

# 2019 - 2024 SIX YEAR CAPITAL PLAN

North Slope Borough, Alaska



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The 2019 6-Year Capital Plan has been developed from several sources:

1. Projects recommended for funding by the CIP Policy Review Committee and the Planning Commission are the basis for the first year (2019) in the Plan.
2. Previously approved projects that were identified as “phased” have the subsequent phases budgeted in the Plan.
3. The NSB Repair & Replacement Schedule has been used to calculate the remaining useful life of all of the Borough’s building, equipment and infrastructure assets. This comprehensive database is used to forecast when capital upgrades are necessary by comparing the estimated useful life of an asset and its many parts to their installation dates.

**NORTH SLOPE BOROUGH PLANNING COMMISSION  
RESOLUTION 2019-09**

**A RESOLUTION RECOMMENDING THAT THE NORTH  
SLOPE BOROUGH ASSEMBLY APPROVE THE 2019  
CAPITAL IMPROVEMENTS PROGRAM**

**WHEREAS**, North Slope Borough Municipal Code (NSBMC) § 19.30.050(B) requires the North Slope Borough Planning Commission (Planning Commission) to annually review the Borough's Capital Improvements Program (CIP) and submit its recommendations on the plan to the Assembly; and

**WHEREAS**, pursuant to NSBMC 3.15.010, the Capital Improvements Program consists of a six-year plan that includes the projects in the capital budget, outlines proposed capital projects for the following five years and provides a summary of unfinished capital projects; and

**WHEREAS**, the Department of Planning and Community Services developed a proposed 2019 six year capital plan based on projects proposed by Borough departments and each North Slope community; and

**WHEREAS**, on May 30, 2019, the Planning Commission considered said plan during its Regular meeting.

**NOW THEREFORE BE IT RESOLVED:**

The North Slope Borough Planning Commission recommends that the North Slope Borough Assembly approve the Capital Improvements Program attached as Exhibit 1.

**THAT** a copy of this Resolution be forwarded to the North Slope Borough Clerk.

INTRODUCED:

May 30, 2019

ADOPTED:

May 30, 2019

Adrian N. Korte (Acting)

Paul Bodfish Sr., Chairman

Date: May 30 2019

Lupita Henry (Acting)

Lupita Henry, Clerk

Date: 5-30-2019

# Anaktuvuk Pass



## 2019 6 Year Capital Improvement Plan

### 2019-10 Recommended Projects

NSBSD Infrastructure Improvements, \$500,000 for AKP	AW Street Lighting, \$21,000 for AKP
AKP Water and Sewer Connections, \$1,850,000	AW Power Generation Upgrade, \$143,000 in AKP
AW Water Systems Major Repairs, \$395,000 for AKP	Light Duty Vehicles, \$94,000 in AKP
AW Sewer Systems Major Repairs, \$131,000 for AKP	S&R Fuel Truck with 5000 gal tank, \$62,000 in AKP
AW Water System Equipment, \$24,000 for AKP	Village Heavy Equip Major Repair, \$55,000 in AKP
AW Power Grid Preservation, \$71,000 for AKP	AKP Heavy Equipment Replacement, \$104,000
AW Water Dist. Pump Variable Frequency Drives, \$50,000 for AKP	Windows Server 2016 Active Directory Upgrades, \$140,000 split amongst 8 communities

### 2019 City Council Priorities

1. Water/Sewer Hook Ups
2. Subdivision
3. Multi-Purpose Building
4. Renovation / Upgrading Residential Housing
5. Dust Control



### Status of Major Projects

- A rock crusher had been delivered to AKP to address the gravel shortage
- The AKP museum access road has not yet been constructed due to gravel shortage
- A scope of work for the AKP secondary water well is underway
- 10 water and sewer service connections have been recommended for funding this year; there are still additional connections needed that remain unfunded
- Construction of the new sewage lagoon and the secondary leach field have been completed and received final ADEC approval
- AKP airport permanent lighting has been repaired and is operational
- The AKP power plant upgrade design is complete
- The man camp to replace itinerant housing and make more housing available to residents is complete and currently in use
- New generation LED street light fixtures have been delivered and installed

### Anticipated Capital Needs

- Subdivision development / relocation
- Additional water & sewer connections
- Power plant upgrade
- Airport: fencing and snow removal equipment
- Snow fence repair and upgrade
- The NSB Administration Building/Public Works building replacement facility



### Anaktuvuk Pass Comprehensive Plan Select Capital Needs

Research alternative energy feasibility	Replace Public Works building
Address housing overcrowding/construct additional homes	Develop recreational facilities, including outdoor ballfield, indoor facility for youth and indoor playground
Dust control	Relocate NSB Administrative Office
Retrofit homes for energy efficiency	Upgrade and expand City Hall building
Install airport restrooms for weekend/holiday use	Evaluate potential contamination at former power plant

# Atqasuk

## 2019 6 Year Capital Improvement Plan



### 2019-10 Recommended Projects

NSBSD Infrastructure Improvements, \$500,000 in ATQ	AW Power Generation Upgrade, \$143,000 in ATQ
AW Water Systems Major Repairs, \$219,000 in ATQ	Light Duty Vehicles, \$94,000 in ATQ
W&S Facilities HVAC & Digital Control Upg, \$78,000 in ATQ	S&R Fuel Truck with 5000 gal tank, \$62,000 in ATQ
AW Sewer Systems Major Repairs, \$73,000 for ATQ	ATQ Heavy Equipment Replacement, \$51,000
AW Water System Equipment, \$46,000 for ATQ	Vill. Upfund Heavy Equip. Major Repair, \$60,000 in ATQ
ATQ Airport Rehabilitation, \$2,100,000	Windows Server 2016 Active Directory Upgrades, \$140,000 split amongst 8 communities
AW Power Grid Preservation, \$146,000 for ATQ	
AW Street Lighting, \$21,000 in ATQ	

### Status of Major Projects

ATQ cemetery roads design is on hold due to NSB and community concerns regarding gravel	Meade River School renovations are funded to completion
The design complete for extending the water & sewer system Construction is on hold to determine if the upgrades to the Wainwright and Point Hope WWTPs are successful and can be emulated in Atqasuk. The Atqasuk WWTP is at capacity and cannot add additional service connections.	The design for the Fuel Tank Truck Loading Racks is complete and construction process is underway
	The man camp to replace itinerant housing and make more housing available to residents is complete and currently in use

### 2019 City Council Priorities

Water/Sewer Connections for Off-Grid Homes	Increased Water/Sewer Capacity for Off Grid Homes
Rock/Gravel/Clay Source Survey and Study	Natural Gas Development Analysis
Gravel for Airport and Water/Sewer Connections	Expand Housing Capacity or Possible Apartments

### Atqasuk Comprehensive Plan Select Capital Needs

Develop Atqasuk Transmission Line	Playground equipment upgrade / replacement
Upgrade roads to both cemeteries	Develop a teen center / senior center
Rehabilitate existing vacant housing	Develop a daycare facility
Construct new homes	Develop a washeteria with showers
Continue evaluation of local material source	

### Anticipated Capital Needs

Water / sewer connections	Road to Utqiagvik
Major upgrades to the power plant	Waste heat loop upgrade

# Kaktovik

## 2019 6 Year Capital Improvement Plan



### 2019-10 Recommended Projects

NSBSD Infrastructure Improvements, \$500,000 in KAK	Village Power Distribution, \$1,500,000 for KAK
AW Water Systems Major Repairs, \$389,000 in KAK	AW Power Generation Upgrade, \$143,000 in KAK
W&S Facilities HVAC & Digital Control Upg, \$78,000 in KAK	Light Duty Vehicles, \$94,000 in KAK
AW Sewer Systems Major Repairs, \$130,000 for KAK	S&R Fuel Truck with 5000 gal tank, \$62,000 in KAK
AW Water System Equipment, \$41,000 for KAK	Vill. Upfund Heavy Equip. Major Repair, \$55,000 in KAK
Waste Heat Recovery, \$3,700,000 for KAK	Windows Server 2016 Active Directory Upgrades, \$140,000 split amongst 8 communities
AW Power Grid Preservation, \$71,000 for KAK	

### 2019 City Council Priorities

1. Waste Heat Trace at the Harold Kaveook School
2. Emergency Evacuation Bridge / Road to Mainland
3. Utilidor Upgrades / Water & Sewer Plant
4. School PA System
5. Museum / Multi-Purpose Building / Shop / Teen Center / Heritage Center
6. Housing

### Status of Major Projects

Performance testing for WWTP upgrades is underway  
Waste heat loop is in design

The power plant upgrade is complete

The work plan for the KIC tank farm remediation has recently completed

The outfall sewage line replacement was funded and an RFP for design work will be released soon

The south water tank is currently being repaired

The man camp to replace itinerant housing and make more housing available to residents is complete and currently in use

Additional street lighting fixtures have been purchased and will be installed when they arrive in the village

### Kaktovik Comprehensive Plan Select Capital Needs

Continue to improve utilities, infrastructure, and facilities for resilience. Employ feasible alternative energy sources.

Protect and preserve fresh water source

Monitor and overcome permafrost subsidence

Impacts to facilities and infrastructure

Upgrade sewer system capacity (work is in progress) The power plant upgrade is complete

Evaluate wind power generation (in design)

Develop a non-impactful snow dump site

Improve street lighting (recently completed)

### Anticipated Capital Needs

Snow Fences

Recreational / multi-purpose facilities

Coastal erosion mitigation

Old airport site remediation

Increase gravel stockpile reserve

Landfill containment improvements

Year-round water pumping source



# Nuiqsut

## 2019 6 Year Capital Improvement Plan



### 2019-10 Recommended Projects

NSBSD Infrastructure Improvements, \$500,000 in NUI	AW Street Lighting, \$21,000 in NUI
Road Improvements, \$1,900,000	AW Power Generation Upgrade, \$143,000 in NUI
AW Water Systems Major Repairs, \$405,000 in NUI	Light Duty Vehicles, \$94,000 in NUI
AW Power Grid Preservation, \$71,000 for NUI	NUI Heavy Equipment Replacement, \$51,000
AW Sewer Systems Major Repairs, \$135,000 for NUI	S&R Fuel Truck with 5000 gal tank, \$62,000 in NUI
AW Water System Equipment, \$49,000 for NUI	Village Upfund Heavy Equip Major Repair, \$55,000 in NUI
W&S Facilities-HVAC & Digital Control Upgrades, \$78,000 in NUI	Windows Server 2016 Active Directory Upgrades, \$140,000 split amongst 8 communities

### Status of Major Projects

- The lift station pumps at Trapper School have been installed and are operational
- The design for the waste heat loop recovery was temporarily on hold; the design contractor will begin work shortly
- The design for the fuel tank truck loading racks is complete and a construction contractor has been hired
- The design for the power plant upgrade is complete and is currently out for bid
- Design is complete for water/sewer connections, fire protection area expansion, & larger main but lacks construction funding
- Vertical support members for gas skidder are installed at Alpine. The gas skid module and tower are under construction in Louisiana with estimated shipping to Alpine on the 2019-2020 ice road
- The man camp to replace itinerant housing and make more housing available to residents is complete and currently in use

### 2019 City Council Priorities

1. Nuiqsut Airport Runway (*funded project*)
2. City Building and City Property Upgrades and Renovations
3. Cultural Heritage Center
4. Natural Gas Hook-up on Nutaagvik and Ericklook Streets
5. Freshwater Lake Road Upgrade (ongoing)
6. Nuiqsut Access Roads Surface Upgrade
7. Road Access to Lots on Freshwater Lake Road

### Anticipated Capital Needs

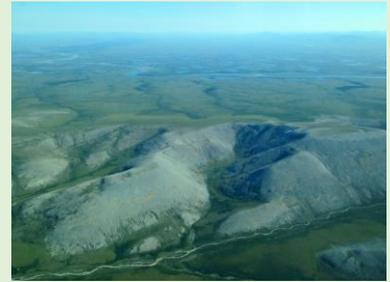
- Road resurfacing is needed throughout the village
- PW Shop Replacement
- Water and sewer extensions to new subdivision
- Community washeteria

# Point Hope

## 2019 6 Year Capital Improvement Plan



2019-10 Recommended Projects	
NSBSD Infrast. Improve., \$500,000 for PHO	Power Generation Upg., \$143,000 in PHO
AW Water Dist. Pump Variable Frequency Drives, \$50,000 for PHO	W&S Facilities-HVAC & Digital Control Upgrades, \$78,000 in PHO
Water System Major Repairs, \$752,000 in PHO	Light Duty Vehicles, \$94,000 in PHO
Secondary Water Source, \$3,595,000 in PHO	PHO Heavy Equip Replacement, \$103,000
Heat Trace Upgrades, \$2,072,000 in PHO	S&R Fuel Truck with 5000 gal tank, \$62,000 in PHO
AW WWTP Upgrades, \$266,000 in PHO	Village Upfund Heavy Equip Major Repair, \$55,000 in PHO
AW WWTP Upgrades, \$266,000 in PHO	Windows Server 2016 Active Directory Upgrades, \$140,000 split by 8 communities
Sewer Systems Maj Repairs, \$251,000 in PHO	
Water Sewer Equipment, \$33,000 in PHO	
Power Grid Preservation, \$71,000 in PHO	



Status of Major Projects
Approximately 1/3 of the water & sewer heat trace panels have been replaced and the others are expected to be replaced by October
The design work for upgrades to the wastewater treatment plant are complete and an RFP will be issued this summer for construction
The flooring in Tikigaq School is nearly complete
The man camp to replace itinerant housing and make more housing available to residents is complete and currently in use
Additional street lighting fixtures have been purchased and will be installed when they arrive in the village



2019 City Council Priorities
1. Erosion
2. Ice Cellar
3. Evacuation Road / Shelter
4. Gravel and Rock
5. New Housing
6. New Landfill
7. Integrity of NSB Facilities
8. Streetlights
9. Water and Sewer Upgrade
10. Washeteria
11. Boat Ramp for North and South sides
12. New Recreation Teen Center

Anticipated Capital Needs
Landfill relocation farther from the village
Continued water storage tank upgrades
The old NSB Search & Rescue building needs upgrades
Evacuation road
Secondary water source
Health Clinic upgrades
Coastal erosion mitigation
Road resurfacing
Sewer main line upgrades



Point Hope Comprehensive Plan Select Capital Needs	
Assess feasibility of airport relocation	Research alternative energy feasibility, especially wind
Construct evacuation road	Additional recreational facilities, including ball field, meeting places, teen center, playgrounds, removable docks
Address housing overcrowding	
New water source location	Repair needed for community facilities: Health Clinic, Senior Center, City Hall, PW Building, Tribal Office
Seek gravel source	

# Point Lay

## 2019 6 Year Capital Improvement Plan



### 2019-10 Recommended Projects

NSBSD Infrastructure Improvements, \$500,000 in PIZ	AW Street Lighting, \$20,000 in PIZ
AW Water Systems Major Repairs, \$196,000 in PIZ	AW Power Generation Upgrade, \$143,000 in PIZ
Water Dist. Pump Variable Frequency Drives, \$50,000 for PIZ	Fire Station Floor Repair Replacement, \$900,000 in PIZ
PIZ Drinking Water Source Development, \$3,600,000	Light Duty Vehicles, \$94,000 in PIZ
W&S Facilities-HVAC & Digital Control Upgrades, \$78,000 in PIZ	S&R Fuel Truck with 5000 gal tank, \$62,000 in PIZ
AW Sewer Systems Major Repairs, \$65,000 for PIZ	PIZ Heavy Equipment Replacement, \$110,000
AW Water System Equipment, \$81,000 for PIZ	Vill. Upfund Heavy Equip Major Repair, \$55,000 in PIZ
AW Power Grid Preservation, \$131,000 for PIZ	Windows Server 2016 Active Directory Upgrades, \$140,000 split amongst 8 communities



### Status of Major Projects

Conceptual alternatives for water and sewer system with community drainage and stabilization planning document is currently under review	The man camp to replace itinerant housing and make more housing available to residents is complete and currently in use
The new snow fence has been installed	The sewage outfall pipeline upgrade is complete
12 sewage holding tanks have been installed and the issues with anchoring have been fixed	A new refuse truck is on order and will be delivered this summer
The septage receiving station will be installed in early to mid 2020, replacing the need for a sewage lagoon	Additional street light fixtures for the boat ramp and block 900 are in route to the community
	New bleachers are being purchased for Kali School

### Anticipated Capital Needs

The water storage tank needs a roof replacement, insulation, and recoating	Structural piling improvements due to subsidence after fill and drainage improvements have been made
Electrical metering upgrades are needed	Auger truck with 30 ft. pile depths
Replacement for dump truck is needed	An alternative above-ground water & sewer system

### Point Lay Comprehensive Plan Select Capital Needs

Abandon wastewater system as needed and install individual holding tanks	Gravel source investigations and assess gravel stockpile
Street lighting to boat ramp / dock	Develop outdoor ballfield
Fix and maintain areas of subsidence that have affected roadway	Reopen washeteria
Renovations for older homes and home weatherization improvements	Develop a childcare facility

# Utqiagvik

## 2019 6 Year Capital Improvement Plan



### 2019-10 RECOMMENDED PROJECTS

NSBSD Infrastructure Improvements, \$500,000 in BRW	Light Duty Vehicles, \$94,000 in BRW
Barrow Arctic Research Center Road, \$3,000,000	BRW Wildlife Facility, Phase II, \$11,342,000
Gaswell Road Upgrade, Phase I, \$1,900,000	Shop II Upgrade, \$675,000
BUS Service Connections Upgrades, \$647,000	BRW Heavy Equip Replacement Shop II, \$1,282,000
BUS Pump Station 5 Upgrades, \$2,227,000	Barrow Sanitation Shop III, \$350,000
BUS Repairs & Upgrades, \$2,000,000	S&R Fuel Truck with 5000 Gallon Tank, \$62,000
East End Barrow Utilities Installation, \$1,500,000	Barrow Heavy Equipment Major Repairs, \$390,000
BRW Landfill Phase V Development, \$1,700,000	Windows Server 2016 Active Directory Upgrades, \$133,000 split amongst 8 communities



### STATUS OF MAJOR PROJECTS

- Residential Learning Center design is complete and renovation is anticipated to begin this summer
- Construction of phase I of the Tom Gordon Expressway is underway
- Design upgrades to Gaswell Road from Cakeeater to the Landfill/Maagaq Road will begin this summer
- Design should begin soon for upgrades to Pump Station 5
- The NARL natural gasline replacement project is on hold pending construction funding
- The design for the new cell 4 and closure of cell 2 are complete. Construction is funded and will begin soon
- The design for the new Iļisaġvik College campus is in concept phase. Additional funding will be needed to complete design and for construction
- New antennas have been installed at Walakpa and the computer upgrade is complete
- A new PSO/jail facility is in design and will be completed once land is purchased for the facility
- The BHS pool renovation design is nearly complete and there is funding for construction
- Land assessment and purchase negotiations are underway for an Integrated Behavioral Health Campus
- Pump Station 4 work is complete
- The Barrow Gas Field Microturbines project is complete
- A new fire engine for Barrow arrived last summer



### ANTICIPATED CAPITAL NEEDS

Ipalook Elementary School and Hopson Middle School are both in need of major maintenance upgrades, including playgrounds	A NSB consolidated administrative facility will be needed
New PSO / jail facility	A seawall for erosion control is needed. The Army Corps of Engineers/NSB project to address coastal erosion has community support for federal funding
Additional water and sewer connections are needed	
Complete the Residential Learning Center remodel	



# Wainwright



## 2019 6 Year Capital Improvement Plan

### 2019-10 Recommended Projects

NSBSD Infrastructure Improvements, \$500,000 in AIN	AW Power Grid Preservation, \$72,000 for AIN
AIN Water Treatment Plant Upgrade, \$9,558,000	AW Power Generation Upgrade, \$142,000 in AIN
AW Water Storage Tank Upgrades, \$2,400,000 for AIN	Light Duty Vehicles, \$92,000 in AIN
AW Water Systems Major Repairs, \$644,000 in AIN	S&R Fuel Truck with 5000 gal tank, \$62,000 in AIN
Water Dist. Pump Variable Frequency Drives, \$50,000 for AIN	Wainwright Heavy Equipment Replacement, \$701,000
W&S Facilities HVAC & Digital Control Upgr, \$77,000 in AIN	Vill. Upfund Heavy Equip. Major Repair, \$55,000 in AIN
AW Sewer Systems Major Repairs, \$215,000 for AIN	Windows Server 2016 Active Directory Upgrades, \$140,000 split amongst 8 communities
AW Water System Equipment, \$26,000 for AIN	

### 2019 Wainwright Steering Committee Priorities

- |   |  |
|---|--|
| 1. Replace Public Works Building          | 8. Community Wide Drainage and Culverts – Road Lifting |
| 2. Power Plant                            | 9. Cultural Center / Daycare and Community Center      |
| 3. Water & Wastewater Treatment Plant     | 10. Expansion of Panik Road                            |
| 4. Gravel Acquisition                     | 11. Tapqaq Bar Access Road                             |
| 5. Alak School Upgrade                    | 12. Coastal Erosion Mitigation                         |
| 6. Expansion of Maqqik road and driveways | 13. Airport Passenger Terminal                         |
| 7. Housing                                | 14. Mini Hub   |



### Status of Major Projects

The sewage outfall pipeline replacement is complete	The design work for the landfill expansion is underway
Alak School renovation design has been funded and will begin soon	The wastewater treatment plant lift station upgrade is in design
The design for new a new snow fence is nearly complete and property easement negotiations are underway	The man camp to replace itinerant housing and make more housing available to residents is complete
The temporary Public Works facility is almost complete	An RFP has been released for Tank 1 design repair
Demolition of the existing Public Works building and construction of the new permanent facility will occur while services to the community are provided from the temporary building	Water storage upgrade design work will begin this summer
	The water plant SCADA system design is 95% complete. The design firm is working on 100% completion with bid documents. Currently, there is not funding for construction

### Wainwright Comprehensive Plan Select Capital Needs

- Goal 1. Develop a cultural center and daycare center
- Goal 2. Potential airport relocation, docking facility and boat launch at Tupkak Bar Road
- Goal 3. Facility demolition recycling program, flag winter transportation routes for snowmachine travelers
- Goal 4. Develop multi-use facility
- Goal 5. Fiber optic upgrade

# Current Capital Improvements Financial Summary \*

\* per NSBMC 11.040(a)(1)

PAST FUNDS    CURRENT FUNDS    PROJECT CLOSING

6 YEAR PLAN FUTURE FUNDING    UPF    UPFUND/UPFUND REQUEST

CAPITAL PROJECTS BY ORDINANCE SECTION		PROJECT START FY	PROJECT CLOSE FY	TOTAL APPROPRIATIONS TO DATE	CURRENT UNENCUMBERED (April 2019)	CURRENT ENCUMBERED (April 2019)	2019-10 FUNDING	Fiscal Year														
								2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
<b>Section 6 - Educational Facilities</b>																						
06-187	District-wide Facility Upgrades (succeeded by 06-201)	2007	2019	\$9,169,000	\$746,068	\$132,197		2007														
06-192	Kali School Major Renovations	2010	2019	\$11,125,000	\$196	\$223,499																
06-195	Tikigaq School Major Renovation & Gym Addition	2012	2019	\$40,642,000	\$1,375,385	\$278,283																
06-196	KAK Kaveolook School Gymnasium Addition	2012	2019	\$16,523,000	\$140,331	\$0																
06-197	Meade River School Renovation	2014	2023	\$15,019,000	\$1,164,344	\$6,420,762													UpF	UpF		
06-199	BRW Residential Learning Support	2015	2023	\$3,000,000	\$2,672,947	\$20													UpF	UpF		
06-201	District-wide Infrastructure Improvements	2017	TBD	\$9,928,000	\$3,438,145	\$5,378,673	\$4,000,000												UPF	UPF	UPF	UPF
06-202	BHS Renovation Phase I	2018	TBD	\$8,000,000	\$7,000,000	\$1,000,000													UPF		UPF	
06-203	Alak School Renovation Phase I	2018	TBD	\$2,740,000	\$2,740,000	\$0														UpF		
06-204	Ilisagvik College New Facility Design Phase I	2018	TBD	\$1,000,000	\$1,000,000	\$0														UpF	UpF	UpF
<b>Section Totals</b>				<b>\$105,406,000</b>	<b>\$9,537,417</b>	<b>\$12,433,434</b>	<b>\$4,000,000</b>															
<b>Section 7 - Roads, Street and Watercourses</b>																						
07-230	Platting and Survey of Dedicated Rights of Way NSB Properitie	1997	2019	\$614,000	\$58,310	\$197,997		1997														
07-239	AW Snow Fencing Upgrades	2002	2019	\$7,703,000	\$2,259,941	\$259		2002														
07-241	AW Emergency Response	2002	2019	\$6,064,000	\$1,423,226	\$102,896		2002														
07-250	AW Culvert Repair & Replacement	2006	2019	\$710,000	\$53,224	\$500		2006														
07-251	BRW Arctic Research Center Road	2007	2023	\$12,713,000	\$233,786	\$4,769,630	\$3,000,000												UpF			
07-264	AKP Museum Road	2010	2019	\$1,667,000	\$1,185,276	\$55,728																
07-267	ATQ Cemetery Road Upgrade & Repair Design	2012	2019	\$250,000	\$213,699	\$0																
07-268	BRW Coastal Erosion Mitigation	2013	TBD	\$12,900,000	\$1,952,286	\$192,960													UpF	UpF	UpF	
07-269	PHO Coastal Erosion Mitigation & Mining	2013	TBD	\$4,330,000	\$2,603,291	\$378,000													UpF	UpF	UpF	
07-270	BRW Nunavaak Road Upgrade	2014	2022	\$500,000	\$85,332	\$4,884														UpF		
07-271	PHO Road Resurfacing	2015	2022	\$400,000	\$389,264	\$0														UpF		
07-272	AW Gravel	2016	TBD	\$9,151,000	\$8,384,949	\$272,890													UPF	UPF	UPF	
07-273	AW Road Stabilization Upgrade	2016	2023	\$870,000	\$851,283	\$0													UPF			
07-274	Point Lay Grading & Drainage Improvements	2016	2021	\$1,000,000	\$751,601	\$55,638																
07-275	Point Hope New Subdivision Roads	2016	2019	\$375,000	\$365,770	\$0																
07-276	East Barrow Subdivision Roads	2016	TBD																UPF	UPF		
07-277	Barrow Road Improvement	2017	TBD	\$613,000	\$612,057	\$0	\$1,900,000												UpF	UPF	UPF	
07-278	Nuiqsut Road Improvements	2018	TBD	\$294,000	\$206,870	\$70,705														UPF	UPF	UPF
07-279	Barrow Gaswell Road Upgrades Phase I	2018	TBD	\$100,000	\$100,000	\$0	\$1,900,000												UpF	UPF	UPF	UPF
<b>Section Totals</b>				<b>\$59,860,000</b>	<b>\$21,423,299</b>	<b>\$6,031,382</b>	<b>\$6,800,000</b>															
<b>Section 8 - Public Housing</b>																						
08-166	AW Residential Housing Development	2014	TBD	\$20,500,000	\$4,277,300	\$227,625													UPF		UPF	
<b>Section Totals</b>				<b>\$20,500,000</b>	<b>\$4,277,300</b>	<b>\$227,625</b>	<b>\$0</b>															

**2017 6 Year Capital Plan**  
per NSBMC 3.15.050 (C)

CAPITAL PROJECTS BY ORDINANCE SECTION		PROJECT START FY	PROJECT CLOSE FY	TOTAL APPROPRIATIONS TO DATE	CURRENT UNENCUMBERED (April 2019)	CURRENT ENCUMBERED (April 2019)	2019-10 FUNDING	Fiscal Year													
								2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Section 9 - Water Facilities</b>																					
09-121	Utilidor Major Repairs/Upgrades (BUS) (succeeded by 10-125)	2001	2019	\$10,981,000	\$169,734	\$710,406		2001													
09-132	BRW Water & Sewer Expansion	2008	2019	\$33,112,702	\$64,333	\$466,965		2008													
09-137	ATQ Facility Connection Water & Sewer Connections	2010	TBD	\$1,049,998	\$175,951	\$0															UPF
09-138	NUI Facility Water & Sewer Connections	2010	2019	\$5,312,002	\$264,655	\$0															
09-142	New BRW Residential Water & Sewer Connections	2011	TBD	\$2,050,000	\$15,000	\$150,132															UPF
09-145	AIN Water Treatment Plant Upgrades	2011	2023	\$1,060,000	\$214,674	\$0	\$9,558,000														UPF
09-148	AKP Facility Connections Water & Sewer Connections	2012	2022	\$750,000	\$12,320	\$262,353	\$1,850,000														UPF
09-149	AW Water Storage Tank Upgrades	2012	TBD	\$11,292,000	\$1,270,420	\$3,014,584	\$2,400,000														UPF
09-150	AW Water Plant System Upgrades	2013	2022	\$450,000	\$216,695	\$74,312															UPF
09-151	Point Lay Water & Sewer System Upgrade	2015	2022	\$485,000	\$454,974	\$0															UPF
09-152	BUS Service Connection Upgrades	2016	TBD	\$240,000	\$107,442	\$108,736	\$647,000														UPF
09-153	BUS SCADA Systems Design	2016	2022	\$191,000	\$13,597	\$12,636															UPF
09-154	AW Residential Water Holding Tanks	2016	TBD	\$508,000	\$502,922	\$0															UPF
09-155	AW Water System Upgrades	2017	TBD	\$4,917,000	\$3,111,303	\$1,158,911	\$3,000,000														UPF
09-156	AKP Water Well	2018	2021	\$2,305,000	\$2,305,000	\$0															UPF
New 09-157	AW Water Distribution Pump VFD's	2019	TBD				\$200,000														UPF
New 09-158	PIZ Drinking Water Source Development	2019	TBD				\$3,600,000														UPF
New 09-159	AW Secondary Water Source	2019	TBD				\$3,595,000														UPF
New 09-160	W&S Facilities-HVAC & Digital Control Upgrades	2019	2023				\$467,000														UPF
<b>Section Totals</b>				<b>\$72,398,702</b>	<b>\$6,594,020</b>	<b>\$5,959,035</b>	<b>\$25,317,000</b>														
<b>Section 10 - Sewage Treatment Disposal Facilities</b>																					
10-107	AW Sewage Tanks	2005	TBD	\$6,523,000	\$1,911,814	\$722,327		2005													UPF
10-111	AW Sewage Lagoon Upgrades	2013	2023	\$6,405,000	\$5,580,975	\$4,114															UPF
10-115	Kaktovik WWTP Expansion	2014	2020	\$782,000	\$90,883	\$56,550															UPF
10-117	PHO Sewer Main Line Upgrade	2014	2022	\$2,300,000	\$88,491	\$78,406															UPF
10-118	AW Treated Effluent Outfall Pipeline Upgrades	2015	2022	\$2,032,000	\$1,255,068	\$392															UPF
10-119	Point Hope Heat Trace Panel Upgrades	2016	2022	\$1,199,000	\$440,237	\$304,100	\$2,072,000														UPF
10-120	BUS Pump Station #5 Upgrade	2016	2023	\$303,000	\$70,723	\$0	\$2,227,000														UPF
10-121	PHO Vacuum Station Upgrade	2016	2020	\$639,000	\$70,723	\$0															UPF
10-122	PHO WWTP Upgrades	2016	2022	\$1,000,000	\$994,559	\$0	\$266,000														UPF
10-123	AW Sewer System Upgrades	2017	TBD	\$121,351	\$3,018,422	\$1,919,284	\$1,000,000														UPF
10-124	PIZ WWTP Receiving Station	2017	2022	\$10,047,000	\$9,040,485	\$382,000															UPF
10-125	Barrow Utilidor System Upgrades (successor to 09-121)	2017	TBD	\$5,971,000	\$2,337,713	\$2,836,888	\$2,000,000														UPF
10-126	AW Water Sewer Equipment	2018	TBD	\$548,000	\$259,509	\$132,336	\$300,000														UPF
<b>Section Totals</b>				<b>\$38,268,351</b>	<b>\$25,144,721</b>	<b>\$6,312,324</b>	<b>\$7,865,000</b>														



**2017 6 Year Capital Plan**  
per NSBMC 3.15.050 (C)

**CAPITAL PROJECTS BY ORDINANCE SECTION**

	PROJECT START FY	PROJECT CLOSE FY	TOTAL APPROPRIATIONS TO DATE	CURRENT UNENCUMBERED (April 2019)	CURRENT ENCUMBERED (April 2019)	2019-10 FUNDING	Fiscal Year																	
							2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
<b>Section 14 - Public Safety Facilities</b>																								
14-116	2009	2022	\$5,566,000	\$1,213,018	\$43,584	\$900,000														UPF	UPF			
14-118	2010	2019	\$27,500,000	\$18,845	\$136,889																			
14-124	2013	2019	\$832,000	\$162,047	\$0																			
14-125	2013	2019	\$46,810,000	\$1,449,055	\$1,250,695																			
14-128	2014	2019	\$750,000	\$295,221	\$15,784																			
14-130	2016	2019	\$1,000,000	\$359,699	\$0																			
14-131	2017	TBD	\$3,003,000	\$1,170,341	\$1,401,850															UPF	UPF	UPF	UPF	
14-132	2017	TBD	\$3,003,000	\$1,170,341	\$1,401,850																UPF	UPF	UPF	
			<b>Section Totals</b>	<b>\$88,464,000</b>	<b>\$5,838,566</b>	<b>\$4,250,651</b>	<b>\$900,000</b>																	
<b>Section 15 - Sanitary Facilities</b>																								
15-088	1999	2019	\$3,530,000	\$404,314	\$0		1999																	
15-095	2004	2019	\$6,480,000	\$298,095	\$343		2004																	
15-099	2009	2019	\$2,500,000	\$82,902	\$72,169																			
15-101	2011	2022	\$1,586,000	\$615,863	\$200																UPF			
15-102	2012	2019	\$4,500,000	\$61,252	\$83,986																			
15-104	2014	2023	\$20,931,000	\$6,145,833	\$256,535	\$1,700,000														UPF	UPF	UPF	UPF	
15-105	2014	2020	\$23,000,000	\$7,611,084	\$534,827																			
15-106	2016	2021	\$1,983,000	\$902,820	\$46,994																			
15-107	2017	TBD	\$1,900,000	\$1,562,738	\$260,155																UPF	UPF	UPF	
15-108	2018	TBD	\$400,000	\$400,000	\$0																	UPF		
			<b>Section Totals</b>	<b>\$66,810,000</b>	<b>\$18,084,901</b>	<b>\$1,255,209</b>	<b>\$1,700,000</b>																	
<b>Section 17 - Communications</b>																								
17-026	2010	2021	\$11,771,000	\$1,359,004	\$825,094																			
17-027	2010	2019	\$5,000,000	\$69,757	\$75,190																			
17-032	2013	2019	\$138,000	<.14>	\$3,333																			
			<b>Section Totals</b>	<b>\$16,909,000</b>	<b>\$1,428,761</b>	<b>\$903,618</b>	<b>\$0</b>																	



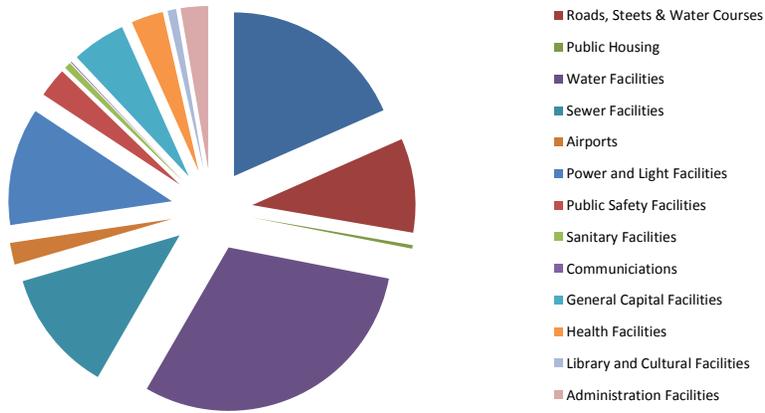
**2017 6 Year Capital Plan**  
per NSBMC 3.15.050 (C)

CAPITAL PROJECTS BY ORDINANCE SECTION		PROJECT START FY	PROJECT CLOSE FY	TOTAL APPROPRIATIONS TO DATE	CURRENT UNENCUMBERED (April 2019)	CURRENT ENCUMBERED (April 2019)	2019-10 FUNDING	Fiscal Year															
								2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		
<b>Section 19 - Health Facilities</b>																							
19-074	Sr. Bus Replacement	2012	2019	\$950,000	\$98,597	\$0		---	---	---	---	---	---	---	---	---	---	---	---	---	---		
19-075	Homeless Assistance Shelter	2016	TBD	\$470,000	\$465,979	\$0		---	---	---	---	---	---	---	---	---	---	---	---	UPF	UPF	UPF	
19-076	Behavioral Health Complex	2017	TBD	\$4,554,000	\$4,551,724	\$0		---	---	---	---	---	---	---	---	---	---	---	---	UPF	UPF	UPF	
PAR 2015-02	PHO Health Clinic Upgrades							---	---	---	---	---	---	---	---	---	---	---	---	UPF	UPF	UPF	
<b>Section Totals</b>				<b>\$5,974,000</b>	<b>\$5,116,300</b>	<b>\$0</b>	<b>\$0</b>																
<b>Section 20 - Library and Cultural Facilities</b>																							
20-001	IHC Expansion & Renovation	2006	2022	\$2,701,000	\$129,006	\$0		2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	2006	
<b>Section Totals</b>				<b>\$2,701,000</b>	<b>\$129,006</b>	<b>\$0</b>	<b>\$0</b>																
<b>Section 22 - Administrative Facilities</b>																							
22-016	AW Computer & Server Replacements	1993	TBD	\$4,358,000	\$568,457	\$183,436		1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	UPF	UPF	UPF	UPF
22-020	AW Office Machine Replacements	2007	TBD	\$1,711,000	\$225,015	\$25,690		2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	2007	UPF	UPF	UPF	UPF
22-024	Emergency Ops Center / Joint Training Center	2012	TBD	\$4,387,000	\$97,419	\$213,550		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
22-025	JD Edwards Upgrades	2013	2023	\$2,210,000	\$497,573	\$189,824		---	---	---	---	---	---	---	---	---	---	---	---	UPF	UPF	UPF	
22-026	NSB Administrative Center Design	2016	TBD	\$1,200,000	\$2,586,374	\$612,500		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
NEW	Windows Server 2016 Active Directory Upgrades		TBD				\$1,113,000	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
<b>Section Totals</b>				<b>\$13,866,000</b>	<b>\$3,974,839</b>		<b>\$1,113,000</b>																
<b>TOTALS</b>		<b>TOTAL</b>		<b>\$807,284,053</b>	<b>\$178,433,518</b>	<b>\$68,842,848</b>	<b>\$75,000,000</b>																

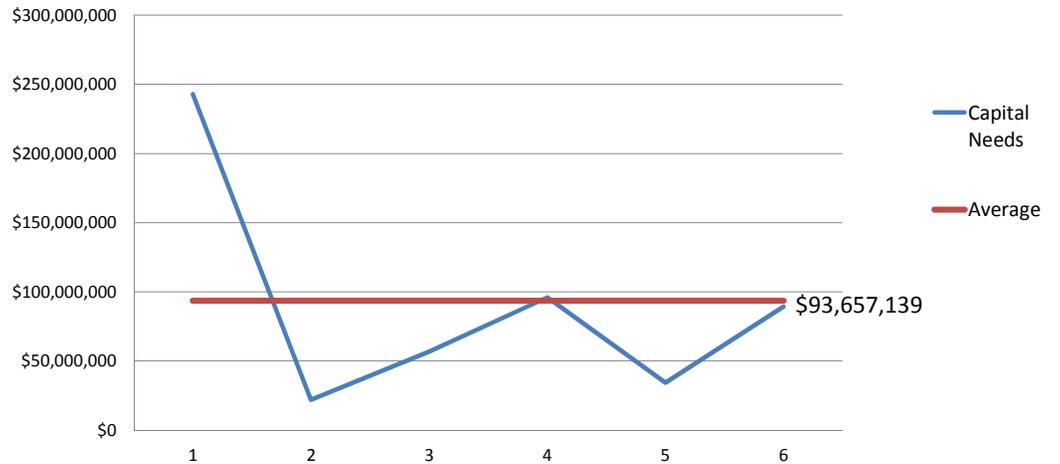
# North Slope Borough Capital Repair and Replacement Schedule Summary

Report Year	2019	Summary Appraisal of Community Buildings, Infrastructure and Equipment Capital Assets				Current Dollar Value of Systems/Components that require Renewal or Replacement during year specified (in thousands of dollars)						No. of Deferred Projects	Deferred Value	
All Communities and Service Areas		Least Remaining Life Span	Earliest Year work req'd	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6					
		Escalation ->		0%	2%	2%	2%	2%	2%					
Location	Asset Value	Asset Description	Section		2019	2020	2021	2022	2023	2024			Six Year Total	
<a href="#">Wainwright</a>	\$ 474,577,506	Summary	AIN		17,839	918	2,258	1,517	7,488	2,803	29	521	\$ 32,823,228	
<a href="#">Point Hope</a>	\$ 466,440,295	Summary	PHO		14,176	70	935	3,299	2,446	14,855	2	952	\$ 35,781,632	
<a href="#">Point Lay</a>	\$ 266,202,309	Summary	PIZ		22,617	2,063	2,056	6,423	888	3,373	16	2,403	\$ 37,419,372	
<a href="#">Barrow</a>	\$ 1,701,501,632	Summary	BRW		104,250	15,990	41,661	68,393	14,352	45,716	90	14,547	\$ 290,361,838	
<a href="#">Atqasuk</a>	\$ 255,844,660	Summary	ATQ		19,628	290	1,303	1,120	3,555	6,226	12	3,784	\$ 32,121,986	
<a href="#">Nuiqsut</a>	\$ 430,916,116	Summary	NUI		28,432	279	2,424	9,591	1,058	7,399	11	1,813	\$ 49,184,450	
<a href="#">Kaktovik</a>	\$ 277,277,698	Summary	BTI		17,835	1,039	1,036	2,822	718	4,210	18	3,685	\$ 27,659,919	
<a href="#">Anaktuvuk Pass</a>	\$ 259,083,023	Summary	AKP		14,952	1,366	515	2,172	2,638	2,898	1	487	\$ 24,541,314	
<a href="#">Service Area 10</a>	\$ 103,202,610	Summary	SA10		3,125	0	4,447	638	1,106	1,841	3	6,629	\$ 11,156,823	
<b>Totals</b>	<b>\$ 4,235,045,849</b>				<b>242,856</b>	<b>22,015</b>	<b>56,635</b>	<b>95,975</b>	<b>34,248</b>	<b>89,323</b>	<b>182</b>	<b>34,820</b>	<b>\$ 561,942,836</b>	

**Capital Assets by Section**

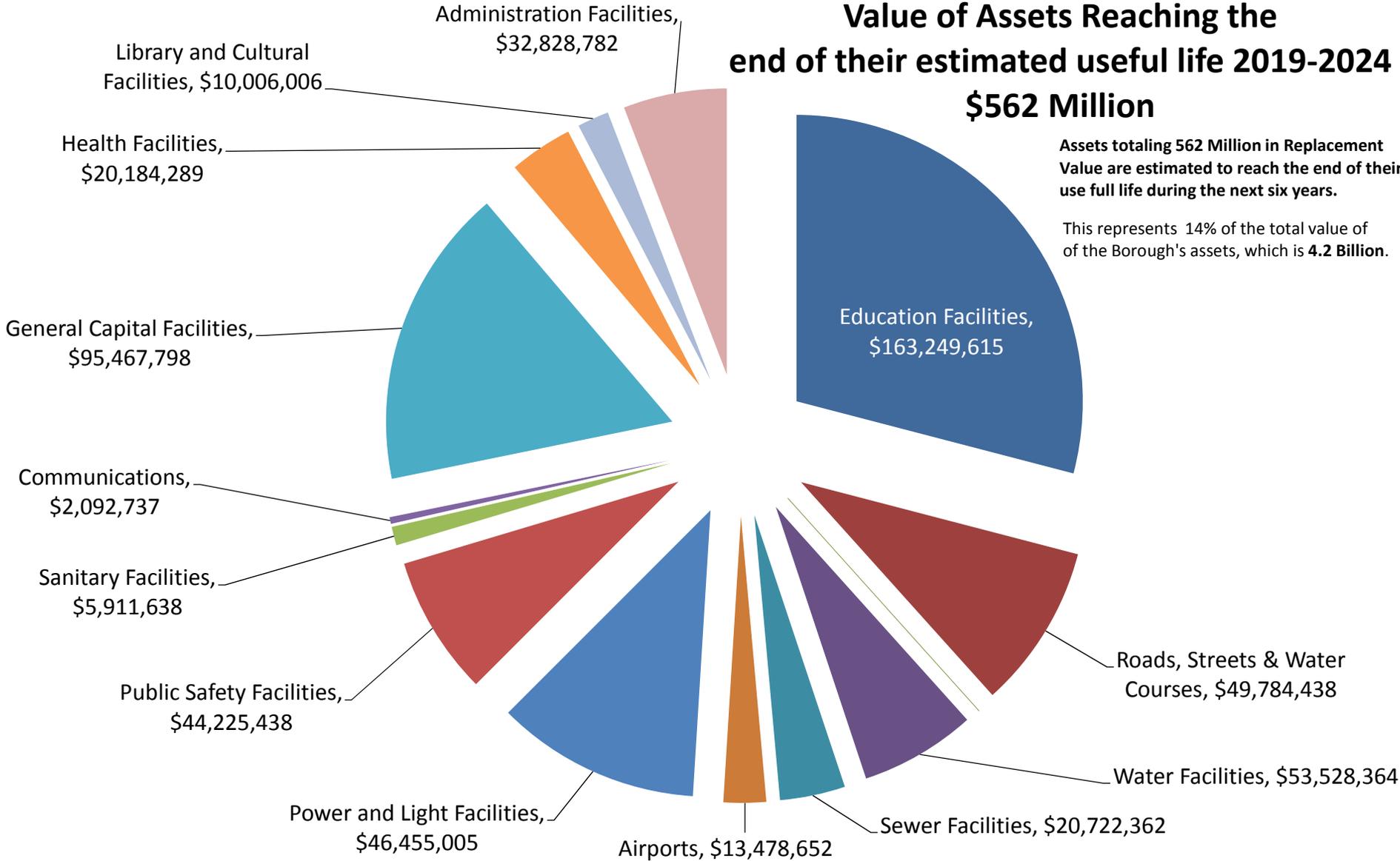


**6 yr Capital Asset Needs Trend**

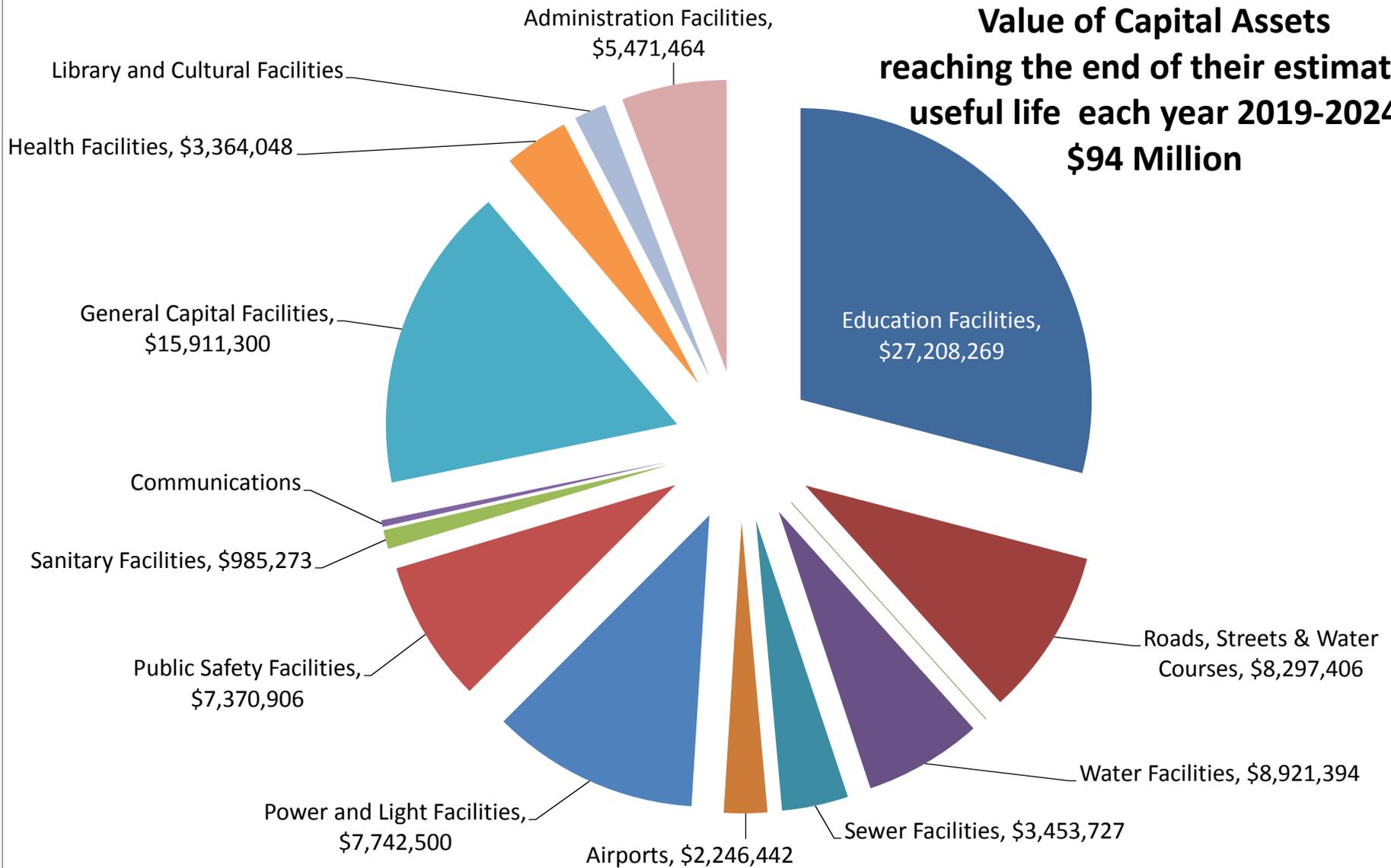


## Value of Assets Reaching the end of their estimated useful life 2019-2024 \$562 Million

Assets totaling 562 Million in Replacement Value are estimated to reach the end of their use full life during the next six years.  
This represents 14% of the total value of of the Borough's assets, which is **4.2 Billion**.



**Value of Capital Assets  
reaching the end of their estimated  
useful life each year 2019-2024  
\$94 Million**



## Proposed Minimum Annual Capital Upgrade Budget \$56.2 Million

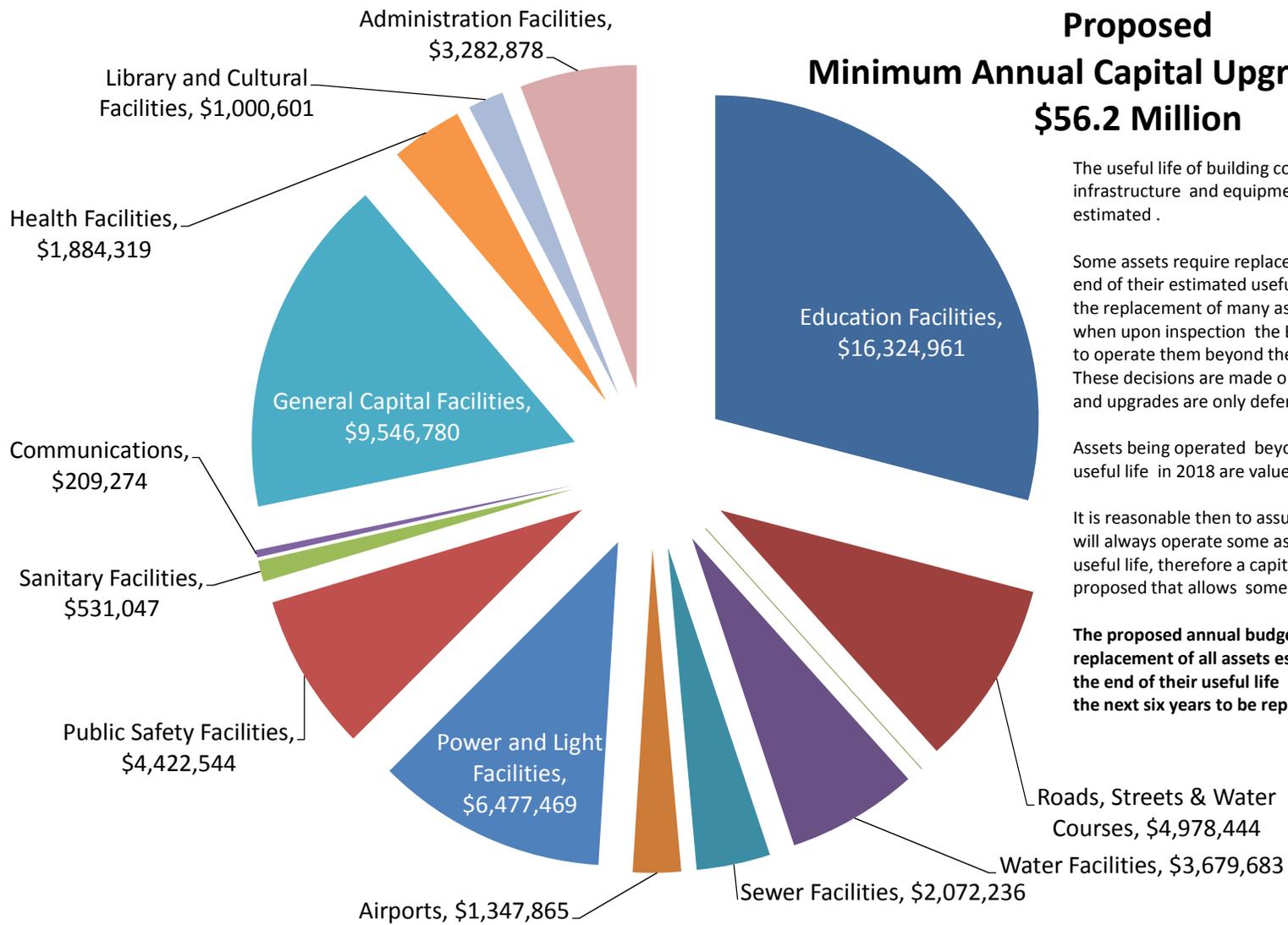
The useful life of building components, infrastructure and equipment assets are estimated .

Some assets require replacement before the end of their estimated useful life, however the replacement of many assets can be deferred when upon inspection the Borough chooses to operate them beyond their estimated useful life. These decisions are made on a case by case basis and upgrades are only deferred when they are due.

Assets being operated beyond their estimated useful life in 2018 are valued at 200 Million Dollars.

It is reasonable then to assume that the Borough will always operate some assets beyond their useful life, therefore a capital upgrade plan is proposed that allows some deferral.

**The proposed annual budget allows the replacement of all assets estimated to reach the end of their useful life within the next six years to be replaced within 10 years.**



NSB SIX YEAR CAPITAL PLAN		2019	2020	2021	2022	2023	2024
	New GO Bond	\$76,000,601	\$77,517,151	\$79,291,975	\$111,562,697	\$106,602,444	\$73,570,076
	Surplus GO Bond		\$30,000,000				
	Other (grants, private)	\$10,000,000	\$15,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000
	<b>Total Program</b>	<b>\$86,000,601</b>	<b>\$122,517,151</b>	<b>\$99,291,975</b>	<b>\$131,562,697</b>	<b>\$126,602,444</b>	<b>\$93,570,076</b>
	<b>Upgrades</b>	\$61,658,601	\$118,217,151	\$89,291,975	\$98,562,697	\$76,602,444	\$93,570,076
<b>Expansion</b>	\$24,342,000	\$4,300,000	\$10,000,000	\$33,000,000	\$50,000,000	\$0	
<b>Project #</b>	<b>Project Description</b>						
<b>SECTION 06 - EDUCATIONAL FACILITIES</b>		<b>\$4,000,000</b>	<b>\$20,500,000</b>	<b>\$16,324,961</b>	<b>\$29,000,000</b>	<b>\$16,324,961</b>	<b>\$16,324,961</b>
<i>Capital Planning (R&amp;R) Projections not listed below</i>		\$12,324,961	\$0	\$3,324,961	\$0	\$2,724,961	\$5,124,961
<i>Expansion of existing programs listed below</i>		\$0	\$0	\$0	\$0	\$0	\$0
<i>Upgrades to existing programs listed below</i>		\$4,000,000	\$20,500,000	\$13,000,000	\$29,000,000	\$13,600,000	\$11,200,000
06-197	Meade River School Renovation <b>Final Phase</b>		Closing				
06-199	BRW Residential Learning Center		\$1,500,000	TBD	TBD	Closing	
06-201	District Wide Infrastructure Improvements	\$4,000,000	\$2,000,000	\$2,000,000	\$1,000,000		
06-202	BHS Renovation Phase 1		\$17,000,000		\$28,000,000	\$13,600,000	\$11,200,000
06-203	AIN Alak School Major Renovations			\$11,000,000			
06-204	Ilisagvik College New Design		TBD			TBD	
<b>SECTION 07 - ROADS, STREETS, &amp; WATERCOURSES</b>		<b>\$6,800,000</b>	<b>\$8,181,000</b>	<b>\$9,800,000</b>	<b>\$7,250,000</b>	<b>\$8,500,000</b>	<b>\$7,250,000</b>
<i>Capital Planning (R&amp;R) Projections not listed below</i>		\$1,178,444	\$0	\$0	\$0	\$0	\$0
<i>Expansion of existing programs listed below</i>		\$3,000,000	\$2,000,000	\$0	\$0	\$0	\$0
<i>Upgrades to existing programs listed below</i>		\$3,800,000	\$6,181,000	\$9,800,000	\$7,250,000	\$8,500,000	\$7,250,000
07-251	BRW Arctic Research Center Road	\$3,000,000				Closing	
07-268	BRW Coastal Erosion Mitigation		TBD			TBD	
07-269	PHO Coastal Erosion Mitigation & Mining		TBD			TBD	
07-270	BRW Nunavaak Road Upgrade Phase I		\$1,500,000	\$1,500,000		Closing	
07-271	PHO Road Resurfacing PH I			\$1,000,000	Closing		
07-272	NSB Gravel		\$2,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
07-273	Areawide Road Stabilization Upgrade			\$300,000		Closing	
07-274	Point Lay Grading & Drainage Improvements		TBD		Closing		
07-276	East Barrow Residential Development		\$2,000,000	\$500,000		\$2,000,000	\$500,000
07-277	AW Road Improvement Project	\$1,900,000	\$1,181,000		\$750,000		\$750,000
07-278	NUI Road Improvements		\$500,000	\$500,000	\$500,000	\$500,000	TBD
07-279	BRW Gaswell Road Improvements Ph 1	\$1,900,000	\$1,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
<b>SECTION 08 - PUBLIC HOUSING</b>		<b>\$10,000,000</b>	<b>\$0</b>	<b>\$10,000,000</b>	<b>\$0</b>	<b>\$10,000,000</b>	<b>\$0</b>
<i>Capital Planning (R&amp;R) Projections not listed below</i>		\$0	\$0	\$0	\$0	\$0	\$0
<i>Expansion of existing programs listed below</i>		\$10,000,000	\$0	\$10,000,000	\$0	\$10,000,000	\$0
<i>Upgrades to existing programs listed below</i>		\$0	\$0	\$0	\$0	\$0	\$0
08-166	AW Residential Housing Development	\$10,000,000		\$10,000,000		\$10,000,000	
<b>SECTION 09 - WATER FACILITIES</b>		<b>\$25,317,000</b>	<b>\$19,365,000</b>	<b>\$12,709,000</b>	<b>\$3,679,683</b>	<b>\$17,517,000</b>	<b>\$14,679,683</b>
<i>Capital Planning (R&amp;R) Projections not listed below</i>		\$0	\$0	\$0	\$179,683	\$0	\$179,683
<i>Expansion of existing programs listed below</i>		\$7,395,000	\$5,000,000	\$5,710,000	\$0	\$11,000,000	\$11,000,000
<i>Upgrades to existing programs listed below</i>		\$17,922,000	\$14,365,000	\$6,999,000	\$3,500,000	\$6,517,000	\$3,500,000
09-137	ATQ Facility Water & Sewer Connections Ph 1			TBD		\$8,000,000	\$6,000,000
09-142	New BRW Residential W/S Connections		\$5,000,000				\$5,000,000
09-145	AIN Water Treatment Plant Upgrades	\$9,558,000				Closing	
09-148	AKP Facility Water & Sewer Connections Ph 1	\$1,850,000	\$1,800,000		Closing		
09-149	AW Water Storage Tank Upgrades	\$2,400,000	\$5,000,000	\$3,000,000		\$2,500,000	

<b>NSB SIX YEAR CAPITAL PLAN</b>		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
09-150	AW Water Plant System Upgrades		\$715,000		Closing		
09-151	Pt Lay W/S System Upgrade, PH I Design		TBD	TBD	Closing		
09-152	BUS Service Connection Upgrades	\$647,000	\$2,400,000	\$500,000	\$500,000	\$500,000	\$500,000
09-153	BUS SCADA System - Design Phase		\$1,200,000		Closing		
09-154	AW Residential Water Holding Tanks		TBD				
09-155	AW Water System Upgrades	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
09-156	AKP Water Well		TBD	Closing			
<b>NEW 09-157</b>	<b>AW Water Distribution Pump VFD's</b>	\$200,000	\$250,000				
<b>NEW 09-158</b>	<b>PIZ Drinking Water Source Development</b>	\$3,600,000		\$2,100,000			
<b>NEW 09-159</b>	<b>AW Secondary Water Source</b>	\$3,595,000		\$3,610,000			
<b>NEW 09-160</b>	<b>W&amp;S Facilities-HVAC &amp; Digital Control Upgrades</b>	\$467,000		\$499,000		\$517,000	
<b>SECTION 10 - SEWAGE TREATMENT DISPOSAL FACILITIES</b>		<b>\$7,865,000</b>	<b>\$9,910,000</b>	<b>\$5,250,000</b>	<b>\$4,750,000</b>	<b>\$2,750,000</b>	<b>\$4,750,000</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$0	\$0	\$0	\$0	\$0	\$0
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$0	\$0
	<i>Upgrades to existing programs listed below</i>	\$7,865,000	\$9,910,000	\$5,250,000	\$4,750,000	\$2,750,000	\$4,750,000
10-107	AW Sewage Tanks		\$2,560,000		\$2,000,000		\$2,000,000
10-111	AW Sewage Lagoon Upgrades		\$300,000			Closing	
10-115	Kaktovik WWTP Expansion		Closing				
10-117	PHO Sewer Main line Upgrades		\$2,500,000	\$2,500,000	Closing		
10-118	AW Effluent Pipeline upgrades		\$900,000		Closing		
10-119	PHO Heat Trace Panel Upgrades - PH I	\$2,072,000			Closing		
10-120	B.U.S. Pump Station #5 Upgrade - Design Phase	\$2,227,000				Closing	
10-122	Point Hope WWTP Upgrades	\$266,000	\$400,000		Closing		
10-123	AW Sewer System Upgrades	\$1,000,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
10-124	PIZ WWTP Receiving Station PH II				Closing		
10-125	Barrow Utilidor Systems Upgrades	\$2,000,000	\$1,500,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
10-126	Areawide Water & Sewer Equipment (successor to 18-052)	\$300,000	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000
<b>SECTION 11 - AIRPORT TERMINAL FACILITIES</b>		<b>\$2,100,000</b>	<b>\$1,643,398</b>	<b>\$1,343,398</b>	<b>\$1,343,398</b>	<b>\$1,343,398</b>	<b>\$1,343,398</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$0	\$1,343,398	\$1,343,398	\$1,343,398	\$1,343,398	\$1,343,398
	<i>Expansion of existing programs listed below</i>	\$0	\$300,000	\$0	\$0	\$0	\$0
	<i>Upgrades to existing programs listed below</i>	\$2,100,000	\$0	\$0	\$0	\$0	\$0
11-066	NUI Airport Rehabilitation		TBD		Closing		
11-067	ATQ Airport Rehabilitation	\$2,100,000				Closing	
11-068	AW Airport Passenger Shelters PH I		\$300,000		Closing		
<b>SECTION 13 - LIGHT, POWER AND HEATING SYSTEMS</b>		<b>\$8,416,000</b>	<b>\$14,225,000</b>	<b>\$16,625,000</b>	<b>\$30,500,000</b>	<b>\$6,477,469</b>	<b>\$6,477,469</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$0	\$0	\$0	\$0	\$2,977,469	\$4,977,469
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$0	\$0
	<i>Upgrades to existing programs listed below</i>	\$8,416,000	\$14,225,000	\$16,625,000	\$30,500,000	\$3,500,000	\$1,500,000
13-222	AW Waste Heat Recovery	\$3,700,000	\$1,750,000	\$1,500,000		Closing	
13-228	AW Tank Farm Upgrades		\$1,500,000	Closing			
13-251	AW Power Grid Preservation	\$633,000		\$250,000		\$250,000	
13-258	Village Power Distribution Grid Upgrades	\$1,500,000		\$2,000,000		\$2,000,000	
13-261	AW Fuel Truck Loading Rack Installation & Upgrades		\$1,725,000		Closing		
13-265	AW Electrical Metering Upgrades PH II			\$625,000			TBD
13-270	AW Street Lighting Phase	\$83,000		Closing			
13-274	BRW Marine Header & Pipeline Relocation PH II		TBD		Closing		

NSB SIX YEAR CAPITAL PLAN		2019	2020	2021	2022	2023	2024
13-275	BRW NARL Gas Pipeline Upgrade PH I		\$3,000,000	\$3,000,000			
13-276	BRW Gasfield Unified Upgrades		\$250,000		\$250,000		\$250,000
13-278	AKP Power Plant Upgrade			\$8,000,000		Closing	
13-279	AW Power Generation Upgrade	\$1,000,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000	\$1,250,000
13-280	BGF Pig Launcher Ph 1		\$1,100,000		\$1,000,000		Closing
<b>NEW 13-281</b>	<b>East End Barrow Utilities Installation</b>	\$1,500,000	\$1,000,000				
	AIN Power Plant Replacement		\$2,000,000		\$20,000,000		TBD
PAR 2013-05	ATQ Power Plant Upgrade		\$650,000		\$8,000,000		Closing
<b>SECTION 14 - PUBLIC SAFETY FACILITIES</b>		<b>\$900,000</b>	<b>\$7,400,000</b>	<b>\$4,422,544</b>	<b>\$4,422,544</b>	<b>\$29,422,544</b>	<b>\$4,422,544</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$3,522,544	\$0	\$2,922,544	\$2,922,544	\$2,922,544	\$2,922,544
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$25,000,000	\$0
	<i>Upgrades to existing programs listed below</i>	\$900,000	\$7,400,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
14-116	AW Fire Station Floor Replacement PH VI	\$900,000	\$900,000		Closing		
14-131	S&R Aircraft Parts & PPE		\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,500,000
14-132	NSB Public Safety Facility Ph 1 Design	\$0	\$5,000,000		TBD	\$25,000,000	
<b>SECTION 15 - SANITARY FACILITIES</b>		<b>\$1,700,000</b>	<b>\$2,700,000</b>	<b>\$4,150,000</b>	<b>\$1,000,000</b>	<b>\$2,650,000</b>	<b>\$531,047</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$0	\$0	\$0	\$0	\$0	\$531,047
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$0	\$0
	<i>Upgrades to existing programs listed below</i>	\$1,700,000	\$2,700,000	\$4,150,000	\$1,000,000	\$2,650,000	\$0
15-101	TOS Upgrades		\$1,200,000		Closing		
15-104	Barrow Landfill Phase V	\$1,700,000	\$1,500,000	\$1,500,000	\$1,000,000	Closing	
15-107	AW Landfill Expansion		TBD	\$2,500,000	TBD	\$2,500,000	TBD
15-108	AW Dumpster Bin Replacement			\$150,000		\$150,000	
<b>SECTION 17 - COMMUNICATIONS</b>		<b>\$0</b>	<b>\$209,274</b>	<b>\$209,274</b>	<b>\$209,274</b>	<b>\$209,274</b>	<b>\$209,274</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$209,274	\$209,274	\$209,274	\$209,274	\$209,274	\$209,274
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$0	\$0
	<i>Upgrades to existing programs listed below</i>	\$0	\$0	\$0	\$0	\$0	\$0
17-026	Boroughwide Radio Systems Upgrades PH II			Closing			
<b>SECTION 18 - GENERAL CAPITAL</b>		<b>\$16,789,000</b>	<b>\$22,100,000</b>	<b>\$12,290,000</b>	<b>\$25,240,000</b>	<b>\$20,240,000</b>	<b>\$9,546,780</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$4,099,780	\$0	\$0	\$0	\$0	\$56,780
Subtotal	<i>Expansion of existing programs listed below</i>	\$11,342,000	\$0	\$0	\$15,000,000	\$10,000,000	\$0
	<i>Upgrades to existing programs listed below</i>	\$5,447,000	\$22,100,000	\$12,290,000	\$10,240,000	\$10,240,000	\$9,490,000
18-042	AW Fire System Upgrade			\$1,500,000		Closing	
18-054	Areawide Light Duty Vehicles	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
18-065	AW High Efficiency Lighting & Facility Controls Ph IV			\$550,000		Closing	
18-099	Wildlife Facility Phase II	\$11,342,000			\$15,000,000	\$10,000,000	
18-100	AW Childcare Facilities Upgrades (BRW/NUI/PHO/AKP)		TBD				
18-101	AIN Public Works Facility Replacement PH II		TBD			Closing	
18-102	Nuiqsut Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-103	Anaktuvuk Pass Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-104	Atqasuk Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-105	Point Hope Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-106	Wainwright Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-107	Kaktovik Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-108	Point Lay Facility Upgrades		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-109	Barrow Facility Upgrades	\$675,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000

<b>NSB SIX YEAR CAPITAL PLAN</b>		<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
18-110	Wainwright Heavy Equipment	\$701,000	\$500,000	\$500,000	\$500,000	\$500,000	closing
18-111	Nuiqsut Heavy Equipment	\$51,000	\$500,000	\$500,000	\$500,000	\$500,000	\$250,000
18-112	Barrow Heavy Equipment	\$2,122,000	\$750,000	\$750,000	\$750,000	\$750,000	\$750,000
18-113	NUI Public Works Shop Replacement - Design Phase		\$12,000,000				
18-114	ATQ Heavy Equip.	\$51,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-115	Kaktovik Heavy Equip.		\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-116	PHO Heavy Equip.	\$103,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-117	PIZ Heavy Equip.	\$110,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
18-118	Village Heavy Equipment Major Repair	\$390,000	\$380,000	\$380,000	\$380,000	\$380,000	\$380,000
18-119	Barrow Heavy Equipment Major Repair	\$390,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000
<b>NEW 18-120</b>	<b>Heavy Equipment Replacement for Anaktuvuk Pass</b>	\$104,000	\$360,000	\$500,000	\$500,000	\$500,000	\$500,000
<b>SECTION 19 - HEALTH FACILITIES</b>		<b>\$0</b>	<b>\$12,000,000</b>	<b>\$1,884,319</b>	<b>\$19,884,319</b>	<b>\$1,884,319</b>	<b>\$1,884,319</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$1,884,319	\$0	\$1,884,319	\$1,884,319	\$1,884,319	\$1,884,319
	<i>Expansion of existing programs listed below</i>	\$0	\$2,000,000	\$0	\$18,000,000	\$0	\$0
	<i>Upgrades to existing programs listed below</i>	\$0	\$10,000,000	\$0	\$0	\$0	
19-075	Homeless Assistance Shelter (Design Development)		TBD				
19-076	Behavioral Health Complex Ph 1 Design		\$2,000,000		\$18,000,000		
PAR 2015-02	PHO Health Clinic Upgrade		\$10,000,000				
<b>SECTION 20 - LIBRARY &amp; CULTURAL FACILITIES</b>		<b>\$1,000,601</b>	<b>\$1,000,601</b>	<b>\$1,000,601</b>	<b>\$1,000,601</b>	<b>\$1,000,601</b>	<b>\$1,000,601</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$1,000,601	\$1,000,601	\$1,000,601	\$1,000,601	\$1,000,601	\$1,000,601
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$0	
	<i>Upgrades to existing programs listed below</i>						
<b>SECTION 22 - ADMINISTRATIVE FACILITIES</b>		<b>\$1,113,000</b>	<b>\$3,282,878</b>	<b>\$3,282,878</b>	<b>\$3,282,878</b>	<b>\$8,282,878</b>	<b>\$25,150,000</b>
	<i>Capital Planning (R&amp;R) Projections not listed below</i>	\$2,169,878	\$2,212,878	\$2,832,878	\$2,212,878	\$3,132,878	\$0
	<i>Expansion of existing programs listed below</i>	\$0	\$0	\$0	\$0	\$5,000,000	\$0
	<i>Upgrades to existing programs listed below</i>	\$1,113,000	\$1,070,000	\$450,000	\$1,070,000	\$150,000	\$25,150,000
22-016	AW Computer & Server Replacements	\$1,113,000	\$300,000	\$300,000	\$300,000		
22-020	AW Office Machine Replacements		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
22-025	JD Edwards Upgrades PH II		\$620,000		\$620,000	Closing	
<b>NEW 22-026</b>	<b>BRW NSB Admin Center Design Phase</b>					\$5,000,000	\$25,000,000

# **Planning & Community Services Department and the Mayor's 2019 Capital Improvement Program Recommendations**

## **EXPANSION OF SERVICES, FACILITIES AND PROGRAMS**

- The Borough currently manages over 4.2 Billion dollars in capital assets. Assets valued over 200 Million are already being operated beyond their estimated useful life. During the next six years 562 Million in capital assets will reach the end of their estimated useful life.
- When a program expansion is considered, we should also consider where we can reduce our inventory of capital assets in order to afford it.
- Expansion of facilities and programs requiring new capital infrastructure that does not replace infrastructure being operated beyond its useful life should be avoided.

## **EQUIPMENT BUDGETS**

- The current capital budgets for equipment are not adequate.
- The Borough maintains over 1,000 pieces of light and heavy duty equipment.
- During consideration of new equipment purchases, the disposal of old equipment that is being replaced must be considered.

## **CONSOLIDATION OF FACILITIES**

- A long term strategy to reduce the total square footage of Borough offices and programs may be to consolidate Borough Facilities in each of our communities to the greatest extent possible.
- Repair/replace existing infrastructure and facilities through 2035 does not appear affordable.
- Replacement projects and PARs for replacement projects should include recommendations and budgets for the re-purposing, disposal or demolition of the existing assets they replace.

## **DESIGN STANDARDS**

- To optimize the useful lives of building systems, design standards should be developed.
- Designs need to fit the budget to insure we are receiving the highest return from capital dollars.

## **BONDING CAPACITY**

- This Capital Plan suggests that bond sales for the next six years should include a minimum of 56.2 million dollars each year to repair/replace the Borough's existing infrastructure.
- Looking for ways to unlock already approved capital dollars in the capital program is necessary to supplement shortfalls in underfunded projects or to address unfunded needs.
- General Obligation Bond sales must be supplemented with other funding sources to meet our capital needs.

## **Fiscal Needs of the North Slope Borough**

- The fiscal responsibility of providing employment opportunities, essential services and maintaining the basic capital infrastructure needs of this municipality are not sustainable without increasing revenue. We must not settle for less. We must protect our taxing authority and we must receive our share of revenue from the development of federal reserves within our boundaries.