b>Police Department</b>		<b>Health and Hospitals Corporation</b>	
Precinct Houses	80	Hospital Buildings	92
Police Buildings Non-Precinct	71	<b>Department of Sanitation</b>	
Piers/Bulkheads	3	Piers/Bulkheads	27
Marinas/Docks	4	Transfer Stations	5
<b>Fire Department</b>		Vehicle Maint./Storage Facilities	41
Fire Department Buildings	72	Fresh Kills Facilities	16
Piers/Bulkheads	3	Public Office Buildings	3
Firehouses	56	<b>Department of Transportation</b>	
Marinas/Docks	1	Bridge/Waterways	41
Fireboats	5	Highway Bridges and Tunnels	89
<b>Administration for Children's Services</b>		Highway Facilities	45
Shelters	2	Streets and Arterials (miles)	6,500
Non-Shelters	2	Street Lighting Systems	1
Day Care Centers	5	Traffic Signal Systems	1
<b>Department of Homeless Services</b>		Ferry Terminal Facilities	5
Shelters	61	Piers/Bulkheads	26
Non-Shelters	2	Ferries/Barges	8
<b>Department of Correction</b>		Pier Facilities	3
Rikers Island Facilities/Utilities	41	Parking Garages	9
Correction Facilities	5	Marinas/Docks	15
Piers/Bulkheads	2	<b>Department of Parks and Recreation</b>	
Marinas/Docks	1	Museum/Gallery Facilities	16
<b>Human Resources Administration</b>		Piers/Bulkheads	137
Shelters	8	Vehicle Maint./Storage Facilities	4
Non-Shelters	8	Park Facilities	763
<b>Department for the Aging</b>		Stadium Facilities	5
Senior Center	13	Marinas/Docks	27
<b>Department of Cultural Affairs</b>		Walls	276
Museum/Gallery Facilities	64	Park Bridges	97
Cultural Facilities	229	<b>Dept. of Citywide Administrative Services</b>	
<b>Division of Youth &amp; Family Justice</b>		Piers/Bulkheads	10
Juvenile Justice Buildings	4	Court Buildings	23
<b>Taxi &amp; Limousine Commission</b>		Public Office Buildings	33
Vehicle Maint./Storage Facilities	1		

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Citywide Summary  
Schedule

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## CITYWIDE SUMMARY SCHEDULE BY AGENCY

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

	CAPITAL FY 2018 - 2021	EXPENSE FY 2018
• NEW YORK PUBLIC LIBRARY	24,888,000	7,539,000
• BROOKLYN PUBLIC LIBRARY	17,972,000	2,426,000
• QUEENS PUBLIC LIBRARY	5,235,000	1,641,000
• DEPARTMENT OF EDUCATION	2,078,243,000	154,407,000
• CITY UNIVERSITY OF NEW YORK	100,847,000	13,471,000
• POLICE DEPARTMENT	104,944,000	13,650,000
• FIRE DEPARTMENT	25,570,000	10,964,000
• ADMIN. FOR CHILDREN'S SERVICES	683,000	832,000
• DEPT. OF HOMELESS SERVICES	78,976,000	6,140,000
• DEPARTMENT OF CORRECTION	473,938,000	7,034,000
• HUMAN RESOURCES ADMINISTRATION	18,945,000	2,312,000
• DEPARTMENT FOR THE AGING	3,262,000	1,310,000
• DEPARTMENT OF CULTURAL AFFAIRS	133,904,000	20,630,000
• DIV. OF YOUTH & FAMILY JUSTICE	4,760,000	877,000
• TAXI & LIMOUSINE COMMISSION	1,717,000	105,000
• DEPT. OF SMALL BUSINESS SERV.	254,634,000	10,607,000
• DEPT. OF HEALTH & MENTAL HYGIENE	25,497,000	3,954,000
• HEALTH AND HOSPITALS CORP.	318,970,000	17,290,000
• DEPARTMENT OF SANITATION	155,197,000	7,583,000
• DEPARTMENT OF TRANSPORTATION		
Bridges	782,042,000	32,169,000
Facilities & Ferries	76,131,000	11,755,000
Street & Traffic Lighting	49,136,000	65,722,000
Streets & Highways	2,394,780,000	
• DEPT. OF PARKS & RECREATION	589,098,000	34,310,000
• DEPT. OF CITYWIDE ADMIN. SERV.	254,933,000	24,710,000
<b>Total</b>	<b>\$7,974,301,000*</b>	<b>\$451,436,000</b>

\* 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 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	1,465,097,000	846,923,000
• Interior Architecture	1,205,843,000	1,126,012,000
• Electrical	834,078,000	1,847,263,000
• Mechanical	547,980,000	1,906,953,000
• Piers	47,017,000	30,657,000
• Bulkheads	121,942,000	141,155,000
• Bridge Structure	757,950,000	208,129,000
• Ferries	29,100,000	
• Vessels		
• Parks' Walls	42,624,000	452,000
• Parks' Boardwalks	56,693,000	59,463,000
• Miscellaneous Buildings	57,573,000	23,100,000
• Parks' Water and Sewer Utilities	107,389,000	161,084,000
• Parks' Electrical Utilities	31,815,000	47,723,000
• Elevators/Escalators		
• Parks' Streets and Roads	53,682,000	17,248,000
• Rikers Island Utilities	56,000,000	
• Park Bridges	62,099,000	7,809,000
• Marinas/Docks	29,410,000	78,405,000
• Bridge Electrical	10,116,000	15,499,000
• Bridge Mechanical	13,976,000	17,618,000
• Primary Streets	381,480,000	
• Secondary Streets	552,440,000	
• Local Streets	1,379,780,000	
• Arterial Streets	40,000,000	
• Step Streets	41,080,000	
• Traffic Signal System	12,899,000	
• Street Lighting System	36,237,000	
<b>Total</b>	<b>\$7,974,301,000 *</b>	<b>\$6,535,493,000</b>
• Importance Code A	2,568,561,000	1,328,183,000
• Importance Code B	3,579,203,000	4,881,159,000
• Importance Code C	1,674,201,000	285,803,000
• Importance Code D	152,335,000	40,348,000
<b>Total</b>	<b>\$7,974,301,000 *</b>	<b>\$6,535,493,000</b>

\* 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 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	62,577,000	9,562,000	9,754,000	9,330,000
• Interior Architecture	113,623,000	22,345,000	25,871,000	31,602,000
• Electrical	33,363,000	26,308,000	25,163,000	24,992,000
• Mechanical	86,418,000	57,188,000	78,018,000	59,792,000
• Piers	3,189,000	311,000	495,000	394,000
• Bulkheads	7,794,000	299,000	346,000	536,000
• Bridge Structure	30,103,000	13,864,000	25,472,000	14,799,000
• Ferries	8,065,000	8,065,000	8,065,000	8,065,000
• Vessels	592,000	609,000	1,708,000	644,000
• Parks' Walls	3,600,000			
• Parks' Boardwalks	110,000			
• Miscellaneous Buildings	3,726,000	1,012,000	1,367,000	1,179,000
• Parks' Water and Sewer Utilities	2,685,000	2,685,000	2,685,000	2,685,000
• Parks' Electrical Utilities	795,000	795,000	795,000	795,000
• Elevators/Escalators	18,472,000	18,412,000	18,412,000	18,412,000
• Parks' Streets and Roads				
• Rikers Island Utilities	2,300,000	2,300,000	2,300,000	2,300,000
• Park Bridges	4,568,000	5,000	29,000	1,248,000
• Marinas/Docks	1,668,000	358,000	652,000	708,000
• Bridge Electrical	623,000	66,000	80,000	123,000
• Bridge Mechanical	1,444,000	162,000	574,000	162,000
• Primary Streets				
• Secondary Streets				
• Local Streets				
• Arterial Streets				
• Step Streets				
• Traffic Signal System	42,322,000	42,322,000	42,322,000	42,322,000
• Street Lighting System	23,400,000	23,400,000	23,400,000	23,400,000
<b>Total</b>	<b>\$451,436,000</b>	<b>\$230,067,000</b>	<b>\$267,509,000</b>	<b>\$243,488,000</b>
• Importance Code A	181,194,000	113,579,000	121,651,000	114,478,000
• Importance Code B	226,424,000	113,231,000	141,861,000	125,824,000
• Importance Code C	40,093,000	2,245,000	2,631,000	2,007,000
• Importance Code D	3,726,000	1,012,000	1,367,000	1,179,000
<b>Total</b>	<b>\$451,436,000</b>	<b>\$230,067,000</b>	<b>\$267,509,000</b>	<b>\$243,488,000</b>

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Report Schedules  
by Agency

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# NEW YORK PUBLIC LIBRARY - 035

**Project Type : NEW YORK PUBLIC LIBRARY**

LIBRARIES	:	54
PUBLIC OFFICE BUILDINGS	:	1
<b>Total Assets in AIMS</b>	<b>:</b>	<b>55</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	13,213,000	5,382,000
• Interior Architecture	6,307,000	6,641,000
• Electrical	1,607,000	15,471,000
• Mechanical	3,760,000	20,542,000
<b>Total</b>	<b>\$24,888,000 *</b>	<b>\$48,036,000</b>
• Importance Code A	13,406,000	5,618,000
• Importance Code B	9,734,000	41,302,000
• Importance Code C	1,748,000	1,116,000
<b>Total</b>	<b>\$24,888,000 *</b>	<b>\$48,036,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	2,152,000	141,000	223,000	36,000
• Interior Architecture	3,258,000	150,000	803,000	430,000
• Electrical	620,000	484,000	217,000	154,000
• Mechanical	1,202,000	703,000	833,000	621,000
• Elevators/Escalators	306,000	306,000	306,000	306,000
<b>Total</b>	<b>\$7,539,000</b>	<b>\$1,784,000</b>	<b>\$2,382,000</b>	<b>\$1,548,000</b>
• Importance Code A	2,313,000	231,000	307,000	125,000
• Importance Code B	4,472,000	1,543,000	2,040,000	1,417,000
• Importance Code C	754,000	10,000	35,000	6,000
• Importance Code D				
<b>Total</b>	<b>\$7,539,000</b>	<b>\$1,784,000</b>	<b>\$2,382,000</b>	<b>\$1,548,000</b>

*\* 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 : 32

Total Assets in AIMS : 32

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	11,810,000	1,855,000
• Interior Architecture	3,790,000	2,957,000
• Electrical	1,837,000	8,228,000
• Mechanical	534,000	8,458,000
<b>Total</b>	<b>\$17,972,000 *</b>	<b>\$21,499,000</b>
• Importance Code A	11,810,000	2,032,000
• Importance Code B	5,250,000	18,951,000
• Importance Code C	911,000	516,000
<b>Total</b>	<b>\$17,972,000 *</b>	<b>\$21,499,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	980,000	102,000	83,000	26,000
• Interior Architecture	692,000	24,000	577,000	87,000
• Electrical	299,000	327,000	82,000	78,000
• Mechanical	320,000	305,000	351,000	221,000
• Elevators/Escalators	136,000	136,000	136,000	136,000
<b>Total</b>	<b>\$2,426,000</b>	<b>\$895,000</b>	<b>\$1,228,000</b>	<b>\$548,000</b>
• Importance Code A	1,054,000	164,000	144,000	86,000
• Importance Code B	1,124,000	727,000	1,083,000	461,000
• Importance Code C	247,000	3,000	1,000	1,000
• Importance Code D				
<b>Total</b>	<b>\$2,426,000</b>	<b>\$895,000</b>	<b>\$1,228,000</b>	<b>\$548,000</b>

\* 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 : 17  
 Total Assets in AIMS : 17

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	2,748,000	1,553,000
• Interior Architecture	1,345,000	1,092,000
• Electrical	455,000	3,710,000
• Mechanical	687,000	3,429,000
<b>Total</b>	<b>\$5,235,000 *</b>	<b>\$9,784,000</b>
• Importance Code A	2,748,000	1,553,000
• Importance Code B	2,182,000	8,107,000
• Importance Code C	305,000	125,000
<b>Total</b>	<b>\$5,235,000 *</b>	<b>\$9,784,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	436,000	50,000	52,000	27,000
• Interior Architecture	691,000	72,000	192,000	140,000
• Electrical	198,000	73,000	46,000	46,000
• Mechanical	253,000	204,000	261,000	167,000
• Elevators/Escalators	63,000	63,000	63,000	63,000
<b>Total</b>	<b>\$1,641,000</b>	<b>\$463,000</b>	<b>\$613,000</b>	<b>\$442,000</b>
• Importance Code A	466,000	80,000	81,000	56,000
• Importance Code B	1,044,000	381,000	533,000	385,000
• Importance Code C	131,000	2,000		2,000
• Importance Code D				
<b>Total</b>	<b>\$1,641,000</b>	<b>\$463,000</b>	<b>\$613,000</b>	<b>\$442,000</b>

*\* 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

<b>Project Type : EDUCATION</b>	
PRIMARY SCHOOLS	: 808
INTERMEDIATE/JUNIOR HIGH SCHOOLS	: 201
HIGH SCHOOLS	: 179
ADMINISTRATIVE BUILDINGS	: 10
PIERS/BULKHEADS	: 2
<b>Total Assets in AIMS</b>	<b>: 1,200</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	484,273,000	346,585,000
• Interior Architecture	766,093,000	589,648,000
• Electrical	557,692,000	957,727,000
• Mechanical	268,982,000	1,153,534,000
• Bulkheads	1,203,000	189,000
<b>Total</b>	<b>\$2,078,243,000 *</b>	<b>\$3,047,684,000</b>
• Importance Code A	533,192,000	516,137,000
• Importance Code B	1,417,470,000	2,466,045,000
• Importance Code C	127,581,000	65,502,000
<b>Total</b>	<b>\$2,078,243,000 *</b>	<b>\$3,047,684,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	26,837,000	5,619,000	5,739,000	5,560,000
• Interior Architecture	56,621,000	10,543,000	11,070,000	15,405,000
• Electrical	16,211,000	13,288,000	13,077,000	12,565,000
• Mechanical	49,729,000	32,467,000	44,069,000	33,373,000
• Bulkheads	52,000	0		14,000
• Elevators/Escalators	4,957,000	4,933,000	4,933,000	4,933,000
<b>Total</b>	<b>\$154,407,000</b>	<b>\$66,851,000</b>	<b>\$78,887,000</b>	<b>\$71,850,000</b>
• Importance Code A	37,221,000	16,961,000	17,128,000	16,907,000
• Importance Code B	97,506,000	48,620,000	60,517,000	54,388,000
• Importance Code C	19,680,000	1,269,000	1,242,000	555,000
• Importance Code D				
<b>Total</b>	<b>\$154,407,000</b>	<b>\$66,851,000</b>	<b>\$78,887,000</b>	<b>\$71,850,000</b>

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

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

# CITY UNIVERSITY OF NEW YORK - 042

<b>Project Type : CITY UNIVERSITY OF NEW YORK</b>	
COMMUNITY COLLEGE BUILDINGS	: 84
PIERS/BULKHEADS	: 3
PARKING GARAGES	: 1
<b>Total Assets in AIMS</b>	<b>: 88</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	40,943,000	25,706,000
• Interior Architecture	19,095,000	22,841,000
• Electrical	13,261,000	66,050,000
• Mechanical	26,949,000	92,862,000
• Bulkheads	412,000	1,077,000
• Miscellaneous Buildings	186,000	161,000
<b>Total</b>	<b>\$100,847,000 *</b>	<b>\$208,698,000</b>
• Importance Code A	45,791,000	28,251,000
• Importance Code B	53,052,000	177,135,000
• Importance Code C	1,817,000	3,150,000
• Importance Code D	186,000	161,000
<b>Total</b>	<b>\$100,847,000 *</b>	<b>\$208,698,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	2,187,000	411,000	453,000	72,000
• Interior Architecture	5,583,000	385,000	2,993,000	1,125,000
• Electrical	1,214,000	858,000	964,000	661,000
• Mechanical	3,659,000	1,894,000	3,159,000	1,629,000
• Bulkheads	18,000	10,000		
• Miscellaneous Buildings	33,000	11,000	10,000	9,000
• Elevators/Escalators	776,000	776,000	776,000	776,000
<b>Total</b>	<b>\$13,471,000</b>	<b>\$4,344,000</b>	<b>\$8,356,000</b>	<b>\$4,272,000</b>
• Importance Code A	2,605,000	712,000	824,000	358,000
• Importance Code B	9,820,000	3,577,000	7,497,000	3,896,000
• Importance Code C	1,014,000	44,000	25,000	9,000
• Importance Code D	33,000	11,000	10,000	9,000
<b>Total</b>	<b>\$13,471,000</b>	<b>\$4,344,000</b>	<b>\$8,356,000</b>	<b>\$4,272,000</b>

*\* 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 2018 - 2021		FY 2022 - 2027	
• Exterior Architecture	39,075,000		18,619,000	
• Interior Architecture	30,097,000		27,173,000	
• Electrical	13,407,000		51,426,000	
• Mechanical	16,428,000		57,735,000	
• Piers	2,067,000		242,000	
• Bulkheads			570,000	
• Miscellaneous Buildings	3,486,000		2,492,000	
• Marinas/Docks	384,000		1,650,000	
<b>Total</b>	<b>\$104,944,000 *</b>		<b>\$159,908,000</b>	
• Importance Code A	40,388,000		22,157,000	
• Importance Code B	56,501,000		132,984,000	
• Importance Code C	4,569,000		2,275,000	
• Importance Code D	3,486,000		2,492,000	
<b>Total</b>	<b>\$104,944,000 *</b>		<b>\$159,908,000</b>	

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	3,649,000	357,000	374,000	324,000
• Interior Architecture	4,345,000	358,000	601,000	535,000
• Electrical	1,457,000	1,051,000	890,000	1,016,000
• Mechanical	3,322,000	2,221,000	3,085,000	2,290,000
• Piers	18,000			
• Bulkheads	59,000		4,000	
• Miscellaneous Buildings	283,000	137,000	114,000	121,000
• Elevators/Escalators	428,000	428,000	428,000	428,000
• Marinas/Docks	89,000	24,000	122,000	160,000
<b>Total</b>	<b>\$13,650,000</b>	<b>\$4,576,000</b>	<b>\$5,619,000</b>	<b>\$4,874,000</b>
• Importance Code A	4,079,000	662,000	773,000	739,000
• Importance Code B	7,734,000	3,715,000	4,700,000	4,009,000
• Importance Code C	1,555,000	62,000	31,000	4,000
• Importance Code D	283,000	137,000	114,000	121,000
<b>Total</b>	<b>\$13,650,000</b>	<b>\$4,576,000</b>	<b>\$5,619,000</b>	<b>\$4,874,000</b>

*\* 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	:	72
PIERS/BULKHEADS	:	3
FIREHOUSES	:	56
MARINAS/DOCKS	:	1
FIREBOATS	:	5

**Total Assets in AIMS : 137**

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	14,860,000	5,216,000
• Interior Architecture	5,200,000	2,656,000
• Electrical	2,088,000	5,134,000
• Mechanical	886,000	3,390,000
• Piers	752,000	102,000
• Bulkheads	53,000	
• Vessels		
• Miscellaneous Buildings	1,619,000	615,000
• Marinas/Docks	113,000	309,000
<b>Total</b>	<b>\$25,570,000 *</b>	<b>\$17,423,000</b>
• Importance Code A	15,609,000	5,889,000
• Importance Code B	6,976,000	10,677,000
• Importance Code C	1,366,000	242,000
• Importance Code D	1,619,000	615,000
<b>Total</b>	<b>\$25,570,000 *</b>	<b>\$17,423,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	3,126,000	355,000	140,000	180,000
• Interior Architecture	4,762,000	232,000	149,000	194,000
• Electrical	814,000	467,000	199,000	627,000
• Mechanical	1,379,000	604,000	817,000	997,000
• Piers	97,000	7,000	0	5,000
• Bulkheads	28,000		0	0
• Vessels	592,000	609,000	1,708,000	644,000
• Miscellaneous Buildings	104,000	65,000	49,000	60,000
• Elevators/Escalators	61,000	25,000	25,000	25,000
• Marinas/Docks	0	6,000	0	0
<b>Total</b>	<b>\$10,964,000</b>	<b>\$2,371,000</b>	<b>\$3,088,000</b>	<b>\$2,733,000</b>

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

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## FIRE DEPARTMENT - 057

• Importance Code A	3,956,000	1,056,000	1,936,000	922,000
• Importance Code B	5,196,000	1,235,000	1,066,000	1,738,000
• Importance Code C	1,707,000	15,000	37,000	12,000
• Importance Code D	104,000	65,000	49,000	60,000
<b>Total</b>	<b>\$10,964,000</b>	<b>\$2,371,000</b>	<b>\$3,088,000</b>	<b>\$2,733,000</b>

*\* 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

<b>Project Type : CHILDREN'S SERVICES</b>	
SHELTERS	: 2
NON-SHELTERS	: 2
DAY CARE CENTERS	: 5
<b>Total Assets in AIMS</b>	<b>: 9</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	376,000	263,000
• Interior Architecture	153,000	452,000
• Electrical	153,000	379,000
• Mechanical		1,062,000
<b>Total</b>	<b>\$683,000 *</b>	<b>\$2,156,000</b>
• Importance Code A	376,000	346,000
• Importance Code B	306,000	1,674,000
• Importance Code C		137,000
<b>Total</b>	<b>\$683,000 *</b>	<b>\$2,156,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	306,000	8,000	17,000	44,000
• Interior Architecture	193,000	42,000	7,000	52,000
• Electrical	46,000	60,000	62,000	53,000
• Mechanical	237,000	71,000	212,000	89,000
• Elevators/Escalators	49,000	49,000	49,000	49,000
<b>Total</b>	<b>\$832,000</b>	<b>\$231,000</b>	<b>\$346,000</b>	<b>\$287,000</b>
• Importance Code A	353,000	17,000	29,000	53,000
• Importance Code B	431,000	211,000	315,000	234,000
• Importance Code C	47,000	3,000	3,000	
• Importance Code D				
<b>Total</b>	<b>\$832,000</b>	<b>\$231,000</b>	<b>\$346,000</b>	<b>\$287,000</b>

*\* 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	:	61
NON-SHELTERS	:	2
<b>Total Assets in AIMS</b>	<b>:</b>	<b>63</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	36,232,000	13,228,000
• Interior Architecture	26,438,000	24,972,000
• Electrical	11,425,000	66,502,000
• Mechanical	4,881,000	31,210,000
<b>Total</b>	<b>\$78,976,000 *</b>	<b>\$135,911,000</b>
• Importance Code A	36,924,000	14,669,000
• Importance Code B	35,763,000	118,570,000
• Importance Code C	6,289,000	2,673,000
<b>Total</b>	<b>\$78,976,000 *</b>	<b>\$135,911,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	1,501,000	261,000	163,000	272,000
• Interior Architecture	2,104,000	207,000	359,000	576,000
• Electrical	620,000	538,000	632,000	487,000
• Mechanical	1,530,000	1,081,000	1,650,000	1,159,000
• Elevators/Escalators	385,000	385,000	385,000	385,000
<b>Total</b>	<b>\$6,140,000</b>	<b>\$2,472,000</b>	<b>\$3,188,000</b>	<b>\$2,878,000</b>
• Importance Code A	1,797,000	545,000	461,000	554,000
• Importance Code B	3,636,000	1,896,000	2,687,000	2,307,000
• Importance Code C	707,000	31,000	40,000	17,000
• Importance Code D				
<b>Total</b>	<b>\$6,140,000</b>	<b>\$2,472,000</b>	<b>\$3,188,000</b>	<b>\$2,878,000</b>

*\* 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 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	227,293,000	179,204,000
• Interior Architecture	62,925,000	49,066,000
• Electrical	75,968,000	130,779,000
• Mechanical	43,236,000	58,694,000
• Piers	1,545,000	83,000
• Bulkheads	3,718,000	1,687,000
• Rikers Island Utilities	56,000,000	
• Marinas/Docks	3,252,000	860,000
<b>Total</b>	<b>\$473,938,000 *</b>	<b>\$420,373,000</b>
• Importance Code A	247,844,000	185,897,000
• Importance Code B	209,127,000	231,212,000
• Importance Code C	16,967,000	3,264,000
<b>Total</b>	<b>\$473,938,000 *</b>	<b>\$420,373,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	558,000	68,000	15,000	144,000
• Interior Architecture	1,047,000	188,000	91,000	465,000
• Electrical	908,000	815,000	767,000	981,000
• Mechanical	1,262,000	1,010,000	1,518,000	1,327,000
• Piers	237,000		11,000	16,000
• Bulkheads	140,000		35,000	17,000
• 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	68,000	4,000	12,000	6,000
<b>Total</b>	<b>\$7,034,000</b>	<b>\$4,899,000</b>	<b>\$5,263,000</b>	<b>\$5,770,000</b>
• Importance Code A	1,408,000	653,000	608,000	713,000
• Importance Code B	5,236,000	4,196,000	4,615,000	5,052,000
• Importance Code C	390,000	50,000	40,000	6,000
• Importance Code D				
<b>Total</b>	<b>\$7,034,000</b>	<b>\$4,899,000</b>	<b>\$5,263,000</b>	<b>\$5,770,000</b>

*\* 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	:	8
NON-SHELTERS	:	8
<b>Total Assets in AIMS</b>	<b>:</b>	<b>16</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	8,707,000	2,302,000
• Interior Architecture	5,419,000	4,287,000
• Electrical	2,918,000	7,124,000
• Mechanical	1,901,000	5,806,000
<b>Total</b>	<b>\$18,945,000 *</b>	<b>\$19,519,000</b>
• Importance Code A	9,302,000	2,618,000
• Importance Code B	8,014,000	15,250,000
• Importance Code C	1,628,000	1,652,000
<b>Total</b>	<b>\$18,945,000 *</b>	<b>\$19,519,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	1,035,000	21,000	13,000	42,000
• Interior Architecture	855,000	33,000	142,000	79,000
• Electrical	102,000	132,000	71,000	70,000
• Mechanical	278,000	292,000	241,000	140,000
• Elevators/Escalators	41,000	41,000	41,000	41,000
<b>Total</b>	<b>\$2,312,000</b>	<b>\$519,000</b>	<b>\$508,000</b>	<b>\$372,000</b>
• Importance Code A	1,078,000	69,000	60,000	89,000
• Importance Code B	939,000	444,000	448,000	277,000
• Importance Code C	294,000	6,000		6,000
• Importance Code D				
<b>Total</b>	<b>\$2,312,000</b>	<b>\$519,000</b>	<b>\$508,000</b>	<b>\$372,000</b>

*\* 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 FOR THE AGING - 125

**Project Type : AGING**  
 SENIOR CENTER : 13  
**Total Assets in AIMS : 13**

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	1,374,000	354,000
• Interior Architecture	469,000	326,000
• Electrical	684,000	1,060,000
• Mechanical	84,000	1,111,000
• Miscellaneous Buildings	651,000	353,000
<b>Total</b>	<b>\$3,262,000 *</b>	<b>\$3,204,000</b>
• Importance Code A	1,374,000	500,000
• Importance Code B	1,044,000	2,352,000
• Importance Code C	194,000	
• Importance Code D	651,000	353,000
<b>Total</b>	<b>\$3,262,000 *</b>	<b>\$3,204,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	196,000	3,000		1,000
• Interior Architecture	880,000	12,000	16,000	39,000
• Electrical	84,000	89,000	31,000	127,000
• Mechanical	86,000	132,000	99,000	75,000
• Miscellaneous Buildings	21,000	22,000	24,000	32,000
• Elevators/Escalators	42,000	42,000	42,000	42,000
<b>Total</b>	<b>\$1,310,000</b>	<b>\$300,000</b>	<b>\$212,000</b>	<b>\$317,000</b>
• Importance Code A	212,000	13,000	9,000	12,000
• Importance Code B	929,000	263,000	177,000	273,000
• Importance Code C	148,000	2,000	2,000	
• Importance Code D	21,000	22,000	24,000	32,000
<b>Total</b>	<b>\$1,310,000</b>	<b>\$300,000</b>	<b>\$212,000</b>	<b>\$317,000</b>

*\* 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

<b>Project Type : CULTURAL AFFAIRS</b>	
MUSEUM/GALLERY FACILITIES	: 64
CULTURAL FACILITIES	: 229
<b>Total Assets in AIMS</b>	<b>: 293</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	73,982,000	32,293,000
• Interior Architecture	21,140,000	62,742,000
• Electrical	16,357,000	54,117,000
• Mechanical	18,627,000	57,310,000
• Miscellaneous Buildings	3,798,000	2,739,000
<b>Total</b>	<b>\$133,904,000 *</b>	<b>\$209,201,000</b>
• Importance Code A	74,360,000	35,634,000
• Importance Code B	53,256,000	124,145,000
• Importance Code C	2,490,000	46,683,000
• Importance Code D	3,798,000	2,739,000
<b>Total</b>	<b>\$133,904,000 *</b>	<b>\$209,201,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	4,927,000	473,000	595,000	844,000
• Interior Architecture	7,496,000	3,061,000	844,000	2,237,000
• Electrical	1,896,000	1,584,000	1,235,000	1,079,000
• Mechanical	4,556,000	2,259,000	3,088,000	2,567,000
• Miscellaneous Buildings	597,000	160,000	196,000	204,000
• Elevators/Escalators	1,159,000	1,159,000	1,159,000	1,159,000
<b>Total</b>	<b>\$20,630,000</b>	<b>\$8,696,000</b>	<b>\$7,116,000</b>	<b>\$8,091,000</b>
• Importance Code A	5,206,000	737,000	825,000	1,072,000
• Importance Code B	13,774,000	7,731,000	6,050,000	6,804,000
• Importance Code C	1,053,000	67,000	46,000	10,000
• Importance Code D	597,000	160,000	196,000	204,000
<b>Total</b>	<b>\$20,630,000</b>	<b>\$8,696,000</b>	<b>\$7,116,000</b>	<b>\$8,091,000</b>

*\* 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 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	3,039,000	473,000
• Interior Architecture	1,359,000	1,483,000
• Electrical		5,891,000
• Mechanical	362,000	1,889,000
<b>Total</b>	<b>\$4,760,000 *</b>	<b>\$9,737,000</b>
• Importance Code A	3,039,000	620,000
• Importance Code B	1,524,000	9,070,000
• Importance Code C	197,000	48,000
<b>Total</b>	<b>\$4,760,000 *</b>	<b>\$9,737,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	220,000		22,000	
• Interior Architecture	383,000		14,000	14,000
• Electrical	87,000	38,000	41,000	27,000
• Mechanical	170,000	91,000	59,000	51,000
• Elevators/Escalators	16,000	16,000	16,000	16,000
<b>Total</b>	<b>\$877,000</b>	<b>\$144,000</b>	<b>\$152,000</b>	<b>\$109,000</b>
• Importance Code A	263,000	12,000	34,000	12,000
• Importance Code B	529,000	133,000	119,000	97,000
• Importance Code C	84,000			
• Importance Code D				
<b>Total</b>	<b>\$877,000</b>	<b>\$144,000</b>	<b>\$152,000</b>	<b>\$109,000</b>

\* 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 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	1,002,000	784,000
• Interior Architecture	634,000	450,000
• Electrical		50,000
• Mechanical	81,000	148,000
<b>Total</b>	<b>\$1,717,000 *</b>	<b>\$1,432,000</b>
• Importance Code A	1,002,000	784,000
• Importance Code B	517,000	648,000
• Importance Code C	197,000	
<b>Total</b>	<b>\$1,717,000 *</b>	<b>\$1,432,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	31,000			
• Interior Architecture	26,000			8,000
• Electrical	6,000	4,000	7,000	4,000
• Mechanical	42,000	8,000	28,000	8,000
<b>Total</b>	<b>\$105,000</b>	<b>\$12,000</b>	<b>\$35,000</b>	<b>\$19,000</b>
• Importance Code A	46,000	3,000	2,000	3,000
• Importance Code B	47,000	9,000	33,000	16,000
• Importance Code C	12,000			
• Importance Code D				
<b>Total</b>	<b>\$105,000</b>	<b>\$12,000</b>	<b>\$35,000</b>	<b>\$19,000</b>

*\* 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	:	178
PARKING GARAGES	:	1
FERRY TERMINAL FACILITIES	:	2
MARINAS/DOCKS	:	5
<b>Total Assets in AIMS</b>	<b>:</b>	<b>244</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	83,101,000	81,084,000
• Interior Architecture	57,497,000	28,790,000
• Electrical	27,014,000	97,067,000
• Mechanical	19,288,000	22,596,000
• Piers	20,342,000	15,791,000
• Bulkheads	45,745,000	43,624,000
• Miscellaneous Buildings	370,000	181,000
• Marinas/Docks	1,277,000	4,888,000
<b>Total</b>	<b>\$254,634,000 *</b>	<b>\$294,021,000</b>

• Importance Code A	129,977,000	106,354,000
• Importance Code B	104,137,000	184,171,000
• Importance Code C	20,150,000	3,314,000
• Importance Code D	370,000	181,000
<b>Total</b>	<b>\$254,634,000 *</b>	<b>\$294,021,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	1,290,000	184,000	91,000	175,000
• Interior Architecture	1,761,000	166,000	335,000	357,000
• Electrical	672,000	525,000	764,000	495,000
• Mechanical	1,355,000	1,132,000	1,323,000	1,112,000
• Piers	1,054,000	48,000	162,000	164,000
• Bulkheads	3,940,000	93,000	71,000	226,000
• Miscellaneous Buildings	33,000	6,000	7,000	6,000
• Elevators/Escalators	406,000	406,000	406,000	406,000
• Marinas/Docks	97,000	41,000	43,000	97,000
<b>Total</b>	<b>\$10,607,000</b>	<b>\$2,601,000</b>	<b>\$3,201,000</b>	<b>\$3,038,000</b>

*\* 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	3,763,000	533,000	524,000	614,000
• Importance Code B	5,815,000	2,031,000	2,658,000	2,345,000
• Importance Code C	996,000	31,000	12,000	73,000
• Importance Code D	33,000	6,000	7,000	6,000
<b>Total</b>	<b>\$10,607,000</b>	<b>\$2,601,000</b>	<b>\$3,201,000</b>	<b>\$3,038,000</b>

*\* 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

<b>Project Type : HEALTH AND MENTAL HYGIENE</b>		
ADMINISTRATIVE BUILDINGS	:	1
CLINICS/LABS. CLASSROOMS	:	26
VEHICLE MAINT./STORAGE FACILITIES	:	1
ANIMAL SHELTERS	:	3
<b>Total Assets in AIMS</b>	<b>:</b>	<b>31</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	11,209,000	4,129,000
• Interior Architecture	7,468,000	6,250,000
• Electrical	2,468,000	12,681,000
• Mechanical	4,203,000	8,908,000
• Miscellaneous Buildings	147,000	102,000
<b>Total</b>	<b>\$25,497,000 *</b>	<b>\$32,070,000</b>
• Importance Code A	11,417,000	4,166,000
• Importance Code B	12,661,000	27,175,000
• Importance Code C	1,271,000	627,000
• Importance Code D	147,000	102,000
<b>Total</b>	<b>\$25,497,000 *</b>	<b>\$32,070,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	844,000	82,000	163,000	117,000
• Interior Architecture	1,420,000	208,000	161,000	186,000
• Electrical	532,000	345,000	223,000	211,000
• Mechanical	733,000	605,000	703,000	503,000
• Miscellaneous Buildings	10,000	7,000	9,000	6,000
• Elevators/Escalators	415,000	415,000	415,000	415,000
<b>Total</b>	<b>\$3,954,000</b>	<b>\$1,662,000</b>	<b>\$1,674,000</b>	<b>\$1,439,000</b>
• Importance Code A	910,000	144,000	220,000	185,000
• Importance Code B	2,606,000	1,499,000	1,439,000	1,245,000
• Importance Code C	428,000	12,000	7,000	3,000
• Importance Code D	10,000	7,000	9,000	6,000
<b>Total</b>	<b>\$3,954,000</b>	<b>\$1,662,000</b>	<b>\$1,674,000</b>	<b>\$1,439,000</b>

*\* 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 : 92

**Total Assets in AIMS : 92**

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	140,393,000	37,558,000
• Interior Architecture	42,636,000	140,875,000
• Electrical	57,330,000	199,961,000
• Mechanical	78,011,000	139,751,000
• Miscellaneous Buildings	599,000	494,000
<b>Total</b>	<b>\$318,970,000 *</b>	<b>\$518,638,000</b>
• Importance Code A	145,236,000	42,975,000
• Importance Code B	165,896,000	445,830,000
• Importance Code C	7,239,000	29,339,000
• Importance Code D	599,000	494,000
<b>Total</b>	<b>\$318,970,000 *</b>	<b>\$518,638,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	2,468,000	456,000	528,000	595,000
• Interior Architecture	3,082,000	1,184,000	1,245,000	2,051,000
• Electrical	2,513,000	2,429,000	2,471,000	2,454,000
• Mechanical	5,858,000	5,375,000	7,055,000	5,626,000
• Miscellaneous Buildings	60,000	26,000	29,000	28,000
• Elevators/Escalators	3,310,000	3,310,000	3,310,000	3,310,000
<b>Total</b>	<b>\$17,290,000</b>	<b>\$12,780,000</b>	<b>\$14,639,000</b>	<b>\$14,063,000</b>
• Importance Code A	3,048,000	1,163,000	1,285,000	1,332,000
• Importance Code B	13,321,000	11,420,000	13,212,000	12,677,000
• Importance Code C	861,000	171,000	113,000	27,000
• Importance Code D	60,000	26,000	29,000	28,000
<b>Total</b>	<b>\$17,290,000</b>	<b>\$12,780,000</b>	<b>\$14,639,000</b>	<b>\$14,063,000</b>

*\* 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

<b>Project Type : SANITATION</b>	
PIERS/BULKHEADS	: 27
TRANSFER STATIONS	: 5
VEHICLE MAINT./STORAGE FACILITIES	: 41
FRESH KILLS FACILITIES	: 16
PUBLIC OFFICE BUILDINGS	: 3
<b>Total Assets in AIMS</b>	<b>: 92</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	73,538,000	14,401,000
• Interior Architecture	41,321,000	12,878,000
• Electrical	9,272,000	20,665,000
• Mechanical	9,772,000	33,031,000
• Piers	14,288,000	2,283,000
• Bulkheads	6,677,000	943,000
• Miscellaneous Buildings	328,000	65,000
<b>Total</b>	<b>\$155,197,000 *</b>	<b>\$84,267,000</b>
• Importance Code A	85,856,000	18,029,000
• Importance Code B	60,324,000	65,130,000
• Importance Code C	8,689,000	1,043,000
• Importance Code D	328,000	65,000
<b>Total</b>	<b>\$155,197,000 *</b>	<b>\$84,267,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	1,546,000	219,000	139,000	68,000
• Interior Architecture	1,883,000	111,000	534,000	186,000
• Electrical	786,000	287,000	227,000	604,000
• Mechanical	1,977,000	822,000	1,018,000	1,202,000
• Piers	817,000	18,000	94,000	91,000
• Bulkheads	395,000	2,000	27,000	46,000
• Miscellaneous Buildings	40,000	12,000	10,000	11,000
• Elevators/Escalators	139,000	139,000	139,000	139,000
<b>Total</b>	<b>\$7,583,000</b>	<b>\$1,610,000</b>	<b>\$2,190,000</b>	<b>\$2,347,000</b>
• Importance Code A	2,028,000	396,000	302,000	268,000
• Importance Code B	4,561,000	1,199,000	1,834,000	2,064,000
• Importance Code C	955,000	4,000	43,000	4,000
• Importance Code D	40,000	12,000	10,000	11,000
<b>Total</b>	<b>\$7,583,000</b>	<b>\$1,610,000</b>	<b>\$2,190,000</b>	<b>\$2,347,000</b>

*\* 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

<b>Project Type : WATERWAY BRIDGES</b>		
BRIDGES, WATERWAYS	:	41
HIGHWAY BRIDGES AND TUNNELS	:	2
<b>Project Type : FERRIES</b>		
FERRIES/BARGES	:	8
PIERS/BULKHEADS	:	16
FERRY TERMINAL FACILITIES	:	5
MARINAS/DOCKS	:	15
<b>Project Type : ELECTRIC CONTROL</b>		
STREET LIGHTING SYSTEMS	:	1
<b>Project Type : HIGHWAY BRIDGES</b>		
HIGHWAY BRIDGES AND TUNNELS	:	87
<b>Project Type : HIGHWAYS</b>		
PIERS/BULKHEADS	:	10
HIGHWAY FACILITIES	:	45
PIER FACILITIES	:	3
PARKING GARAGES	:	9
STREET AND CITY OWNED ARTERIALS	:	5
<b>Project Type : TRAFFIC</b>		
TRAFFIC SIGNAL SYSTEMS	:	1
<b>Total Assets in AIMS</b>	<b>:</b>	<b>248</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	10,787,000	11,173,000
• Interior Architecture	7,915,000	6,453,000
• Electrical	4,640,000	6,120,000
• Mechanical	1,605,000	12,610,000
• Piers	1,766,000	2,637,000
• Bulkheads	8,096,000	2,750,000
• Bridge Structure	757,950,000	208,129,000
• Ferries	29,100,000	
• Miscellaneous Buildings	143,000	65,000
• Marinas/Docks	12,080,000	59,491,000
• Bridge Electrical	10,116,000	15,499,000
• Bridge Mechanical	13,976,000	17,618,000
• Primary Streets	381,480,000	
• Secondary Streets	552,440,000	
• Local Streets	1,379,780,000	
• Arterial Streets	40,000,000	
• Step Streets	41,080,000	
• Traffic Signal System	12,899,000	
• Street Lighting System	36,237,000	
<b>Total</b>	<b>\$3,302,089,000 *</b>	<b>\$342,543,000</b>

\* 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	786,728,000	142,300,000
• Importance Code B	1,049,779,000	114,560,000
• Importance Code C	1,424,359,000	85,618,000
• Importance Code D	41,223,000	65,000
<b>Total</b>	<b>\$3,302,089,000 *</b>	<b>\$342,543,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	866,000	112,000	141,000	99,000
• Interior Architecture	769,000	124,000	92,000	39,000
• Electrical	242,000	212,000	234,000	228,000
• Mechanical	510,000	290,000	656,000	302,000
• Piers	253,000	67,000	19,000	73,000
• Bulkheads	321,000	7,000	33,000	26,000
• Bridge Structure	30,103,000	13,864,000	25,472,000	14,799,000
• Ferries	8,065,000	8,065,000	8,065,000	8,065,000
• Miscellaneous Buildings	216,000	27,000	29,000	22,000
• Elevators/Escalators	137,000	137,000	137,000	137,000
• Marinas/Docks	377,000	53,000	91,000	117,000
• Bridge Electrical	623,000	66,000	80,000	123,000
• Bridge Mechanical	1,444,000	162,000	574,000	162,000
• Primary Streets				
• Secondary Streets				
• Local Streets				
• Arterial Streets				
• Step Streets				
• Traffic Signal System	42,322,000	42,322,000	42,322,000	42,322,000
• Street Lighting System	23,400,000	23,400,000	23,400,000	23,400,000
<b>Total</b>	<b>\$109,646,000</b>	<b>\$88,907,000</b>	<b>\$101,345,000</b>	<b>\$89,913,000</b>
• Importance Code A	95,233,000	87,524,000	93,961,000	88,287,000
• Importance Code B	9,695,000	1,014,000	6,643,000	1,067,000
• Importance Code C	4,503,000	341,000	712,000	537,000
• Importance Code D	216,000	27,000	29,000	22,000
<b>Total</b>	<b>\$109,646,000</b>	<b>\$88,907,000</b>	<b>\$101,345,000</b>	<b>\$89,913,000</b>

\* 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	:	137
VEHICLE MAINT./STORAGE FACILITIES	:	4
PARK FACILITIES	:	763
STADIUM FACILITIES	:	5
MARINAS/DOCKS	:	27
WALLS	:	276
PARK BRIDGES	:	97
<b>Total Assets in AIMS</b>	<b>:</b>	<b>1,325</b>

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	73,866,000	22,572,000
• Interior Architecture	25,778,000	16,299,000
• Electrical	11,272,000	20,592,000
• Mechanical	6,386,000	33,066,000
• Piers	6,257,000	9,519,000
• Bulkheads	53,394,000	86,552,000
• Parks' Walls	42,624,000	452,000
• Parks' Boardwalks	56,693,000	59,463,000
• Miscellaneous Buildings	45,539,000	15,310,000
• Parks' Water and Sewer Utilities	107,389,000	161,084,000
• Parks' Electrical Utilities	31,815,000	47,723,000
• Parks' Streets and Roads	53,682,000	17,248,000
• Park Bridges	62,099,000	7,809,000
• Marinas/Docks	12,304,000	11,207,000
<b>Total</b>	<b>\$589,098,000 *</b>	<b>\$508,896,000</b>
• Importance Code A	254,845,000	147,449,000
• Importance Code B	210,786,000	316,462,000
• Importance Code C	24,247,000	12,427,000
• Importance Code D	99,221,000	32,558,000
<b>Total</b>	<b>\$589,098,000 *</b>	<b>\$508,896,000</b>

*\* 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 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	6,082,000	456,000	446,000	554,000
• Interior Architecture	5,732,000	463,000	497,000	949,000
• Electrical	1,915,000	721,000	925,000	1,115,000
• Mechanical	2,036,000	993,000	1,675,000	1,374,000
• Piers	714,000	171,000	209,000	46,000
• Bulkheads	2,518,000	178,000	175,000	169,000
• Parks' Walls	3,600,000			
• Parks' Boardwalks	110,000			
• Miscellaneous Buildings	2,277,000	506,000	856,000	648,000
• Parks' Water and Sewer Utilities	2,685,000	2,685,000	2,685,000	2,685,000
• Parks' Electrical Utilities	795,000	795,000	795,000	795,000
• Elevators/Escalators	242,000	242,000	242,000	242,000
• Parks' Streets and Roads				
• Park Bridges	4,568,000	5,000	29,000	1,248,000
• Marinas/Docks	1,036,000	231,000	385,000	327,000
<b>Total</b>	<b>\$34,310,000</b>	<b>\$7,447,000</b>	<b>\$8,920,000</b>	<b>\$10,152,000</b>
• Importance Code A	12,146,000	906,000	968,000	1,164,000
• Importance Code B	16,199,000	5,957,000	6,966,000	7,624,000
• Importance Code C	3,688,000	79,000	129,000	716,000
• Importance Code D	2,277,000	506,000	856,000	648,000
<b>Total</b>	<b>\$34,310,000</b>	<b>\$7,447,000</b>	<b>\$8,920,000</b>	<b>\$10,152,000</b>

\* 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	:	10
COURT BUILDINGS	:	23
PUBLIC OFFICE BUILDINGS	:	33

**Total Assets in AIMS : 66**

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

CAPITAL	FY 2018 - 2021	FY 2022 - 2027
• Exterior Architecture	113,275,000	42,188,000
• Interior Architecture	72,764,000	117,679,000
• Electrical	24,228,000	116,530,000
• Mechanical	41,316,000	159,811,000
• Bulkheads	2,644,000	3,763,000
• Miscellaneous Buildings	706,000	522,000
<b>Total</b>	<b>\$254,933,000 *</b>	<b>\$440,493,000</b>
• Importance Code A	117,339,000	44,206,000
• Importance Code B	114,905,000	369,712,000
• Importance Code C	21,983,000	26,052,000
• Importance Code D	706,000	522,000
<b>Total</b>	<b>\$254,933,000 *</b>	<b>\$440,493,000</b>

EXPENSE	FY 2018	FY 2019	FY 2020	FY 2021
• Exterior Architecture	1,340,000	184,000	356,000	150,000
• Interior Architecture	10,039,000	4,780,000	5,150,000	6,449,000
• Electrical	2,140,000	1,980,000	2,001,000	1,909,000
• Mechanical	5,926,000	4,628,000	6,117,000	4,959,000
• Piers				
• Bulkheads	323,000	9,000	1,000	38,000
• Miscellaneous Buildings	53,000	32,000	32,000	32,000
• Elevators/Escalators	4,889,000	4,889,000	4,889,000	4,889,000
<b>Total</b>	<b>\$24,710,000</b>	<b>\$16,503,000</b>	<b>\$18,546,000</b>	<b>\$18,425,000</b>
• Importance Code A	2,009,000	997,000	1,169,000	925,000
• Importance Code B	21,809,000	15,432,000	17,230,000	17,449,000
• Importance Code C	839,000	42,000	114,000	20,000
• Importance Code D	53,000	32,000	32,000	32,000
<b>Total</b>	<b>\$24,710,000</b>	<b>\$16,503,000</b>	<b>\$18,546,000</b>	<b>\$18,425,000</b>

*\* 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.*

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## Exhibits A - C

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- 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





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

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## 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
1.2.5	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

<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</b>
3.2.1	Mechanical	Air Conditioning	Energy Source	B
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
3.5.16	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
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
5.1.7	Bulkheads	Structural	Pile Supported Wall	A
5.1.9	Bulkheads	Structural	Piles and Bracing	A
5.1.10	Bulkheads	Structural	Rip Rap	C
5.1.11	Bulkheads	Structural	Sheet Piles	A

<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</b>
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
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
6.5.2	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
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

<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</b>
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
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
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

<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</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
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



<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</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
14.3.3	Marinas/Docks	Launch/Haulout	Fenders	B

<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</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

<b>D.S.C.</b>	<b>Discipline (D)</b>	<b>System (S)</b>	<b>Component (C)</b>	<b>Importance</b>
16.5.2	Park Bridges	Piers	Cap beam	A
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

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Exhibit B  
Technical Notes and  
Project Methodology

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## **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

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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

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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.



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### **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 2017	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 2017	Street and City Owned Arterial System • <i>report produced by DOT</i>
Department of Transportation (DOT) FY 2017	Street Lighting System • <i>agency contract information</i>
Department of Transportation (DOT) FY 2017	Traffic Signal System • <i>agency contract information</i>
Department of Transportation (DOT) FY 2017	Ferries • <i>agency contract information</i>
Parks Department (DPR) FY 2017	Underground Utilities • <i>narrative report submitted on electrical, sewer, and water utilities</i>
Parks Department (DPR) FY 2017	Streets and Roads in Parks • <i>narrative report submitted</i>
Department of Correction (DOC) FY 2017	Rikers Island Underground Utilities • <i>yearly report based on agency information</i>
Fire Department (FDNY) FY 2017	Fireboats • <i>yearly report based on agency information</i>

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Exhibit C  
Legend for Individual  
Survey Report and  
Sample Asset Report

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## Exhibit C Legend for Individual Survey Report

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

### Header

- |           |                  |  |
|-----------|------------------|--|
| <b>a.</b> | Print Date:      | Date of report printing  |
| <b>b.</b> | Agency:          | Name of agency being reported  |
| <b>c.</b> | Fiscal Year:     | Fiscal year of report creation   |
| <b>d.</b> | Page:            | Page number of agency report   |
| <b>1.</b> | Asset Name:      | The asset name/description   |
| <b>2.</b> | Address:         | Self explanatory   |
| <b>3.</b> | Borough:         | Self explanatory   |
| <b>4.</b> | Program/Asset #: | The unique number assigned to every sub-asset in the study   |
| <b>5.</b> | 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.   |
| <b>6.</b> | Date of Survey:  | Date of last survey  |
| <b>7.</b> | Areas Surveyed:  | Sub-basement, basement, and roof are indicated if surveyed. The floors surveyed are indicated by floor number (applicable to buildings only). The codes ATT and PH are used to indicate attic and penthouse. |

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

**Header (continued)**

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

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

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## Observations

System <sup>1</sup> Component Type	Observation <sup>2</sup> Location <sup>3</sup>	Extent <sup>4</sup>	Area Affected <sup>5</sup>
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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 : 04-Nov-2016

**QUEENS PUBLIC LIBRARY - FY 2017**

**Asset Name** : QUEENS CENTRAL LIBRARY  
**Address** : 89-11 MERRICK BOULEVARD  
**Borough** : QUEENS **Agency's Number** : N/A  
**Program / Asset #** : QPL0001.000 / 1867 **Yr Built/Renovated** : 1966 / 2012  
**Area Sq Ft** : 239,750 **Project Type** : QUEENS PUBLIC LIBRARY  
**Date of Survey** : 12-Apr-2016 **Landmark Status** : NONE  
**Areas Surveyed** : Basement, Roof, Floors 1,3  
**Block** : 9798 **Lot** : 6 **BIN** : 4209635

<b>CAPITAL</b>	<b>FY 2018 - 2021</b>	<b>FY 2022 - 2027</b>
Exterior Architecture	\$1,276,500	\$714,500
Interior Architecture	\$1,195,700	\$654,400
Electrical	\$68,600	\$2,108,200
Mechanical	\$686,800	\$2,592,500
<b>Total</b>	<b>\$3,227,700</b>	<b>\$6,069,600</b>
Importance Code A	\$1,276,500	\$714,500
Importance Code B	\$1,685,200	\$5,265,400
Importance Code C	\$266,000	\$89,700
<b>Total</b>	<b>\$3,227,700</b>	<b>\$6,069,600</b>

<b>EXPENSE</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
Exterior Architecture	\$47,900		\$10,500	
Interior Architecture	\$411,800			\$63,900
Electrical	\$30,400	\$20,600	\$21,800	\$20,300
Mechanical	\$144,700	\$95,900	\$145,400	\$91,200
Elevators/Escalators	\$15,800	\$15,800	\$15,800	\$15,800
<b>Total</b>	<b>\$650,600</b>	<b>\$132,300</b>	<b>\$193,500</b>	<b>\$191,200</b>
Importance Code A	\$60,200	\$11,900	\$22,400	\$11,900
Importance Code B	\$544,000	\$120,500	\$171,200	\$179,400
Importance Code C	\$46,300			
<b>Total</b>	<b>\$650,600</b>	<b>\$132,300</b>	<b>\$193,500</b>	<b>\$191,200</b>



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**  
**QUEENS CENTRAL LIBRARY**  
**Asset # : 1867**

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	30%	Now	\$179,400	LIFE	**	5	\$29,400	
	<i>Horizontal Cracks, Extent : Moderate, Area Affected : 10%</i>							
	<i>Location : Penthouse</i>							
	<i>Misaligned/Bulging, Extent : Moderate, Area Affected : 5%</i>							
	<i>Location : Penthouse</i>							
	<i>Water Penetration, Extent : Moderate, Area Affected : 10%</i>							
	<i>Location : Second Floor Admin. Area Under Windows</i>							
Granite Panels	5%			LIFE	**	5	\$7,300	
Panel/Paver: Limestone	50%	2-4	\$270,800	LIFE	**	5	\$36,700	
	<i>Jnt Mortar Miss/Erod, Extent : Light, Area Affected : 10%</i>							
	<i>Location : Front Entrance</i>							
Pre-Cast Concrete	10%			LIFE	**	5	\$63,600	
Window Wall	5%			2047	**	5	\$18,300	
Windows								
Aluminum	25%	Now	\$89,100	2035	**	5	\$3,500	
	<i>Caulking Deteriorated, Extent : Moderate, Area Affected : 5%</i>							
	<i>Location : Throughout</i>							
	<i>Water Penetration, Extent : Moderate, Area Affected : 5%</i>							
	<i>Location : Throughout</i>							
Aluminum	75%			2035	**	5	\$21,000	
Parapets								
Masonry: Brick	30%	Now	\$39,700	LIFE	**	5	\$6,800	
	<i>Misaligned/Bulging, Extent : Moderate, Area Affected : 25%</i>							
	<i>Location : Throughout</i>							
	<i>Worn/Eroded, Extent : Moderate, Area Affected : 15%</i>							
	<i>Location : Throughout</i>							
Masonry: Limestone	5%			LIFE	**	5-10	\$13,800	
Metal Panel	10%			2037	**	5	\$8,800	
Metal Rail	5%			2032	**	5-10	\$20,500	
Panel/Paver: Limestone	50%			LIFE	**	5-10	\$97,900	

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**  
**QUEENS CENTRAL LIBRARY**  
**Asset # : 1867**

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	Priority
Exterior								
Roof								
Built-Up (BUR)	25%	Now	\$85,500	2032	**			
<i>Miss/Damaged Flashings, Extent : Moderate, Area Affected : 10%</i>								
<i>Location : Over I T S Area, 1980 Addition</i>								
<i>Water Penetration, Extent : Moderate, Area Affected : 10%</i>								
<i>Location : Over I T S Area, Blue Conference Room, Second Floor Corridors Of 1980 Addition</i>								
Modified Bitumen	40%			2027	\$579,600	10	\$98,200	
Modified Bitumen	30%	Now	\$434,700	2037	**			1
<i>Blisters, Extent : Moderate, Area Affected : 15%</i>								
<i>Location : Throughout</i>								
<i>Miss/Damaged Flashings, Extent : Moderate, Area Affected : 25%</i>								
<i>Location : Throughout</i>								
<i>Water Penetration, Extent : Severe, Area Affected : 20%</i>								
<i>Location : Throughout</i>								
Skylight, Metal/Glass	5%	Now	\$91,900	2047	**			
<i>Deformed/Dented, Extent : Light, Area Affected : 20%</i>								
<i>Location : Throughout</i>								
Interior								
Floors								
Carpet	35%	Now	\$308,500	2026	\$1,542,600	3	\$178,900	
<i>Punct/Tear/Impact Damage, Extent : Moderate, Area Affected : 10%</i>								
<i>Location : Throughout</i>								
<i>Worn/Eroded, Extent : Moderate, Area Affected : 25%</i>								
<i>Location : Throughout</i>								
Cast in Place Concrete	10%			LIFE	**	5	\$149,100	
Ceramic Tile	5%	0-2	\$133,800	2030	**	5	\$8,500	
<i>Cracking/Crumbling, Extent : Light, Area Affected : 10%</i>								
<i>Location : Throughout</i>								
Sheet Vinyl/Rubber	15%			2032	**	5	\$76,700	
Terrazzo	25%			LIFE	**	5	\$133,100	
<i>Recent Installation, Extent : Light, Area Affected : 100%</i>								
<i>Location : Throughout</i>								
Vinyl Tile	10%			2027	\$293,600	3	\$17,000	

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**  
**QUEENS CENTRAL LIBRARY**  
**Asset # : 1867**

<b>Architecture</b>		<b>Current Repair</b>		<b>Future Replacement</b>		<b>Maintenance</b>		<b>Priority</b>
<b>System Component Type</b>	<b>% of Total</b>	<b>Fail Date (Years)</b>	<b>Estimated Cost</b>	<b>Year FY</b>	<b>Estimated Cost</b>	<b>Cycle (Yrs)</b>	<b>Estimated Cost</b>	
<b>Interior</b>								
<b>Interior Walls</b>								
Ceramic Tile	5%	Now	\$133,400	2030	**	5	\$4,800	
<i>Cracking/Crumbling, Extent : Moderate, Area Affected : 75%</i>								
<i>Location : Throughout</i>								
Concrete Masonry Unit	10%			LIFE	**	5	\$15,300	
Glass: Single Pane	5%	Now	\$14,500	LIFE	**	5	\$7,200	
<i>Cracking/Crumbling, Extent : Light, Area Affected : 20%</i>								
<i>Location : Throughout</i>								
Gypsum Board	15%			LIFE	**	5-10	\$48,700	
Gypsum Board	20%			LIFE	**	5-10	\$64,900	
Gypsum Board	10%			LIFE	**	5-10	\$32,400	
Plaster	25%	Now	\$19,400	LIFE	**	5	\$14,300	
<i>Cracking/Crumbling, Extent : Moderate, Area Affected : 5%</i>								
<i>Location : Stairwell 5</i>								
SGFT/Glazed Masonry	5%			LIFE	**	10	\$4,800	
Wood	5%			LIFE	**	5	\$76,300	
<b>Ceilings</b>								
AcousTileConcealSpLn	15%	4+	\$419,100	2047	**	5	\$32,000	
<i>Staining/Discoloring, Extent : Moderate, Area Affected : 25%</i>								
<i>Location : First C And C2 Floors</i>								
<i>Worn/Eroded, Extent : Moderate, Area Affected : 25%</i>								
<i>Location : First C And C2 Floors</i>								
AcousTileSusp.Lay-In	20%	0-2	\$55,900	2040	**	5	\$34,100	
<i>Staining/Discoloring, Extent : Moderate, Area Affected : 5%</i>								
<i>Location : Payroll Room, Security Office, Corridors</i>								
<i>Water Penetration, Extent : Moderate, Area Affected : 10%</i>								
<i>Location : Payroll Room, Its And Corridors Of 1980 Addition, Cafeteria</i>								
Exposed Concrete	5%			LIFE	**	5-10	\$21,300	
Exposed Struc: Steel	5%			LIFE	**	10	\$34,100	
Metal Panel	5%	Now	\$86,500	LIFE	**	5	\$21,300	
<i>Deformed/Dented, Extent : Moderate, Area Affected : 40%</i>								
<i>Location : Throughout</i>								
Plaster	10%			LIFE	**	5-10	\$58,600	
Plaster	15%			LIFE	**	5-10	\$87,900	
Under Construction	25%							

<b>Electrical</b>		<b>Current Repair</b>		<b>Future Replacement</b>		<b>Maintenance</b>		<b>Priority</b>
<b>System Component Type</b>	<b>% of Total</b>	<b>Fail Date (Years)</b>	<b>Estimated Cost</b>	<b>Year FY</b>	<b>Estimated Cost</b>	<b>Cycle (Yrs)</b>	<b>Estimated Cost</b>	
<b>Under 600 Volts</b>								
<b>Service Equipment</b>								
Fused Disc Sw	100%			2053	**	5	\$1,000	
<b>Switchgear / Switchboard</b>								
Molded Case Bkrs	80%			2053	**	5	\$5,100	
Molded Case Bkrs	20%			2027	\$39,600	5	\$1,300	

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**  
**QUEENS CENTRAL LIBRARY**  
**Asset # : 1867**

<b>Electrical</b>	<b>Current Repair</b>			<b>Future Replacement</b>		<b>Maintenance</b>		<b>Priority</b>
<b>System Component Type</b>	<b>% of Total</b>	<b>Fail Date (Years)</b>	<b>Estimated Cost</b>	<b>Year FY</b>	<b>Estimated Cost</b>	<b>Cycle (Yrs)</b>	<b>Estimated Cost</b>	
<b>Under 600 Volts</b>								
Raceway								
Conduit	40%			2027	\$91,300	1		
Conduit	60%			2057	**	1		
Panelboards								
Fused Disc Sw	5%			2049	**	5	\$300	
Fused Disc Sw	5%			2026	\$6,800	5	\$300	
Molded Case Bkrs	40%			2026	\$54,500	5	\$2,500	
Molded Case Bkrs	50%			2049	**	5	\$3,200	
Wiring								
Braided Cloth	30%	2-4	\$68,600	2052	**	1		
<i>Insulation Aged, Extent : Moderate, Area Affected : 100%</i>								
<i>Location : Basement</i>								
Thermoplastic	40%			2027	\$91,500	1		
Thermoplastic	30%			2053	**	1		
Motor Controllers								
Locally Mounted	20%			2025	\$122,400	5	\$300	
Motor Control Center	70%			2025	\$105,500	5	\$4,600	
Variable Frequency Drive	10%			2044	**			
Ground								
Grounding Devices								
Generic	50%			LIFE	**	5	\$3,500	
Generic	50%			LIFE	**	5	\$3,500	
Stand-by Power								
Transfer Switches								
Automatic	100%			2047	**	1	\$73,800	
Generators								
Diesel	100%			2042	**	1	\$92,800	
<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>								
<i>Location : Generator Room Basement</i>								
<i>Explanation : One 1250 Kw</i>								
Batteries								
Lead/Acid	100%			2022	\$1,500	5	\$8,900	
Fuel Storage								
Day Tank	50%			2052	**	5	\$22,200	
<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>								
<i>Location : Generator Room Basement</i>								
<i>Explanation : One 275 Gallons</i>								
Main Tank	50%			2067	**	5	\$3,500	
<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>								
<i>Location : Basement</i>								
<i>Explanation : One 6000 Gallons</i>								

**Lighting**

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<b>Electrical</b>		<b>Current Repair</b>		<b>Future Replacement</b>		<b>Maintenance</b>		
<b>System Component Type</b>	<b>% of Total</b>	<b>Fail Date (Years)</b>	<b>Estimated Cost</b>	<b>Year FY</b>	<b>Estimated Cost</b>	<b>Cycle (Yrs)</b>	<b>Estimated Cost</b>	<b>Priority</b>
<b>Lighting</b>								
Interior Lighting								
Fluorescent	30%			2027	\$729,500	10	\$66,000	
			<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>					
			<i>Location : Throughout The Building</i>					
			<i>Explanation : T-12 Lamps</i>					
Fluorescent	15%			2035	**	10	\$33,000	
			<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>					
			<i>Location : Throughout</i>					
			<i>Explanation : T-5 Lamps</i>					
Fluorescent	40%			2037	**	10	\$88,000	
			<i>Other Observation, Extent : Moderate, Area Affected : 100%</i>					
			<i>Location : Throughout</i>					
			<i>Explanation : T-8 Lamps</i>					
Fluorescent	15%			2035	**	10	\$33,000	
			<i>Compact Fluorescent Light, Extent : Moderate, Area Affected : 100%</i>					
			<i>Location : Throughout The Building</i>					
<b>Egress Lighting</b>								
Emergency, Service	40%			2037	**	1		
Emergency, Service	10%			2027	\$11,900	1		
Emergency, Battery	5%			2027	\$16,400	10	\$2,900	
Exit, LED	30%			2062	**	1		
Exit, Service	15%			2027	\$5,200	1		
<b>Exterior Lighting</b>								
HID	70%			2022	\$642,000	10	\$500	
HID	30%			2035	**	10	\$200	
<b>Alarm</b>								
<b>Security System</b>								
No Component	90%							
Generic	10%			2035	**	1	\$9,000	
<b>Fire/Smoke Detection</b>								
No Component	90%							
Generic, Digital	10%			2035	**	1-3	\$14,800	

<b>Mechanical</b>		<b>Current Repair</b>		<b>Future Replacement</b>		<b>Maintenance</b>		
<b>System Component Type</b>	<b>% of Total</b>	<b>Fail Date (Years)</b>	<b>Estimated Cost</b>	<b>Year FY</b>	<b>Estimated Cost</b>	<b>Cycle (Yrs)</b>	<b>Estimated Cost</b>	<b>Priority</b>
<b>Heating</b>								
Energy Source								
Interruptible Gas/Dual Fuel	100%			2037	**	1		

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Mechanical	Current Repair		Future Replacement		Maintenance		Priority
System Component Type	% of Total	Fail Date (Years)	Estimated Cost	Year FY	Estimated Cost	Cycle (Yrs)	
<b>Heating</b>							
Conversion Equipment							
Furnace	5%			2032	**	1	\$5,900
	<i>Other Observation, Extent : Light, Area Affected : 5%</i>						
	<i>Location : Roof</i>						
	<i>Explanation : 1 Roof Mounted Unit</i>						
Hot Water Boiler	95%			2040	**	1	\$112,600
	<i>Other Observation, Extent : Light, Area Affected : 95%</i>						
	<i>Location : Penthouse</i>						
	<i>Explanation : 2 Units</i>						
<b>Distribution</b>							
Hot Wtr Piping/Pump	95%			2035	**	4	\$16,800
No Component	5%						
<b>Terminal Devices</b>							
Air Handler	70%			2022	\$916,600	1	\$103,800
Convactor/Radiator	20%			2032	**	1	\$15,500
Unit Heater-Stm/HW	5%			2022	\$78,400	4	\$1,600
No Component	5%						
<b>Air Conditioning</b>							
<b>Energy Source</b>							
Electricity	10%			2035	**	1	
Steam/HW System	90%			2037	**	1	
<b>Conversion Equipment</b>							
Absorption	90%			2036	**	1	\$233,500
Chiller/Steam/HW							
	<i>R-134a Refrigerant, Extent : Light, Area Affected : 90%</i>						
	<i>Location : Penthouse</i>						
	<i>Other Observation, Extent : Light, Area Affected : 90%</i>						
	<i>Location : Penthouse</i>						
	<i>Explanation : 2 Units</i>						
Ext Pkg Unit - Heating/Cooling	10%			2027	\$160,200	2	\$1,500
	<i>R-22 Refrigerant, Extent : Light, Area Affected : 10%</i>						
	<i>Location : Roof</i>						
<b>Distribution</b>							
Chilled Wtr Pipe/Pump	90%			2037	**	4	\$10,600
No Component	10%						
<b>Terminal Devices</b>							
Air Handler/Cool/Ht	90%			2022	\$928,400	1	\$133,400
No Component	10%						
<b>Heat Rejection</b>							
Remote Air Cond	10%			2027	\$145,100	2	\$16,700
Water Cooling Tower	90%			2021	\$627,400	2	\$217,200
<b>Ventilation</b>							
<b>Distribution</b>							
Ductwork/Diffusers	100%			LIFE	**	2-5	\$211,700

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<b>Mechanical</b>		<b>Current Repair</b>		<b>Future Replacement</b>		<b>Maintenance</b>		<b>Priority</b>
<b>System Component Type</b>	<b>% of Total</b>	<b>Fail Date (Years)</b>	<b>Estimated Cost</b>	<b>Year FY</b>	<b>Estimated Cost</b>	<b>Cycle (Yrs)</b>	<b>Estimated Cost</b>	
<b>Ventilation</b>								
Exhaust Fans								
Interior	90%			2022	\$241,600	2	\$6,600	
Roof	10%			2027	\$19,300	2	\$700	
<b>Plumbing</b>								
H/C Water Piping								
Brass/Copper	100%			2037	**	1		
HW Heat Exchanger								
Low Temp	100%	Now	\$1,500	2037	**	4	\$23,700	
		<i>Leak Evident, Extent : Moderate, Area Affected : 5%</i>						
		<i>Location : At The Valve, Penthouse</i>						
Sanitary Piping								
Cast Iron	100%			LIFE	**	1		
Storm Drain Piping								
Cast Iron	100%			LIFE	**	1		
Sump Pump(s)								
Rigid Piping	100%			2022	\$11,200	4	\$2,500	
Sewage Ejector(s)								
Electric	100%			2022	\$11,200	4	\$2,500	
Fixtures								
Generic	100%							
<b>Vertical Transport</b>								
Elevators								
Geared Traction	50%			LIFE	**			
		<i>Other Observation, Extent : Light, Area Affected : 50%</i>						
		<i>Location : C1, C, C2, 1, 2</i>						
		<i>Explanation : Two Units</i>						
Hydraulic	50%			LIFE	**			
		<i>Other Observation, Extent : Light, Area Affected : 50%</i>						
		<i>Location : C1, 2 And C2,1</i>						
		<i>Explanation : 2 Units</i>						
<b>Fire Suppression</b>								
Standpipe								
Generic	100%			2047	**	1-5	\$120,900	
Sprinkler								
Generic	100%			2037	**	1-2	\$67,200	
Fire Pump								
Generic	100%			2030	**	1	\$44,800	
Chemical System								
Generic	100%			2025	\$26,500	1-3	\$50,600	

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