

# PHYSICAL SERVICES SECTOR

*Strategic Framework*

## Vision

The Physical Services departments are a cohesive team of proud and empowered employees working collectively to continuously improve the quality of public services

## Mission

The Physical Services sector is a grouping of interrelated departments providing responsive services to plan, build, operate and maintain a safe and efficient infrastructure and a health environment. These services enhance the economic well being and quality of life in the community.

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# DEPARTMENT OF AVIATION

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Taxiway E and Taxiway D Intersection
  - Replace EMAS System
  - North Ramp Improvements
  - Terminal Improvements
  - Aviation Support Center
  - Refurbish of Passenger Loading Bridges
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**The Department of Aviation** administers the Greater Rochester International Airport, a County-operated international airport, one of the busiest commercial air facilities in New York State. The airport was leased to the Monroe County Airport Authority in 1989. The lease provided that all revenue generated by various operations at the airport would remain with the Airport Authority. The Authority contracted with the County to perform the functions previously handled by the County and the County Legislature continued its role in the awarding of contracts related to activities at the field. As agent for the Authority, County personnel continue to perform direct services such as building and field maintenance, security and emergency response. These services by the County include the leasing of land and terminal space to the airlines, concessionaires and other parties.

## Status of Previously Programmed Projects

Projects completed in 2009:

- Construction of the expansion to the parking garage was completed. This project built an expansion on the west side of the existing parking facility.
- Construction of terminal improvements in Concourse A was completed and improvements in Concourse B are in progress and are scheduled for completion in the first quarter of 2010.
- Phase 1 of construction of the new baggage screening system was completed and established new Airline Baggage makeup areas. Phase 2 is underway with the first inline screening equipment in place. The project is scheduled for completion in late 2010.
- Contract 1 for Taxiway H was constructed. This new segment of taxiway between Taxiway A and Taxiway D provides a new circulation option on the south side of Runway 10-28.
- Contract 1 for Taxiway N was constructed. This reconstructed Taxiway N from Taxiway A to Taxiway D.
- Contract 2 of the Runway 10-28 project was constructed. This reconstructed 1,000 feet of the runway from Runway 4-22 easterly to Taxiway D.
- Design of Taxiway A from the Runway 4 threshold to Taxiway A-1 was progressed for future construction.



- Compressed Natural Gas vehicles were placed in service in 2009 as part of the Voluntary Airport Low Emission (VALE) program.
- Design of future phases of the Runway 10-28 rehabilitation, including the intersection with Runway 4-22 was progressed for future construction.
- Environmental Compliance program has been initiated and utilizes consultant services to comply with current regulations.

All projects were funded with Federal Aviation Administration Grants (95% of eligible Costs) and New York State Department of Transportation Grants (2.5% of eligible costs), Passenger Facility Charges (PFC's) or Special Revenue (100% of eligible costs).

**DEPARTMENT OF AVIATION - 2011-2016**

PROJECT NAME		Budget	ANNUAL		PROJECT	COST		Total Cost 6 Years
		2011	2012	2013	2014	2015	2016	
<i>Taxiway E and Taxiway D Intersection</i>	e	120,000						120,000
	s	120,000						120,000
	f	4,560,000						4,560,000
	total	4,800,000	0	0	0	0	0	4,800,000
Replace EMAS System	e	50,000		50,000				100,000
	s	50,000		50,000				100,000
	f	1,900,000		1,900,000				3,800,000
	total	2,000,000	0	2,000,000	0	0	0	4,000,000
North Ramp Improvements	e	50,000		50,000			75,000	175,000
	s	50,000		50,000			75,000	175,000
	f	1,900,000		1,900,000			2,850,000	6,650,000
	total	2,000,000	0	2,000,000	0	0	3,000,000	7,000,000
Terminal Improvements	e	31,250		37,500	18,750		37,500	125,000
	s	31,250		37,500	18,750		37,500	125,000
	f	1,187,500		1,425,000	712,500		1,425,000	4,750,000
	total	1,250,000	0	1,500,000	750,000	0	1,500,000	5,000,000
<i>Aviation Support Center</i>	e	25,000	0	25,000	0	0	0	50,000
	s	25,000	0	25,000	0	0	0	50,000
	f	950,000	0	950,000	0	0	0	1,900,000
	total	1,000,000	0	1,000,000	0	0	0	2,000,000
Voluntary Airport Low Emissions (VALE) Program	e	5,000		5,000				10,000
	s	5,000		5,000				10,000
	f	200,000		200,000				400,000
	total	210,000	0	210,000	0	0	0	420,000
Planning and Design Projects	e	6,250		6,250		6,250		18,750
	s	6,250		6,250		6,250		18,750
	f	237,500		237,500		237,500		712,500
	total	250,000	0	250,000	0	250,000	0	750,000
Taxiway "L" Improvements	e	12,500						12,500
	s	12,500						12,500
	f	475,000						475,000
	total	500,000	0	0	0	0	0	500,000
<i>Refurbish of Passenger Loading Bridges</i>	e	25,000		18,750		18,750		62,500
	s	25,000		18,750		18,750		62,500
	f	950,000		712,500		712,500		2,375,000
	total	1,000,000	0	750,000	0	750,000	0	2,500,000
Heavy Equipment	e	15,000			25,000		25,000	65,000
	s	15,000			25,000		25,000	65,000
	f	570,000			950,000		950,000	2,470,000
	total	600,000	0	0	1,000,000	0	1,000,000	2,600,000
General Aviation Apron Rehabilitation	e	5,000	50,000					55,000
	s	5,000	50,000					55,000
	f	190,000	1,900,000					2,090,000
	total	200,000	2,000,000	0	0	0	0	2,200,000
Rehabilitate Taxiway "H"	e		37,500					37,500
	s		37,500					37,500
	f		1,425,000					1,425,000
	total	0	1,500,000	0	0	0	0	1,500,000
Parking Facility Upgrades	e		1,000,000			1,000,000		2,000,000
Master Plan Update	e		16,250					16,250
	s		16,250					16,250
	f		617,500					617,500
	total	0	650,000	0	0	0	0	650,000
Runway 10/28 and Taxiway B Extension	e		75,000					75,000
	s		75,000					75,000
	f		2,850,000					2,850,000
	total	0	3,000,000	0	0	0	0	3,000,000
Runway 4/22 and Taxiway Improvements	e		12,500			100,000	75,000	187,500
	s		12,500			100,000	75,000	187,500
	f		475,000			3,800,000	2,850,000	7,125,000
	total	0	500,000	0	0	4,000,000	3,000,000	7,500,000

Federal funds share includes both Airport Improvement Program and Passenger Facility Charge funds.

Italics denotes a new project

DEPARTMENT OF AVIATION - 2011-2016

PROJECT NAME		Budget	ANNUAL		PROJECT	COST		Total Cost 6 Years
		2011	2012	2013	2014	2015	2016	
South Taxiway - Runway 10/28	e		100,000					100,000
	s		100,000					100,000
	f		3,800,000					3,800,000
	total	0	4,000,000	0	0	0	0	4,000,000
Alternative Energy	e		500,000	500,000				1,000,000
	s		500,000	500,000				1,000,000
	total	0	1,000,000	1,000,000	0	0	0	2,000,000
Rehabilitate Taxiways A1, A3, and N	e			25,000				25,000
	s			25,000				25,000
	f			1,000,000				1,000,000
	total	0	0	1,050,000	0	0	0	1,050,000
Perimeter Service Road	e			15,000				15,000
	s			15,000				15,000
	f			500,000				500,000
	total	0	0	530,000	0	0	0	530,000
Airfield Lighting Upgrade	e			25,000				25,000
	s			25,000				25,000
	f			950,000				950,000
	total	0	0	1,000,000	0	0	0	1,000,000
Airfield Drainage Improvements	e			37,500				37,500
	s			37,500				37,500
	f			1,425,000				1,425,000
	total	0	0	1,500,000	0	0	0	1,500,000
Property Acquisition	e			12,500				12,500
	s			12,500				12,500
	f			475,000				475,000
	total	0	0	500,000	0	0	0	500,000
Environmental Compliance Projects	e			12,500				12,500
	s			12,500				12,500
	f			475,000				475,000
	total	0	0	500,000	0	0	0	500,000
West Taxiway - Runway 4/22	e				132,500		75,000	207,500
	s				132,500		75,000	207,500
	f				5,000,000		2,850,000	7,850,000
	total	0	0	0	5,265,000	0	3,000,000	8,265,000
Black Creek Culvert Extension	e				31,250	75,000		106,250
	s				31,250	75,000		106,250
	f				1,187,500	2,850,000		4,037,500
	total	0	0	0	1,250,000	3,000,000	0	4,250,000
Taxiway "A" Improvements	e				75,000			75,000
	s				75,000			75,000
	f				2,850,000			2,850,000
	total	0	0	0	3,000,000	0	0	3,000,000
Taxiway "D" Extension	e				62,500			62,500
	s				62,500			62,500
	f				2,375,000			2,375,000
	total	0	0	0	2,500,000	0	0	2,500,000
Viaduct Rehabilitation	e					50,000		50,000
	s					50,000		50,000
	f					1,900,000		1,900,000
	total	0	0	0	0	2,000,000	0	2,000,000
Access/Circulation Roadway	e					2,000,000		2,000,000
Terminal South Apron, "C" Expansion	e						50,000	50,000
	s						50,000	50,000
	f						1,900,000	1,900,000
	total	0	0	0	0	0	2,000,000	2,000,000
e = enterprise fund	e	345,000	1,791,250	820,000	345,000	3,250,000	337,500	6,888,750
s = state funds	s	345,000	791,250	820,000	345,000	250,000	337,500	2,888,750
f = federal funds	f	13,120,000	11,067,500	12,150,000	13,075,000	9,500,000	12,825,000	71,737,500
<b>TOTAL</b>		<b>13,810,000</b>	<b>13,650,000</b>	<b>13,790,000</b>	<b>13,765,000</b>	<b>13,000,000</b>	<b>13,500,000</b>	<b>81,515,000</b>

Federal funds share includes both Airport Improvement Program and Passenger Facility Charge funds.

Italics denotes a new project

## Taxiway E and Taxiway D Intersection

**Project Description:** This project will improve the Line of Sight between Runway 4-22 and Runway 10-28 by reconstructing the existing taxiways at a lower elevation. This improvement is required to bring the airport into conformance with existing FAA criteria for safety for pilots and airport vehicles operating on the air carrier runways. The work includes new asphalt pavement, drainage systems, lighting, pavement markings and related work to recreate the existing taxiway geometry at the adjusted elevations.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$16,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$16,300</u>
Net Operating Budget Impact:	\$ 0

## Replace EMAS System

**Project Description:** This project replaces the Engineered Material Arresting System (EMAS) located in the Runway 28 Overrun at the west end of runway 10-28. This product provides for the deceleration of aircraft that were unable to stop on the runway during their operations. This system was installed in 2001.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$13,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$13,600</u>
Net Operating Budget Impact:	\$ 0

## North Ramp Improvements

**Project Description:** This project will rehabilitate existing concrete and asphalt aircraft parking aprons at the terminal. The project will extend the useful life of the existing pavement by replacing existing concrete slabs that have or are failing; and, rehabilitate concrete slabs with localized damage areas. This will minimize the disruption to the airline operations at the terminal that would result if areas of the pavement were allowed to fail and total reconstruction was required. This work is identified in the pavement management study for the airport.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$23,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$23,800</u>
Net Operating Budget Impact:	\$ 0

## Terminal Improvements

**Project Description:** This project involves the construction of new walls, corridors, vertical circulation for pedestrians and building renovations to support both improved circulation and provide additional leased space for airline usage. The Airport has identified the need to alter the existing pedestrian circulation patterns to better address customer needs for services within the constraints of airport security requirements. It is also anticipated that the expansion of services with low fare and regional carriers will require the renovation of the concourse function to provide the required leased areas.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$17,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$17,000</u>
Net Operating Budget Impact:	\$ 0

## Aviation Support Complex

**Project Description:** This project will provide vehicles and equipment that are used to provide aircraft support services a facility for parking and protection from weather. The spaces that had provided protection for this equipment have been reconfigured for baggage screening and no longer have available space for support equipment. The project will include demolishing of existing buildings; construction of new buildings, rehabilitates and reconstructs interior spaces as needed within existing structures on the east terminal apron area. This project will provide weather protection for Airline ground support equipment and make available alternative space to protect the equipment from freezing temperatures.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$11,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$11,900</u>
Net Operating Budget Impact:	\$ 0

## Voluntary Airport Low Emissions (VALE)

**Project Description:** This project will provide vehicles that are powered by Compressed Natural Gas (CNG) under the parameters defined in the Airport Improvement Program (AIP). The project will also expand the existing Compressed Natural Gas facility by providing a second dispensing station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$2,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$2,400</u>
Net Operating Budget Impact:	\$ 0

## Planning and Design Projects

**Project Description:** Planning and design activities related to future aviation projects which are eligible for Federal AIP funding. The current FAA procedure places more emphases on the Airport being able to progress an aided project. Projects which are designed and ready to construct are the best demonstration that the project is ready to progress.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$4,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$4,500</u>
Net Operating Budget Impact:	\$ 0

## Taxiway "L" Improvements

**Project Description:** This project rehabilitates Taxiway "L" from Taxiway "H" to Taxiway "E", a distance of 1,600 feet. This asphalt taxiway, constructed in 1957, is near the end of its useful life as identified in the Pavement Management Study of 2008. The project will include rehabilitation of the existing pavement section and necessary drainage, lighting, signage and marking work.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$1,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$1,700</u>
Net Operating Budget Impact:	\$ 0

## Refurbish of Passenger Loading Bridges

**Project Description:** This project will provide for the Refurbishment of existing jet way loading bridges. This scheduled and planned refurbishment program will continue the useful life of this important equipment. Existing loading bridges are the original equipment installed when the airport was constructed in its current configuration. Annual maintenance on this equipment is exceeding the ability to be supported by the operating budget as the equipment continues to age and require more significant maintenance and component replacement.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$8,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$8,500</u>
Net Operating Budget Impact:	\$ 0

## Heavy Equipment

**Project Description:** This project will provide for the purchase of replacement equipment to be used for airport field maintenance and safety operations such as runway maintenance, snow removal, ice control and fire fighting and rescue. This scheduled and planned heavy equipment replacement program allows the Airport's airfield to remain operational and functional year round in all types of weather and conditions.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$8,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$8,800</u>
Net Operating Budget Impact:	\$ 0

## General Aviation Apron Rehabilitation

**Project Description:** This project rehabilitates and reconstructs the existing aircraft aprons on the south side of the airfield and will include pavement, drainage improvements, electrical improvements and pavement markings. The configuration of pavement in this area of the airport has evolved by combining former runways, taxiways, aircraft parking and vehicle parking lots. These paved areas need to be reconfigured to improve safety for both aircraft and vehicle movements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$7,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$7,500</u>
Net Operating Budget Impact:	\$ 0

## Rehabilitate Taxiway 'H'

**Project Description:** This project will rehabilitate and reconstruct portions of Taxiway "H" from Taxiway "A" north to the north ramp to include new rigid and flexible pavement, miscellaneous drainage and electrical improvements and pavement markings. This will improve one of the older taxiways on the airport, thus avoiding possible pavement failure and resulting delays in service.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$5,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$5,100</u>
Net Operating Budget Impact:	\$ 0

## Parking Facility Upgrades

**Project Description:** This project will result in the upgrading of existing surface areas and related support facilities as well as required structural upgrades to existing airport parking facilities. The parking garage and related facilities construction (for the terminal) began in 1989. Parking garages require periodic major maintenance projects to maintain the integrity of the structure and extend the useful life at a minimal cost. Surface parking lots need periodic maintenance to maintain their condition.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$271,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$271,700</u>
Net Operating Budget Impact:	\$ 0

## Master Plan Update

**Project Description:** This project will update the current Airport Master Plan to reflect needed improvements in the next 20 years. The FAA requires updated long range planning for airport facilities to remain eligible for federal funding for airport improvements. The plan will include analysis of runway and taxiway configurations for future activity at the airport, projecting capital improvement requirements over a 20 year period, and assessing the need for expansion of airport property for both safety and aviation needs.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$2,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$2,200</u>
Net Operating Budget Impact:	\$ 0

## Runway 10/28 and Taxiway B Extension

**Project Description:** This project includes improvement of Runway 10/28, with a displaced threshold, and a blast pad. Taxiway "B" will be extended to the new runway end.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$10,200
Annual Operating Costs:	\$ 3,000
Attributable Revenues:	<u>\$13,200</u>
Net Operating Budget Impact:	\$ 0

## Runway 4/22 and Taxiway Improvements

**Project Description:** This project improves the south end of Runway 4 and will include an extension of parallel Taxiway "A". The relocation of several existing navigation aids and lighting systems will be required and the project will include new concrete pavement, drainage systems, lighting, marking and related work to construct the runway improvements. The resulting improvements will provide safer aircraft landing and take off as well as facilitate the utilization of a more diverse aircraft type at GRIA.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$25,500
Annual Operating Costs:	\$ 5,000
Attributable Revenues:	<u>\$30,500</u>
Net Operating Budget Impact:	\$ 0

## South Taxiway - Runway 10/28

**Project Description:** This project will create new segments of east/west taxiway for Runway 10/28, south of the runway, including upgrading of the intersected pavements at Taxiway H and Taxiway G, and connection to the runway threshold east of Taxiway G.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$13,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$13,600</u>
Net Operating Budget Impact:	\$ 0

## Alternative Energy

**Project Description:** This project will provide further implementation of energy conservation and generation measures at the Airport complex. The sequence of this project following the current energy projects will provide a period to evaluate the performance of current green energy initiatives that have been undertaken and make performance based decisions on how to best continue reducing the Airport's energy consumption. This project includes the design and construction of renewable energy improvements to supply power for building consumption. Solar panels (photo voltaic) as well as wind turbine power generation will be utilized to offset power purchase from the utility company.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$135,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$135,900</u>
Net Operating Budget Impact:	\$ 0

## Rehabilitate Taxiways A1, A3, and N

**Project Description:** This project rehabilitates three of the existing exit taxiways from Runway 4-22, the primary Airport runway. Taxiways A-3 and A-4 were constructed in the 1960's and require major structural rehabilitation to the existing asphalt pavement. Taxiway A-1 will be reviewed for conformance to current design standards for pavement width and it is proposed that the concrete pavement be rehabilitated, and widened should this be required to meet standards. Work on both Taxiways will include drainage, lighting, signage, and markings.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$3,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$3,400</u>
Net Operating Budget Impact:	\$ 0

## Perimeter Service Road

**Project Description:** This project will upgrade existing gravel roadways within the Airport security fence to allow vehicles to move more efficiently around the airfield independent of aircraft operations. Construction of asphalt surfaces on the service roadways in the southern portion of the Airport will allow improved operations by the Airport.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$2,000
Annual Operating Costs:	\$1,200
Attributable Revenues:	<u>\$3,200</u>
Net Operating Budget Impact:	\$ 0

## Airfield Lighting Upgrade

**Project Description:** This project provides funding for upgrading critical components of the airfield lighting system. While some components of the system have been updated when airfield improvements have been implemented, a complete overall system update is required. Lights, wiring, switches and other component parts may need replacement or reconditioning. The work will also include replacement of the back up generator that powers the lighting system during electric grid failures.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$3,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$3,400</u>
Net Operating Budget Impact:	\$ 0

## Airfield Drainage Improvements

**Project Description:** This project provides funding to upgrade and expand the existing storm drainage system for the airport. The program will include replacement of portions of existing systems and supplemental outfall piping to provide the required system capacity.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$5,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$5,100</u>
Net Operating Budget Impact:	\$ 0

## Property Acquisition

**Project Description:** This project will provide funds to acquire property around the Airport for safety, compatibility and control of future development at the airport. Identification of these properties is included in the Airport Master Plan Update.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$1,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$1,700</u>
Net Operating Budget Impact:	\$ 0

## Environmental Compliance Projects

**Project Description:** This project will include various environmental improvements at the airport including improvements to existing storm water quality discharges, upgrade of existing chemical storage areas, automation of deicing fluid collection systems for remote operations, contaminated site investigation and remediation, and wetland mitigation. This project will enable the airport to comply with federal and state environmental regulations.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$1,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$1,700</u>
Net Operating Budget Impact:	\$ 0

## West Taxiway - Runway 4/22

**Project Description:** This project will create a new north/south taxiway for Runway 4/22, west of the runway including upgrades of the intersecting pavement on Taxiway "C". The Airport Master Plan Update identifies the need to improve the operational characteristics of the North/South runway to improve aircraft circulation west of the runway.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$28,200
Annual Operating Costs:	\$ 8,000
Attributable Revenues:	<u>\$36,200</u>
Net Operating Budget Impact:	\$ 0

## Black Creek Culvert Extension

**Project Description:** This project will extend the culvert carrying Little Black Creek on the west side of Runway 4-22. This project will include drainage systems and related work to construct the culverts. This project will improve the water quality of Little Black Creek and allow for the future construction of the planned parallel taxiway west of Runway 4-22.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$14,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$14,400</u>
Net Operating Budget Impact:	\$ 0

## Taxiway 'A' Improvements

**Project Description:** The project provides for the reconstruction of Taxiway A from the Runway 4 threshold to Taxiway A-3. The pavement geometry at the bend in the taxiway will be improved to provide the proper pavement width for Group IV aircraft that use Taxiway A. The project will include necessary improvements at the intersecting taxiways and the Taxiway A hold apron. The work will include new rigid pavement, miscellaneous drainage improvements, electrical lighting circuit and runway guard light improvements and installation of appropriate pavement markings for the taxiway configuration. This project also provides for localized concrete pavement rehabilitation to extend the useful life of the pavement in areas not programmed for reconstruction, as recommended in the Pavement Management Study.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$10,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$10,200</u>
Net Operating Budget Impact:	\$ 0

## Taxiway "D" Extension

**Project Description:** This project extends Taxiway D from Taxiway F south to the development parcel located east of the existing Air Traffic Control Tower. The project will include asphalt pavement, drainage improvements, electrical system upgrades and new pavement markings. Modifications to the existing airport roadway and utility grid in the vicinity of Hangar #2 will be required.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$ 8,500
Annual Operating Costs:	\$ 5,000
Attributable Revenues:	<u>\$13,500</u>
Net Operating Budget Impact:	\$ 0

## Viaduct Rehabilitation

**Project Description:** This project provides funds for the rehabilitation of the Viaduct, the elevated roadway that traverses the front of the Passenger Terminal. The work will include replacement of the concrete deck that is supported by a pre-cast plank system, remedial work as required on existing piers and columns and related work necessary to maintain the structural integrity of the Viaduct.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$6,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$6,800</u>
Net Operating Budget Impact:	\$ 0

## Access/Circulation Roadway

**Project Description:** This project will upgrade the airport circulation roadway network that was constructed in the 1980's to support terminal improvements. The project includes surface rehabilitation, drainage system improvements, curbing and pavement marking for landside roadways that connect the terminal to Brooks Avenue and Scottsville Road.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$271,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$271,700</u>
Net Operating Budget Impact:	\$ 0

## Terminal South Apron, "C" Expansion

**Project Description:** This project involves expansion of the terminal apron and relocation of taxiway "C." The apron expansion would provide approximately eight acres of new pavement. The existing apron grading enables "at gate" aircraft deicing and deicing fluid collection; therefore, the expansion would also necessitate re-grading/reconstruction of the existing apron to fully maintain this capability. The work will include new concrete pavement, drainage systems, lighting, marking and related work to complete this expansion. Terminal apron expansion will allow for future terminal concourse expansion and provide needed additional aircraft parking. Relocation of Taxiway "C" will be required by the expansion for safe and more efficient aircraft movement.

**Environmental Review:** This project is an Unlisted Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$6,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$6,800</u>
Net Operating Budget Impact:	\$ 0

# DEPARTMENT OF ENVIRONMENTAL SERVICES

## DIVISION OF PURE WATERS

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### HIGHLIGHTS OF CAPITAL PROGRAM

- Continuation of upgrades and replacement of major process equipment at the Frank E. Van Lare Wastewater Treatment Plant (FEV WWTP) consisting of improvements to the overall electrical system, aeration basins, and primary tanks in combination with collection system improvement initiatives for pump stations and sewers including CSOAP infrastructure in the Rochester Pure Waters District (RPWD).
- Continuation of comprehensive improvements to address hydraulic capacities and extend the useful life of the interceptor system and upgrades to pump stations in the Irondequoit Bay South Central Pure Waters District (IBSCPWD).
- Continuation of comprehensive improvements to address hydraulic capacities and extend the useful life of the interceptor system and upgrades to pump stations in the Northwest Quadrant Pure Waters District (NWQPWD).
- Continuation of collection system improvement initiatives for pump stations and sewers in the Gates-Chili-Ogden Sewer District (GCOSD).

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**The Division of Pure Waters** was established by the County Legislature to implement the Pure Waters Master Plan to reduce the levels of pollution of Irondequoit Bay, the Genesee River, areas of Lake Ontario, and other waters of Monroe County to safe, healthy levels. It operates and maintains four geographic districts containing two wastewater treatment facilities, 55 pump stations, 1000 miles of collection system sewers, 115 miles of interceptor / trunk sewers and 38 miles of conveyance / storage deep tunnels.

The various staff of the four Pure Waters Districts work cooperatively together to maximize operational effectiveness and enhance cost efficiencies. The County's two wastewater treatment plants treat an average of 130 million gallons of water per day through physical, biological, and chemical processes. The Field Operations Section is responsible for the operation and maintenance of 700 miles of sewers in the City and 300 miles of sanitary sewers in the Gates-Chili-Ogden District. This section is also responsible for the operation of 55 pump stations and the Combined Sewer Overflow Abatement Program (CSOAP) Tunnel System, which dramatically reduces storm generated overflows to the river, bay and lake through improved overflow capture and treatment rates. The Industrial Waste Pretreatment Section administers a federally approved pretreatment program, the sampling and analysis of discharges from 150 industrial facilities and enforcement of the Monroe County Sewer Use Law.

The County Legislature, which serves as the Pure Waters



Administrative Board, oversees program management, approves contracts, holds public hearings, and establishes the annual rates and operating budgets for the four districts.

Engineering services, including project design and construction administration, are generally provided by the Monroe County Division of Engineering and Facilities Management, either directly, or through contractual services with consultants and other outside vendors.

### Status of Previous Programmed Projects

In the **Rochester Pure Waters District** evaluation and design of alternatives to replace and upgrade the FEV WWTP aeration system continued in 2009. Construction of Phase I is scheduled to begin in 2010, with additional phases continuing through 2012. Construction of upgrades to the Clinton Keeler Pump Station began in 2009, with completion scheduled for 2010. Construction of major improvements to the FEV WWTP Bar Rakers was completed in 2009. Construction of Phase I of the FEV WWTP Thickener Tank Improvements will be completed in 2010. Various rehabilitation and replacement projects in the collection system were completed in 2009 and others will continue annually.

In the **Irondequoit Bay South Central Pure Waters District** upgrades to the Pattonwood Pump Station were completed in 2009. Construction of improvements to the McEwen Pump Station will be completed in 2010. The Irondequoit Bay Pump Station force mains are being evaluated for rehabilitation, with construction scheduled to begin in 2010.

In the **Northwest Quadrant Pure Waters District**, design of a third, secondary clarifier to increase hydraulic capacities of the NWQ WWTP began in 2009, with construction scheduled to begin in early 2011. General improvements to the pump stations and interceptor system will continue in 2010 and beyond.

In the **Gates Chili Ogden Sewer District** design of upgrades to the Trolley Pump Station were completed in 2009 with construction scheduled to begin in 2010. Design of upgrades for the Central Gates, Southwest and Scottsville Road Pump Stations continued in 2009 with construction scheduled to begin in 2012 and beyond.

**PURE WATERS - 2011-2016**

PROJECT NAME	Budget	ANNUAL			PROJECT	COST		Total Cost 6 Years
	2011	2012	2013	2014	2015	2016		
<b>Rochester Pure Waters District</b>								
Frank E. VanLare Electrical System Improvements	d	1,000,000						1,000,000
Frank E. VanLare Aeration System Improvements	d	4,000,000	4,000,000					8,000,000
Frank E. VanLare Primary Tank Improvements	d	2,000,000	2,500,000					4,500,000
Combined System Tunnel System Improvements	d		1,000,000	3,000,000				4,000,000
Combined System Pedestrian Bridge Improvements	d			1,000,000				1,000,000
Lake & Merrill Pump Station Improvements	d				1,000,000			1,000,000
Frank E. VanLare General Improvements	d					500,000	500,000	1,000,000
General Collection System Improvements	d					500,000	500,000	1,000,000
<i>Frank E. VanLare Thickener Improvements Phase II</i>	<i>d</i>						<i>1,500,000</i>	<i>1,500,000</i>
District Subtotal	d	7,000,000	7,500,000	4,000,000	1,000,000	1,000,000	2,500,000	23,000,000
<b>Irondequoit Bay S. Central Pure Waters District</b>								
General Pump Station & Interceptor Improvements	d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Pinnacle Road Pump Station Improvements	d	1,000,000						1,000,000
South Central Trunk Sewer Improvements	d		1,000,000					1,000,000
District Subtotal	d	1,500,000	1,500,000	500,000	500,000	500,000	500,000	5,000,000
<b>North West Quadrant Pure Waters District</b>								
General Pump Station & Interceptor Improvements	d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
District Subtotal	d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
<b>Gates Chili Ogden Pure Waters District</b>								
General Collection System Improvements	d	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
Central Gates Pump Station Improvements	d		2,500,000					2,500,000
Southwest Pump Station Improvements	d				2,000,000			2,000,000
<i>Scottsville Road Pump Station Improvements</i>	<i>d</i>						<i>1,500,000</i>	<i>1,500,000</i>
District Subtotal	d	500,000	3,000,000	500,000	2,500,000	500,000	2,000,000	9,000,000
TOTAL	d	9,500,000	12,500,000	5,500,000	4,500,000	2,500,000	5,500,000	40,000,000

Italics denotes a new project

## RPWD - FEV WWTP Electrical System Improvements

**Project Description:** This project includes upgrades and improvements to the overall electrical system, including transformers, manual and auto transfer switchgear, cable fault detection systems, and components integral to the simultaneous upgrade of the aeration system.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-20,000
Attributable Revenues:	<u>\$ 67,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP Aeration System Improvements

**Project Description:** This project includes multi-year, phased replacement of the aeration system, a critical component of the overall treatment process and the largest energy consuming system at the plant.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 697,500
Annual Operating Costs:	\$-225,000
Attributable Revenues:	<u>\$ 472,500</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP Primary Tank Improvements

**Project Description:** This project includes structural improvements to the primary tanks in combination with mechanical and electrical upgrades necessary to support the critical process of primary treatment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$392,300
Annual Operating Costs:	\$ -50,000
Attributable Revenues:	<u>\$342,300</u>
Net Operating Budget Impact:	\$ 0

## RPWD - CSOAP Tunnel System Improvements

**Project Description:** This project includes removal of significant amounts of grit and deposition from the Tiger-Carlisle / Dewey-Eastman Tunnel System that has accumulated throughout the first 20 years of tunnel operation and debris. In addition to improving the hydraulic capacity of the tunnel system, an extensive inspection and any necessary rehabilitation of concrete and other structural elements will be performed. The project will also include debris removal and structural rehabilitation work in the Lexington Avenue Tunnel.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$348,700
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$333,700</u>
Net Operating Budget Impact:	\$ 0

## RPWD - CSOAP Pedestrian Bridge Improvements

**Project Description:** This project consists of a comprehensive structural rehabilitation of the Maplewood Pedestrian Bridge access pathways.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-10,000
Attributable Revenues:	<u>\$ 77,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - Lake & Merrill Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements to the District's Lake and Merrill Pump Station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-15,000
Attributable Revenues:	<u>\$ 72,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP General Improvements

**Project Description:** This project generally includes various smaller scale improvements at the FEV WWTP, which are internally managed and integral to the Department's "Five Year Plan" operation and maintenance program which generates repair and replacement priorities that may not be part of larger and long term planned initiatives.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-10,000
Attributable Revenues:	<u>\$ 77,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - General Collection System Improvements

**Project Description:** This project generally includes various smaller scale collection system improvements, which are internally managed and consistent with the Department's "Five Year Plan" operation and maintenance program which generates repair and replacement priorities that may not be part of larger and long term planned initiatives.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-25,000
Attributable Revenues:	<u>\$ 62,200</u>
Net Operating Budget Impact:	\$ 0

## RPWD - FEV WWTP Thickener Improvements - Phase II

**Project Description:** This project includes mechanical improvements to the thickener tanks in combination with structural and electrical upgrades necessary to support the critical process of solids handling. The RPWD recently completed Phase I of the thickener improvements. Phase II is necessary to complete the entire complex.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$130,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$130,800</u>
Net Operating Budget Impact:	\$ 0

## IBSCPWD - General Pump Station & Interceptor Improvements

**Project Description:** This project includes general improvements to various pump stations and interceptors in the District. Improvements include a phased rehabilitation of the Irondequoit Bay Pump Station's two major force mains that convey District flows to the FEV WWTP; trunk sewer improvements necessary to increase conveyance capacities in the southwest quadrant of the District, and District-wide enhancements to the appurtenant communication and data transmission systems. A major component for all facility improvements is an emphasis on energy efficiencies and cost savings that will provide a partial offset to debt service incurred.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ -25,000
Attributable Revenues:	<u>\$236,600</u>
Net Operating Budget Impact:	\$ 0

## IBSCPWD - Pinnacle Road Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements to the District's Pinnacle Road Pump Station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-15,000
Attributable Revenues:	<u>\$ 72,200</u>
Net Operating Budget Impact:	\$ 0

## IBSCPWD - South Central Trunk Sewer Improvements

**Project Description:** This project includes repair, replacement and rehabilitation measures necessary to increase conveyance capacities and maintain structural integrity of the District's South Central Trunk Sewer.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 87,200
Annual Operating Costs:	\$-25,000
Attributable Revenues:	<u>\$ 62,200</u>
Net Operating Budget Impact:	\$ 0

## NWQPWD - General Pump Station & Interceptor Improvements

**Project Description:** This project includes general improvements to various pump stations and interceptors in the District. Improvements include increases in conveyance capacity of localized sections of the District's interceptors; facility upgrades necessary to more effectively maximize flow distribution and capacities between the District and the Gates-Chili-Ogden Sewer District; and District-wide enhancements to the appurtenant communication and data transmission systems. A major component for all facility improvements is an emphasis on energy efficiencies and cost savings that will provide a partial offset to debt service incurred.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ -25,000
Attributable Revenues:	<u>\$236,600</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - General Collection System Improvements

**Project Description:** This project includes general improvements to various pump stations and collection system infrastructure in the District. Improvements will serve to extend the useful life of various facilities, while also providing increased conveyance capacity and enhanced operational flexibility and District-wide enhancements to the appurtenant communication and data transmission systems. A major component for all facility improvements is an emphasis on energy efficiencies and cost savings that will provide a partial offset to debt service incurred.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$261,600
Annual Operating Costs:	\$ -20,000
Attributable Revenues:	<u>\$241,600</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - Central Gates Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements to the District's Central Gates Pump Station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$218,000
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$203,000</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - Southwest Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements to the District's Southwest Pump Station.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$174,400
Annual Operating Costs:	\$ -15,000
Attributable Revenues:	<u>\$159,400</u>
Net Operating Budget Impact:	\$ 0

## GCOSD - Scottsville Road Pump Station Improvements

**Project Description:** This project includes major mechanical, electrical and structural improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$130,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$130,800</u>
Net Operating Budget Impact:	\$ 0

# DEPARTMENT OF ENVIRONMENTAL SERVICES FLEET

## HIGHLIGHTS OF CAPITAL PROGRAM

- Purchase of necessary equipment for various department operations

The Division of Fleet was created in the Environmental Services Department in 2003. The purpose of the division is to coordinate the purchase of specialized equipment for a variety of county department operations. Equipment for Parks, Highways and Traffic and Traffic Engineering are included in this program.



### ENVIRONMENTAL SERVICES FLEET - 2011-2016

PROJECT NAME		Budget	ANNUAL PROJECT COST				Total Cost 6 Years	
		2011	2012	2013	2014	2015		2016
Equipment/Vehicles Parks	c	121,000	250,000	145,000	145,000	155,000	155,000	971,000
Equipment/Vehicles Traffic Engineering	c		120,000	120,000	255,000	545,000		1,040,000
Equipment/Vehicles Highways and Bridges	c	185,000	140,000	104,000	190,000	125,000		744,000
TOTAL	c	306,000	510,000	369,000	590,000	825,000	155,000	2,755,000

## Equipment/Vehicles Parks

**Project Description:** This project involves the purchase of heavy equipment for county parkland maintenance activities. Items to be purchased in each year of the capital program are intended to supplement existing equipment or replace worn and out dated equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	6 years
Annual Debt Service Payment:	\$197,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$197,500

## Equipment/Vehicles Highways and Bridges

**Project Description:** This project provides funds for the purchase of heavy equipment used for the maintenance of county highways and bridges. Items to be purchased in each year of the capital program are intended to supplement existing equipment or replace worn and outdated equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$73,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$73,500

## Equipment/Vehicles Traffic Engineering

**Project Description:** This project provides for the purchase of heavy equipment used for the county's traffic engineering maintenance activities. Items to be purchased in each year of the capital program are to supplement existing equipment or replace worn and outdated equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$114,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$114,700

# DEPARTMENT OF ENVIRONMENTAL SERVICES GEOGRAPHIC INFORMATION SERVICES DIVISION

## HIGHLIGHTS OF CAPITAL PROGRAM

- Continuation of the implementation of the County's Geographic Information System.

The Division of Geographic Information Services was created in the Environmental Services Department in 2000. The purpose of the division is to continue the development of the County's Geographic Information System by improving computer hardware and software and providing technical services to improve computerized mapping capabilities in County Departments. The program initially involved creating a digital base map using the County's real property tax maps. Building upon this base, additional computerized map layers will be established for County departments wishing to display and analyze their facility information in a geographic manner. Working with other departments, local governments, and state and federal agencies, the Geographic Information Services Division will continue to expand and improve the computerized mapping capabilities in Monroe County.



## GIS (Geographic Information System) Enterprise Development

**Project Description:** This project is a continuation of the County's GIS (Geographic Information System) development. The project revolves around three initiatives: data conversion for the cadastral base map, network infrastructure development, and application development. The cadastral layer will serve as a base map for city and county departments, local towns and villages, private agencies and the public. Network infrastructure development concentrates on the hardware and software improvements necessary to bring GIS technology to a broad audience. Specific improvements are underway that will facilitate the internet, intranet, and extranet community. Application development applies GIS technologies to tasks, projects, or programs in order to perform that task, project, or program more efficiently.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	5 years
Annual Debt Service Payment:	\$114,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$114,000</u>
Net Operating Budget Impact:	\$ 0

### GEOGRAPHIC INFORMATION SERVICES - 2011-2016

PROJECT NAME	Budget	ANNUAL PROJECT COST				Total Cost 6 Years		
	2011	2012	2013	2014	2015		2016	
Geographic Information System Enterprise Development	c					240,000	240,000	480,000
TOTAL	c	0	0	0	0	240,000	240,000	480,000

# DEPARTMENT OF ENVIRONMENTAL SERVICES SOLID WASTE

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Composting and recycling initiatives that leverage federal and state grants.
  - Improvements to Resource Recovery Facility and Recycling Center
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**Monroe County's Solid Waste Management** integrated program is built upon recycling, volume reduction and lastly land burial. Some materials can be recycled, some composted and others must be landfilled. The County's program responds to this diversity of management by redirecting materials from disposal for their reuse and reduction to extend the life of landfills.



### SOLID WASTE - 2011-2016

PROJECT NAME	Budget	ANNUAL PROJECT COST			COST		Total Cost 6 Years
	2011	2012	2013	2014	2015	2016	
Resource Recovery Facility/ Recycling Center Complex Improvements e	210,000	210,000	500,000	900,000			1,820,000
TOTAL e	210,000	210,000	500,000	900,000	0	0	1,820,000

## Resource Recovery Facility/Recycling Center Complex Improvements

**Project Description:** This project includes security, tipping and storage floor replacement and parking/staging and street milling/paving and drainage and utility upgrades at the Monroe County Resource Recovery Facility (RRF) and Recycling Center. The RRF is 30 years old and is used as a transfer station for City solid waste being hauled to the Mill Seat Landfill. The Recycling Center is nearly 20 years old and receives and processes recyclables to reduce land filled waste from throughout the County. Wear and tear on the infrastructure and the buildings is attributed to the 500 collection vehicles and tractor/trailers within the complex daily and major improvements are now required.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$247,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$247,300</u>
Net Operating Budget Impact:	\$ 0

# DEPARTMENT OF ENVIRONMENTAL SERVICES FACILITIES MANAGEMENT

## HIGHLIGHTS OF CAPITAL PROGRAM

- Installation of energy management systems throughout County-owned buildings for operational savings.
- Upgrade County facilities for structural improvements, electrical improvements, fire protection, roof repairs and HVAC.
- Renovate Monroe County Public Safety Building.
- Upgrade security systems to control unauthorized building access.
- Undertake implementation of corrective measures for ADA compliance.
- Renovate Hall of Justice.



**The Division of Engineering and Facilities Management** is responsible for the operation and maintenance of County-owned facilities. This includes setting and meeting security and safety objectives for all County buildings and its personnel; developing and administering housekeeping programs that will use worker time more efficiently, achieve savings, and provide building cleaning; and managing energy consumption in County buildings. The four major facilities are the Hall of Justice, the County Office Building, the Health and Human Services Building, and the Civic Center Complex.

## Status of Previously Programmed Projects

The Division of Engineering and Facilities Management continues to maintain County facilities. The Division continues to make improvements to roofs, updates to elevators, accommodations to improve handicapped accessibility, and general improvements to County Buildings.

### ENGINEERING AND FACILITIES MANAGEMENT - 2011-2016

PROJECT NAME		Budget	ANNUAL PROJECT COST				Total Cost 6 Years	
		2011	2012	2013	2014	2015		2016
General Improvements	c	100,000	600,000	600,000	600,000	600,000	600,000	3,100,000
Hall of Justice Court Requested Improvements	c	300,000	300,000	300,000	300,000	300,000	300,000	1,800,000
Hall of Justice Reconstruction	c	450,000	250,000	2,250,000	250,000	250,000	250,000	3,700,000
Asbestos Abatement	c	75,000	75,000	75,000	75,000	75,000	75,000	450,000
Civic Center Complex Reconstruction	c	500,000	500,000	500,000	500,000	500,000	500,000	3,000,000
ADA Aid to Disabled Improvements	c	75,000		75,000		75,000		225,000
Public Safety Building Reconstruction	c	2,600,000	2,000,000	1,000,000				5,600,000
County Office Building Reconstruction	c	500,000	600,000	600,000	600,000	600,000	600,000	3,500,000
Energy Conservation and Management Systems	c	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Roof Improvements	c		450,000		450,000		450,000	1,350,000
<b>TOTAL</b>	<b>c</b>	<b>4,700,000</b>	<b>4,875,000</b>	<b>5,500,000</b>	<b>2,875,000</b>	<b>2,500,000</b>	<b>2,875,000</b>	<b>23,325,000</b>

## General Improvements

**Project Description:** This project funds improvements to County Buildings. These changes are designed to improve office productivity, and to make improvements which address health, safety, and code concerns. Included are funds for design and construction of building system upgrades such as plumbing, door and window replacement, HVAC, lighting, masonry and structural improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$294,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$181,200</u>
Net Operating Budget Impact:	\$113,600

## Hall of Justice Court Requested Improvements

**Project Description:** This project will fund New York Unified Courts System (Courts) requested building modifications at the Hall of Justice. The County would act as the project manager/contractor for these modifications, and would pay for them from this capital fund. The Courts would reimburse the County for the expenses incurred while making the modifications, resulting in no additional expense to the County.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$244,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$244,600</u>
Net Operating Budget Impact:	\$ 0

## Hall of Justice Reconstruction

**Project Description:** The Hall of Justice is over 40 years old and much of the infrastructure is in need of reconstruction. This project will fund various upgrades, such as improvements to building electrical, plumbing, steam, chilled water, HVAC, elevator, and security systems. Projects will also include interior renovations and reconfigurations to meet the functional needs of the building occupants.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$225,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$126,400</u>
Net Operating Budget Impact:	\$ 99,400

## Asbestos Abatement

**Project Description:** This project will provide funds for identification, labeling, and abatement of asbestos materials in County facilities. Asbestos is a hazardous material when it is friable and airborne. In the past it was commonly used in building materials and is frequently encountered during building renovations, thus requiring abatement.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$42,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$24,900</u>
Net Operating Budget Impact:	\$17,900

## Civic Center Complex Reconstruction

**Project Description:** This project will involve various improvements to the buildings at the Civic Center complex, which is approximately 40 years old. Improvements will include changes to benefit building operations, as well as upgrades to utilities, life safety and security systems. Also included is a substantial repair project which will remove/replace damaged concrete, repair any damaged structural steel, and replace failed expansion joints.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$183,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$116,200</u>
Net Operating Budget Impact:	\$ 66,900

## ADA Aid to Disabled Improvements

**Project Description:** This project will implement the Americans with Disabilities Act (ADA) improvements to County buildings. Improvements include development of accessible parking spots, restroom accessibility, fire alarm system upgrades, entrance ramp construction, communications improvements, sign improvements, and replacement of doors and hardware to improve building accessibility.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$21,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$14,700</u>
Net Operating Budget Impact:	\$ 6,700

## Public Safety Building Reconstruction

**Project Description:** Many of the systems in the over 40 year old building are reaching the end of their useful life and need replacement. This project will fund reconstruction of various areas of the Public Safety Building and improvements to electrical, plumbing, steam, chilled water and security systems. Also included are changes to the building to make it suitable for the needs of the Sheriff's Department.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$341,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$162,700</u>
Net Operating Budget Impact:	\$179,100

## County Office Building Reconstruction

**Project Description:** The County Office Building is over 100 years old and much of the infrastructure is in need of reconstruction. This project will fund improvements to electrical, plumbing, HVAC and security systems. Also included is remodeling and changes to the building structure and spaces.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$213,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 14,500</u>
Net Operating Budget Impact:	\$199,100

## Energy Conservation and Management Systems

**Project Description:** This project will provide funds for upgrades and expansion of the energy management systems that control the heating, air-conditioning, and lighting equipment in County buildings. Project elements include upgrading to electronic controllers, replacement of building electric motors, installing energy efficient doors and windows, and upgrading of lighting systems.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$57,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$15,900</u>
Net Operating Budget Impact:	\$41,200

## Roof Improvements

**Project Description:** This project provides funds for the replacement of roofs, skylights, roof drains, gutters, roofing masonry structure and decking reconstruction.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$128,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 88,300</u>
Net Operating Budget Impact:	\$ 40,100

# DEPARTMENT OF PARKS

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Improvement of recreational facilities throughout the park system.
  - Construction of master plan improvements at existing parks stressing necessary health/safety improvements.
  - Rehabilitation of substandard restroom facilities and construction of new restrooms.
  - Handicapped access improvements.
  - Improvement of park facilities, which increase operating efficiency and reduce maintenance costs.
- 

**The Monroe County Department of Parks** is responsible for the operation and maintenance of approximately 11,600 acres of parkland throughout the County. The Department also maintains park buildings and recreational facilities, including picnic areas, trails, shelters and lodges, beach area, boat launches, a sensory memorial garden, arboretums, wetlands, sledding hills, ice skating rinks, a community center, ski slopes and play areas. It houses a zoological collection of over 400 animals. It maintains an extensive horticultural collection and arboretum. The Department cosponsors, with community organizations, a number of special attractions, such as the Highland Park Bowl, Ontario Performance Pavilion and programs at Springdale Farm, Seneca Park Zoo, Lambertton Conservatory, The Rochester Civic Garden Center, Landmark Society Olmsted Task Force, City of Rochester, Jack Tindale Inc., and the Ontario Beach Park Program Committee.



## Status of Previously Programmed Projects

### Projects Completed in 2009:

- Pavilion Lodge renovation
- Ellison Park Area Master Plan
- Playground at Durand-Eastman Park
- Restoration of the Lambertton Conservatory
- Warner Castle Improvements
- Greece Canal Park Off Leash Dog Park

### Projects Nearing Completion:

- Black Creek Park Wetlands
- Rocky Coasts Exhibit Life Support Improvements
- Main Zoo Building Evaluation
- Design of Ellison Area Parks Master Plan Improvements

### Other Projects Underway or Beginning:

- System-wide ADA Improvements
- Ellison Park Off Leash Dog Park
- Greece Canal Park Master Plan Improvements
- Powder Mills Park Master Plan
- Africa Phase III
- Elephant Exhibit Design

**PARKS - 2011-2016**

PROJECT NAME		Budget	ANNUAL PROJECT COST				Total Cost 6 Years	
		2011	2012	2013	2014	2015		2016
Seneca Park Zoo - Elephant Exhibit	c	900,000						900,000
Buildings and Structures	c	600,000	600,000	650,000	650,000	650,000	650,000	3,800,000
Utilities, Access and Site Improvements	c	600,000	600,000	650,000	650,000	650,000	650,000	3,800,000
<i>Tennis Court Rehabilitation</i>	c	300,000						300,000
Oatka Creek Park - Master Plan and Improvements	c	100,000	100,000					200,000
Powder Mills Park - Master Plan Improvements	c		150,000	1,000,000				1,150,000
Webster Park - Master Plan Improvements	c		1,000,000					1,000,000
Mendon Ponds Park - Master Plan Improvements	c				1,000,000			1,000,000
Churchville Park - Master Plan Improvements	c				150,000	1,000,000		1,150,000
Seneca Park - Master Plan Improvements	c					180,000	1,100,000	1,280,000
Highland Park Master Plan Improvements	c						200,000	200,000
<b>TOTAL</b>	c	2,500,000	2,450,000	2,300,000	2,450,000	2,480,000	2,600,000	14,780,000

Italics denotes a new project

**Seneca Park Zoo - Elephant Exhibit**

**Project Description:** This project involves improvements to the Elephant Exhibit at the Seneca Park Zoo. Improvements will include the construction of an additional off-exhibit holding area. Area for this holding area was built into the original elephant holding building. This holding area is required to bring in an additional elephant to the Zoo, joining the two resident African elephants. This is a requirement of the American Association of Zoos and Aquariums, which is the organization that provides accreditation to the Seneca Park Zoo.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life: 15 years  
 Annual Debt Service Payment: \$ 92,700  
 Annual Operating Costs: \$ 10,000  
 Attributable Revenues: \$ 0  
 Net Operating Budget Impact: \$102,700

**Buildings and Structures**

**Project Description:** This continuing project provides funds for: upgrading buildings and structures to provide handicapped access and use; meeting building and fire codes and other standards; major structural repairs and improvements to buildings such as new roofs, energy conservation improvements, heating and ventilation systems; construction of new support facilities such as storage barns, picnic facilities, playgrounds, restrooms, and shelters; and bridges and other structure construction and rehabilitation. Emphasis is on making improvements in the most heavily used parks and for projects involving public health and safety concerns, particularly restrooms and meeting ADA requirements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life: 15 years  
 Annual Debt Service Payment: \$391,300  
 Annual Operating Costs: \$ -37,000  
 Attributable Revenues: \$ 0  
 Net Operating Budget Impact: \$354,300

## Utilities, Access and Site Improvements

**Project Description:** This project provides for reconstruction and improvements to roads, parking areas, walkways, bridges, patios, stairs and associated improvements such as lighting, grading and landscaping throughout the entire parks system. Improvements included in this program have been identified in various park master plans. Also provided for are: new/replacement energy efficient security lighting for roads, parking lots, related facilities and selected walkways; erosion protection measures for steep slopes/stream banks; drainage improvements to increase usability of recreation facilities; repair/replacement of main sewer, water, electric, gas, phone lines, septic systems, pump stations and pumps, and meters; new utility service lines on a site specific, as needed basis; and handicapped accessibility. The emphasis is to fund heavily used parks and for public health and safety concerns.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$391,300
Annual Operating Costs:	\$ -35,000
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$356,300

## Tennis Court Rehabilitation

**Project Description:** This project involves the reconstruction of 15 tennis courts, located at Churchville, Greece Canal, Ellison and Webster Parks. The existing tennis courts are in a deteriorated condition, and require base stabilization, new surfacing, painting, striping, and new equipment.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$40,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$40,800

## Oatka Creek Park - Master Plan and Improvements

**Project Description:** This project involves the development of a park master plan, and the design and construction of Master Plan improvements at Oatka Creek Park. The master plan for the park will be completed before the first project is constructed.

Projects will include: recreational facility improvements; building construction and rehabilitation; handicapped accessibility improvements; and utility system upgrades. Oatka Creek park comprises 461 acres, most of which was acquired over 25 years ago. Very few improvements have been undertaken since its acquisition, and there is a need to improve public access to the recreational opportunities in this park, due to increased use levels and the unique resources of the park.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$20,600
Annual Operating Costs:	\$20,400
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$41,000

## Powder Mills Park Master Plan Improvements

**Project Description:** This project involves the design and construction of Master Plan improvements at Powder Mills Park.

Projects will include: recreational facility improvements; building construction and rehabilitation; handicapped accessibility improvements; road, parking and trail improvements; and utility system upgrades. Powder Mills Park was initially developed in the 1930's and the park facilities and infrastructure are in need of upgrading to protect the County investment in this popular park. The Master Plan will identify and set priorities for project implementation.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$118,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$118,400

## Webster Park - Master Plan Improvements

**Project Description:** This program provides for design and construction of several recommendations of the Park's master plan. These involve: waterfront improvements; campground improvements; security lighting; general building and recreation facility improvements; improve trails and handicapped accessibility throughout the park and its facilities; improve road and parking areas; forest management plan; landscaping and grading; and a sign system. These projects bring the park up to current standards, improve health and safety of park users and reduce operations and maintenance costs.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$103,000
Annual Operating Costs:	\$ -10,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ 93,000

## Mendon Ponds Park - Master Plan Improvements

**Project Description:** This project implements Park Master Plan recommendations. These are: (1) improving handicapped accessibility; (2) developing a sign system; (3) road, parking and trail improvements; (4) building construction and rehabilitation; (5) recreational facility improvements; and (6) utility system upgrades. Improvements will address health and safety problems, make the park more accessible to the handicapped, protect significant natural features, and reduce operations and maintenance costs.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$103,000
Annual Operating Costs:	\$ -10,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ 93,000

## Churchville Park - Master Plan Improvements

**Project Description:** This project involves the design and construction of Master Plan improvements at Churchville Park. Projects include road and utility construction, new buildings and rehabilitation, recreation facility improvements, trail construction, and landscaping. Churchville Park was initially developed in the 1930's and the park facilities and infrastructure need upgrading to protect the County investment in this important park.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$118,400
Annual Operating Costs:	\$ -8,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$110,400

## Seneca Park - Master Plan Improvements

**Project Description:** These funds begin to implement recommendations in the park master plan. Projects include: improve handicapped accessibility; rehabilitate trails and other facilities; provide signs and install security lighting; reconstruct roads and parking lots; construct new buildings and rehabilitate existing structures; and restore historic landscape design throughout the park.

**Environmental Review:** Type I Action is checked; Type II Action is checked;

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$131,800
Annual Operating Costs:	\$ 10,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$141,800

## Highland Park Master Plan Improvements

**Project Description:** This project involves the design and construction of Master Plan Improvements at Highland Park. Improvements include new and rehabilitated pathways, tree and shrub collection improvements, road and parking construction, building construction and rehabilitation, handicapped access, and infrastructure upgrades.

**Environmental Review:** This project is a Type I Action and will require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$20,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$20,600

# DEPARTMENT OF TRANSPORTATION HIGHWAYS AND BRIDGES

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Resurface approximately 200 lane miles of County highways.
  - Reconstruct/rehabilitate approximately 26 lane miles of County highways.
  - Reconstruct/rehabilitate approximately 7 lane miles of City highways.
  - Rehabilitate and reconstruct 16 County Bridges.
  - Rehabilitate and reconstruct approximately 22 County culverts.
- 

**The Highway Engineering and Operations Division** is responsible for engineering, construction and operations of approximately 662 centerline miles (1,493 lane miles) of highways. These highways range from four and five lane urban arterials to two lane rural roads. When major highway improvements are undertaken, the County performs the planning function, design, construction supervision and project management through the use of the Department of Transportation staff and consultant engineering services. All major construction projects are contracted to private construction firms through the public bidding process.

In accordance with section 131-k of the State Highway Law, the County has undertaken a program to fund reconstruction of certain City streets that function as arterials. In projects of this type, County funds may be used only for engineering design, construction inspection, and for actual costs of construction of highway elements. Utility displacement, sidewalks and right-of-way costs must be borne by the City.

### Status of Previously Programmed Highway Projects:

**Projects that will be completed or under construction in 2010 include:** Mill Road II, Jefferson Avenue, Paul Road/Fisher Road Corridor, Highway Preventative Maintenance Project and 23 sections of roads equaling approximately 129 lane miles that were rehabilitated in 2009/10 as part of Stimulus funding.

**Projects that are currently in planning or design and will begin construction in 2011, or later, include:** East Ridge Road, John Street Ext., Lyell Avenue, Long Pond Road V, Westfall Road III, Dorsey Road, Lincoln Road, Culver Road, Portland Avenue, and Erie Station Road.



**The Bridge Engineering and Operations Division** is responsible for engineering, inspection, operation, and maintenance of 176 bridges and 276 major culverts on the County's highway system. It is also responsible, via an agreement with the NYSDOT, for the operation and maintenance of the Colonel Patrick H. O'Rorke Memorial Bridge. Specific bridges have been chosen for the capital program through an inventory of all county bridges compiled from detailed biennial inspection reports prepared by both the County and State engineers. All bridges are condition rated on a Statewide and Federal rating system. These ratings are the key elements used in prioritizing and programming bridges for capital improvements.

Typically these structures have existed well beyond their projected useful lives and, if not maintained, rehabilitated or reconstructed, may receive some restrictions. Structural restrictions are caused by deterioration, outdated design capacity, narrow pavement width, hydraulic inadequacies, obsolete and unsafe railing system and parapets.

Specific culverts have been chosen for capital improvements solely through inventory and inspection efforts of County staff. A condition rating system similar to that used for bridges is used to prioritize and program culverts for capital improvements.

### Status of Previously Programmed Bridge Projects:

**Bridge projects completed or under construction in 2010 include:** bridges on: North Greece Road and Honeoye Falls No. 6 Road, culverts on Pinnacle Road (2), Honeoye Falls No. 6 Road, Salt Road and six bridges that underwent preventative maintenance in 2009/10 as part of Stimulus funding.

**Projects that are currently in planning or design and will begin construction in 2010 or later include:** Union Street Bridge over Oatka Creek Rehabilitation, Lawrence Road Bridge, Peck Road Bridge, Edgemere Drive Bridge, Kirk Road Bridge, Union Street Bridge over Black Creek, Klem Road Bridge, Penfield Road Bridge, Twin Bridge Road Bridge and Stottle Road culvert.

**HIGHWAYS AND BRIDGES - 2011-2016**

PROJECT NAME		Budget	ANNUAL		PROJECT	COST		Total Cost 6 Years
		2011	2012	2013	2014	2015	2016	
Milling/Resurfacing/Recycling	c	2,200,000	2,400,000	2,600,000	2,800,000	2,900,000	3,000,000	15,900,000
Culvert Replacement Program	c	900,000	1,000,000	1,100,000	1,200,000	1,400,000	1,600,000	7,200,000
Dorsey Rd. - Mt. Read Blvd. To Dewey Ave.	c	177,000						177,000
	s	530,000						530,000
	f	2,828,000						2,828,000
	total	3,535,000	0	0	0	0	0	3,535,000
Peck Rd. Bridge over Salmon Creek 3317820	c	53,000						53,000
	s	157,000						157,000
	f	838,000						838,000
	total	1,048,000	0	0	0	0	0	1,048,000
Lawrence Rd. Bridge over Brockport Cr. 3317000	c	37,000						37,000
	s	113,000						113,000
	f	600,000						600,000
	total	750,000	0	0	0	0	0	750,000
Edgemere Dr. Bridge Over Round Pond Outlet 3211130	c	55,000						55,000
	s	162,000						162,000
	f	866,000						866,000
	total	1,083,000	0	0	0	0	0	1,083,000
Union Street Bridge over Black Creek 3317430	c	89,000						89,000
	s	268,000						268,000
	f	1,428,000						1,428,000
	total	1,785,000	0	0	0	0	0	1,785,000
Kirk Road Bridge Over Round Pond Creek 3317540	c	49,000						49,000
	s	146,000						146,000
	f	779,000						779,000
	total	974,000	0	0	0	0	0	974,000
Culver Road - Atlantic/Garson Laurelton/Clifford (City)	c	848,000						848,000
Burnt Mill Rd. Bridge over Allen Creek (PM) (3317300)	c	7,000	16,000					23,000
	s	19,000	50,000					69,000
	f	104,000	266,000					370,000
	total	130,000	332,000	0	0	0	0	462,000
Edgewood Ave. Bridge over Allen Creek 3317400	c	12,000		48,000				60,000
	s	38,000		144,000				182,000
	f	200,000		766,000				966,000
	total	250,000	0	958,000	0	0	0	1,208,000
Long Pond Rd. Bridge Over Round Pond Creek 3369710	c	7,000		27,000				34,000
	s	20,000		82,000				102,000
	f	108,000		437,000				545,000
	total	135,000	0	546,000	0	0	0	681,000
Erie Station Rd-W Henrietta Rd. to Middle Road	c			5,000	165,000			170,000
	s			15,000	495,000			510,000
	f	300,000		80,000	2,640,000			3,020,000
	total	300,000	0	100,000	3,300,000	0	0	3,700,000
South Avenue - Elmwood Ave/Bellvue Dr & Elmwood Ave.: Mt. Hope/South Ave (City)	c	132,000	1,000,000	1,000,000	1,100,000	1,200,000	68,000	4,500,000
Portland Avenue - Titus Avenue to City Line	c		1,626,000					1,626,000
	s		378,000					378,000
	f		2,016,000					2,016,000
	total	0	4,020,000	0	0	0	0	4,020,000
Highway Rehabilitation Program	c		200,000	2,800,000	2,800,000	2,800,000	2,900,000	11,500,000
Lincoln Road - Commercial St./Route 31F	c		185,000					185,000
	s		555,000					555,000
	f		2,960,000					2,960,000
	total	0	3,700,000	0	0	0	0	3,700,000
Klem Rd Bridge over Mill Creek Tributary 3368070	c		51,000					51,000
	s		153,000					153,000
	f		816,000					816,000
	total	0	1,020,000	0	0	0	0	1,020,000
Penfield Rd Bridge Rehab. Over Irondequoit Creek 1048530	c		46,000					46,000
	s		139,000					139,000
	f		739,000					739,000
	total	0	924,000	0	0	0	0	924,000

Italics denotes a new project

**HIGHWAYS AND BRIDGES - 2011-2016**

PROJECT NAME	Budget	ANNUAL PROJECT COST				Total Cost 6 Years	
	2011	2012	2013	2014	2015		2016
Twin Bridge Road Bridge over Oatka Creek 3317380	c			78,000			78,000
	s			232,000			232,000
	f			1,240,000			1,240,000
total		0	0	1,550,000	0	0	1,550,000
Phillips Road - Schlegel Road to Lake Road	c			1,025,000		4,000,000	5,025,000
Bowerman Road Bridge over Oatka Creek 3359090	c			400,000	2,212,000		2,612,000
Wheatland Center Rd Br. Over Oatka Cr. 3317920	c			30,000	475,000		505,000
Stone Road - Mt. Read Blvd. To Lynette Drive	c			25,000	10,000	215,000	250,000
	s			75,000	30,000	645,000	750,000
	f			400,000	160,000	3,440,000	4,000,000
total		0	0	500,000	200,000	4,300,000	5,000,000
Whitney Road - Turk Hill Road to Howell Road	c			50,000	23,000	237,000	237,000
	s			150,000	69,000	713,000	713,000
	f			800,000	368,000	3,800,000	3,800,000
total		0	0	1,000,000	460,000	4,750,000	4,750,000
Sibley Rd Br Rehab over Honeoye Creek 3317750	c				156,000		1,143,000
Park Rd. Bridge over Irondequoit Creek 3317860	c					145,000	145,000
Moscow Rd Bridge over Yanty Creek 3317110	c					216,000	216,000
Clarkson Parma T.L. Rd. Bridge Rehab. Over Otis Creek (3317780)	c					30,000	220,000
North Hamlin Road Bridge Rehab. Over Sandy Creek (3317640)	c					30,000	30,000
Goodman Street - Bay Street to Clifford (City)	c					1,132,000	1,132,000
<i>Coldwater Road over Little Black Creek (1043310)</i>	<i>c</i>					<i>155,000</i>	<i>155,000</i>
<i>Bridge Preventive Maintenance</i>	<i>c</i>					<i>285,000</i>	<i>285,000</i>
<i>Rustic Railing Replacement Project</i>	<i>c</i>					<i>485,000</i>	<i>485,000</i>
c = county funds		4,566,000	6,524,000	9,188,000	10,941,000	9,173,000	15,225,000
s = state funds		1,453,000	1,275,000	698,000	594,000	1,358,000	713,000
f = federal funds		8,051,000	6,797,000	3,723,000	3,168,000	7,240,000	3,800,000
<b>TOTAL</b>		<b>14,070,000</b>	<b>14,596,000</b>	<b>13,609,000</b>	<b>14,703,000</b>	<b>17,771,000</b>	<b>19,738,000</b>

Italics denotes a new project

## Milling/Resurfacing/Recycling

**Project Description:** This is an annual program to improve various county highways. Projects in this program are designed to restore deteriorating highways by improving the drainage, edge treatments, shoulders and roadway condition. This program will improve arterial and collector highways in the county and extend the useful life of the roads before major reconstruction is needed. The projects will improve traffic safety and operating conditions on these highways.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$1,637,100
Annual Operating Costs:	\$- 435,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$1,202,100

## Culvert Replacement Program

**Project Description:** This program is designed to replace deteriorated and inadequate culverts on the county highway system. An inventory is updated each year and the highest priority culverts are scheduled in the program. Replacement of these culverts will improve traffic safety by eliminating the structural, as well as geometric and functional hazards such as headwalls located at the edge of the pavement and, the possibility of upstream and downstream flooding.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 741,300
Annual Operating Costs:	\$-100,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$ 641,300

## Dorsey Rd. - Mt. Read Blvd. to Dewey Ave.

**Project Description:** This project involves the reconstruction of Dorsey Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 33.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 18,200
Annual Operating Costs:	\$-19,500
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$- 1,300

## Peck Road Bridge over Salmon Creek (3317820)

**Project Description:** This project will provide funds for replacement of Peck Road Bridge over Salmon Creek, in the town of Parma (BIN 3317820). Originally built in 1959, this 50 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.167, with a Federal Sufficiency Rating of 69.3, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,600
Annual Operating Costs:	\$-39,160
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$-34,560

## Lawrence Road Bridge over Brockport Creek (3317000)

**Project Description:** This project will provide funds for replacement of Lawrence Road Bridge over Brockport Creek, in the town of Clarkson (BIN 3317000). Originally built in 1930, this 79 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.488, with a Federal Sufficiency Rating of 65.9, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,200
Annual Operating Costs:	\$-36,600
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$-32,400

## Edgemere Dr. Bridge over Round Pond Outlet (3211130)

**Project Description:** This project will provide funds for replacement of Edgemere Drive Bridge over Round Pond Outlet, in the town of Greece (Bin 3211130). Originally built in 1973, this 36 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.109, with a Federal Sufficiency Rating of 61.1, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,800
Annual Operating Costs:	\$-41,040
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-36,240

## Union Street Bridge Over Black Creek (3317430)

**Project Description:** This project will provide funds for replacement of Union Street Bridge Over Black Creek, in the town of Chili (Bin 3317430). Originally built in 1960, this 49 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.319, with a Federal Sufficiency Rating of 51.1, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 8,200
Annual Operating Costs:	\$-72,360
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-64,160

## Kirk Road Bridge over Round Pond Creek (3317540)

**Project Description:** This project will provide funds for replacement of one bridge on Kirk Road and total removal of a second, in the town of Greece. The North bridge (BIN 3317540) over Round Pond Creek, was originally built in 1937. The 2008 NYSDOT inspection gives this structure a condition rating of 4.850, with a Federal Sufficiency Rating of 61.0. The south bridge (BIN 3317550), over Round Pond Creek tributary was originally built in 1937. The 2008 NYSDOT inspection gives this structure a condition rating of 5.133, with a Federal Sufficiency Rating of 65.3. Because of the close proximity of the two bridges, a thorough hydraulic analysis will be performed during design, to determine whether the south bridge can be completely removed or possibly replaced with a much smaller pipe structure. Furthermore, utilizing the same hydraulic analysis will determine the appropriate size of the north bridge replacement, to accommodate the flows for both structures.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,300
Annual Operating Costs:	\$-36,920
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-32,620

## Culver Road - Atlantic/Garson & Laurelton/Clifford (City)

**Project Description:** This project involves the reconstruction of the roadway; installation of curbs, sidewalks, landscaping and street lighting; and drainage and water improvements. This road is an arterial highway in the City of Rochester and is eligible for county funding under section 131-k of the Highway Law. Adequate bicycle space will be designed into the planned improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$87,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$87,300

## Burnt Mill Road Bridge over Black Creek (PM) (3317300)

**Project Description:** Projects in this program are designed to restore deteriorating bridges by addressing critical elements on the structures which have deteriorated to a condition where they should be addressed. This program will extend the useful life of these structures before major rehabilitation is needed. This project will provide funds for Preventive Maintenance of the Burnt Mill Road Bridge (3317300) Over Black Creek, in the town of Riga. Originally built in 1932, this 77 year old structure's life expectancy can be extended by this project. The 2008 NYSDOT inspection gives this structure a condition rating of 4.857, with a Federal Sufficiency Rating of 42.1, indicating deterioration. Since the CIP program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 2,000
Annual Operating Costs:	\$-18,200
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-16,200

## Edgewood Ave. Bridge over Allen Creek (3317400)

**Project Description:** This project will provide funds for replacement of Edgewood Avenue Bridge over Allen Creek, in the town of Brighton (BIN 3317400). Originally built in 1953, this 56 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.690, with a Federal Sufficiency Rating of 51.1, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 5,200
Annual Operating Costs:	\$-42,840
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-37,640

## Long Pond Road Bridge over Round Pond Creek (3369710)

**Project Description:** This project will provide funds for rehabilitation of Long Pond Road Bridge over Round Pond Creek, in the town of Greece (BIN 3369710). Originally built in 1965, this 44 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 5.091, with a Federal Sufficiency Rating of 40.7, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 3,000
Annual Operating Costs:	\$-24,400
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-21,400

## Erie Station Rd. - W. Henrietta Rd. to Middle Road

**Project Description:** This project involves the reconstruction of Erie Station Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 49.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 17,000
Annual Operating Costs:	\$-22,500
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -5,500

## South Avenue: Elmwood/Bellvue & Elmwood Ave: Mt. Hope/South (City)

**Project Description:** This project involves the reconstruction of the roadway; installation of curbs, sidewalks, landscaping and street lighting; and drainage and water improvements. This road is an arterial highway in the City of Rochester and is eligible for county funding under section 131-k of the Highway Law. Adequate bicycle space will be designed into the planned improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$463,300
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$463,300

## Portland Avenue - Titus Avenue to City Line

**Project Description:** This project involves the reconstruction of Portland Avenue to include improved drainage, catch basins, rehabilitation and/or replacement of the riding surface and curbs. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 32.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$167,400
Annual Operating Costs:	\$ -60,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$107,400

## Highway Rehabilitation Program

**Project Description:** This project is designed to restore deteriorating highways by improving the drainage, edge treatments, shoulders and roadway condition. This program will improve arterial and collector highways in the county and extend the useful life of the roads before major reconstruction is needed. The projects will improve traffic safety and operating conditions on these highways.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$1,002,600
Annual Operating Costs:	\$ -75,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ 927,600

## Lincoln Road - Commercial St./Route 31F

**Project Description:** This project involves the reconstruction of Lincoln Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 36.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 19,000
Annual Operating Costs:	\$-19,500
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -500

## Klem Road Bridge over Mill Creek Tributary (3368070)

**Project Description:** This project will provide funds for replacement of Klem Road Bridge over Mill Creek Tributary, in the town of Webster (3368070). Originally built in 1971, this 38 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 3.571, with a Federal Sufficiency Rating of 15.7, indicating deterioration. Since the CIP bridge replacement program is intended to replace deteriorated structures on the County Highway System, the bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,400
Annual Operating Costs:	\$-47,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-42,600

## Penfield Road Bridge Rehab. over Irondequoit Creek (1048530)

**Project Description:** This project will provide funds for rehabilitation of Penfield Road Bridge over Irondequoit Creek, in the town of Penfield (BIN 1048530). Originally built in 1928, this 81 year old structure will need major rehabilitation to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.188, with a Federal Sufficiency Rating of 62.3, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 4,000
Annual Operating Costs:	\$-41,840
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-37,840

## Twin Bridge Road Bridge over Oatka Creek (3317380)

**Project Description:** This project will provide funds for replacement of Twin Bridge Road bridges over Oatka Creek, in the town of Wheatland. The North bridge (BIN 3317380), originally built in 1929, this 80 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 3.653, with a Federal Sufficiency Rating of 21.3, indicating deterioration. The South bridge (BIN 3317370), rehabilitated in 1973, this 36 year improvement has served its purpose. The 2008 NYSDOT inspection gives this structure a condition rating of 4.250, with a Federal Sufficiency Rating of 64.6, indicating deterioration. Because of the close proximity of the two bridges, a thorough hydraulic analysis will be performed during design, to determine whether the south bridge can be completely removed or possibly replaced with a much smaller pipe structure. Furthermore, utilizing the same hydraulic analysis will determine the appropriate size of the north bridge replacement, to accommodate the flows for both structures. A thorough planning study will determine first, if both bridges can be completely removed without replacement. Since the CIP bridge replacement program is intended to replace deteriorated structures on the County Highway System, the bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 6,800
Annual Operating Costs:	\$-69,440
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-62,640

## Phillips Road - Schlegel Road to Lake Road

**Project Description:** This project involves the reconstruction of Phillips Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 66.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$517,400
Annual Operating Costs:	\$ -52,500
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$464,900

## Bowerman Road Bridge over Oatka Creek (3359090)

**Project Description:** This project will provide funds for replacement of Bowerman Road Bridge over Oatka Creek, in the town of Wheatland (BIN 3359090). Originally built in 1948, this 61 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection report gives this structure a condition rating of 4.681, with a Federal Sufficiency Rating of 42.8, indicating deterioration. Since the CIP bridge program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 227,700
Annual Operating Costs:	\$-112,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ 115,700

## Wheatland Center Road Bridge over Oatka Creek (PM) (3317920)

**Project Description:** This project will provide funds for Preventive Maintenance of Wheatland Center Road Bridge over Oatka Creek, in the town of Wheatland (BIN 3317920). Originally built in 1965, this 44 year old structure will need maintenance work to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.736, with a Federal Sufficiency Rating of 71.8, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$ 44,000
Annual Operating Costs:	\$-54,520
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-10,520

## Stone Road - Mt Read Blvd. to Lynette Drive

**Project Description:** This project involves the reconstruction of Stone Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 47.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 25,700
Annual Operating Costs:	\$-24,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ 1,700

## Whitney Road - Turk Hill Road to Howell Road

**Project Description:** This project involves the reconstruction of Whitney Road to include improved drainage, catch basins, replacement of the base and riding surface, gutters/curbs and paved shoulders. Adequate bicycle space will be designed into the planned improvements. This project will improve the structural integrity and efficiency of the highway and preserve the investment in the highway system. The 2008 Pavement Quality Index (scale 0-100; worst to best) for this road is 42.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$ 56,300
Annual Operating Costs:	\$-60,000
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ -3,700

## Sibley Road Bridge over Honeoye Creek (3317750)

**Project Description:** This project will provide funds for rehabilitation of Sibley Road Bridge over Honeoye Creek, in the town of Mendon (BIN 3317750). Originally built in 1962, this 47 year old structure will need a major rehabilitation to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.767, with a Federal Sufficiency Rating of 64.1, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$113,300
Annual Operating Costs:	\$ -45,200
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$ 68,100

## **Park Rd. Bridge over Irondequoit Creek (3317860)**

**Project Description:** This project will provide funds for replacement of Park Road Bridge over Irondequoit Creek, in the town of Perinton (Bin 3317860). Originally built in 1957, this 52 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.800, with a Federal Sufficiency Rating of 73.2, indicating deterioration. Since the CIP bridge replacement program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion in this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### **Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$ 12,600
Annual Operating Costs:	\$-42,440
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-29,840

## **Moscow Road Bridge over Yanty Creek (3317110)**

**Project Description:** This project will provide funds for replacement of Moscow Road Bridge over Yanty Creek, in the town of Hamlin (3317110). Originally built in 1932, this 77 year old structure is approaching the end of useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.347, with a Federal Sufficiency Rating of 73.1, indicating deterioration. Since the CIP bridge program is intended to replace or rehabilitate deteriorated structures on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### **Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$ 18,800
Annual Operating Costs:	\$-62,640
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-43,840

## **Clarkson Parma T.L. Road Bridge Over Otis Creek (PM) (3317780)**

**Project Description:** This project will provide funds for Preventive Maintenance of Clarkson Parma Town Line Road Bridge over Otis Creek, in the town of Parma (BIN 3317780). Originally built in 1952, this 57 year old structure will need maintenance work to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.862, with a Federal Sufficiency Rating of 72.9, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### **Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$21,800
Annual Operating Costs:	\$ -7,760
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$14,040

## **North Hamlin Road Bridge Over Sandy Creek (PM) (3317640)**

**Project Description:** This project will provide funds for Preventive Maintenance of North Hamlin Road Bridge over Sandy Creek, in the town of Hamlin (BIN 3317640). Originally built in 1948, this 61 year old structure will need maintenance work to extend its useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.889, with a Federal Sufficiency Rating of 71.1, indicating deterioration. Since the CIP bridge program is intended to rehabilitate or replace deteriorated structures, on the County Highway System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### **Estimated Annual Impact on the Operating Budget:**

Bond Life:	20 years
Annual Debt Service Payment:	\$ 2,600
Annual Operating Costs:	\$-5,200
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$-2,600

## Goodman Street - Bay Street to Clifford (City)

**Project Description:** This project involves the reconstruction of the roadway; installation of curbs, sidewalks, landscaping and street lighting; and drainage and water improvements. This road is an arterial highway in the City of Rochester and is eligible for county funding under section 131-k of the Highway Law. Adequate bicycle space will be designed into the planned improvements.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$116,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$116,600

## Coldwater Road over Little Black Creek (1043310)

**Project Description:** This project will provide funds for replacement of the Coldwater Road Bridge over Little Black Creek, in the town of Chili (1043310). Originally built in 1920, this 89 year old single span concrete drop beam - through girder structure has outlasted its design useful life. The 2008 NYSDOT inspection gives this structure a condition rating of 4.756, with a Federal Sufficiency Rating of 31.3, indicating significant deterioration. Since the CIP bridge program is intended to replace or rehabilitate deteriorated structures on Monroe County System, this bridge was selected for inclusion into this program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$13,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$13,500

## Bridge Preventive Maintenance

**Project Description:** Projects in this program are designed to maintain, and prevent from deterioration, various bridges in Monroe County by addressing deck elements. Bridge decks will gradually lose their protective sealer and allow penetration of weathering elements, such as salt-water, exposing the reinforcement to premature rusting and the concrete to cyclic to freeze-thaw damage. This program will provide for cleaning and re-sealing the decks on all newly constructed bridges in Monroe County in order to extend their service life and prevent future major rehabilitation. Deck sealers installed on all of Monroe County bridge structures have a useful life expectancy of 6-7 years, beyond which the surfaces should be cleaned and re-sealed to insure weathering elements do not penetrate into the concrete deck surface. Breakdown of the sealer will result in reinforcement corrosion and concrete damage due to freeze-thaw action causing potholes to develop. This program is intended to keep up with the cyclic preventive maintenance sealing of the newly constructed County Bridges, protecting our investment from premature deterioration.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$24,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$24,800

## Rustic Railing Replacement Project

**Project Description:** There are rustic railings installed at over a dozen locations throughout the County, for various design and aesthetic reasons. These systems range from 4 to 28 years in age and were installed at locations where the public demand required a more aesthetically blending system with their surroundings. These railings, although aesthetically appealing to some neighborhoods, have been deemed prone to premature deterioration and breakdown of the protective coating, in moist environments (such as road sides where they are now installed). The material tends to deteriorate from inside out, making it difficult to visually inspect, while compromising the system's integrity and safety from within. In 2007, NYSDOT issued an engineering bulletin requiring all rustic railings, within the State, to be replaced with conventional galvanized railing, no later than ten years from the issuance of the mandate. We are required to meet this requirement by 2017.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$49,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ 0
Net Operating Budget Impact:	\$49,900

# DEPARTMENT OF TRANSPORTATION -- TRAFFIC ENGINEERING

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## HIGHLIGHTS OF CAPITAL PROGRAM

- Provides for the upgrading and replacement of existing traffic signals and expressway lighting, installation of new traffic signals, expansion of the intelligent transportation system, and expansion of the computerized signal system for the City, towns and villages of Monroe County;
- Undertake spot improvements at accident, traffic congestion and problem locations in Monroe County;
- Replace and upgrade traffic signs to bring them up to today's standards and improve safety for motorists;
- Rehabilitate and improve the Regional Traffic Operations Center to maintain operations at this critical facility.



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**Various Department of Transportation Divisions** are responsible for all the County's traffic engineering needs such as: traffic analysis and design; the computerized traffic control system; signal maintenance; highway lighting; highway spot safety improvement program; and City traffic features needs. These Divisions identify prospects for spot improvements and traffic engineering improvements.

### Status of Previously Programmed Projects

**Projects that will be completed, or under construction, in 2010 include:** Traffic Engineering – (upgrading the County's signal system and expressway lighting infrastructure, expanding the computerized signal system and Intelligent Transportation Systems); City Traffic Features; Spot Improvements to shoulders on County highways, and approximately 4000 traffic signs replaced as part of Stimulus funding.

**Projects that are currently in planning or design phase and should be under construction in 2011 or later include:** Spot improvements: shoulder and vertical curve improvements to County roads; City Traffic Features; Traffic Engineering: continue to upgrade the County's signal system and expressway lighting infrastructure, and Intelligent Transportation Systems (computerized signal system expansion using fiber optic cable).

**TRAFFIC ENGINEERING - 2011-2016**

PROJECT NAME		Budget	ANNUAL		PROJECT	COST		Total Cost 6 Years	
		2011	2012	2013	2014	2015	2016		
Traffic Engineering	c	600,000	750,000	900,000	850,000	850,000	850,000	4,800,000	
Spot Improvement Projects	c	500,000	500,000	500,000	500,000	500,000	600,000	3,100,000	
City of Rochester Traffic Features	c	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000	
Traffic Sign Retroreflectivity Upgrade	c	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000	
Regional Traffic Operations Center Rehabilitation	c					300,000	300,000	600,000	
TOTAL		c	1,900,000	2,050,000	2,200,000	2,150,000	2,450,000	2,550,000	13,300,000

**Traffic Engineering**

**Project Description:** This is a multi-year program designed to provide for the upgrading, expansion and replacement of existing traffic signal and roadway lighting facilities. Tasks include the replacement/upgrades of existing equipment (such as traffic signal and lighting systems controls), installation of new signals and flashers where they are justified, and the expansion of the County's computerized traffic control systems (for improved highway signal system performance).

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	15 years
Annual Debt Service Payment:	\$494,200
Annual Operating Costs:	\$- 20,000
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$474,200

**Spot Improvement Projects**

**Project Description:** This is a multi-year program designed to address the improvement of identified safety and traffic congestion problems on county highways and at county intersections. These locations have been identified as areas where the accident rate is higher than the County average or where traffic congestion exists due to continued growth. Improvements may include but are not limited to the cutting and filling of hills and the installation of turn lanes, shoulders and traffic control devices.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	15 years
Annual Debt Service Payment:	\$319,200
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$319,200

**City of Rochester Traffic Features**

**Project Description:** This project provides funding to reimburse the City for traffic engineering costs associated with those City-initiated highway projects exclusive of 131-k projects. The County of Monroe is responsible for the signal system, pavement markings, and traffic signs on highways in the City of Rochester. There is an obligation to provide traffic-engineering services to the City and this project will provide a mechanism for identifying traffic-engineering costs for specific City projects. This program funds the replacement and upgrading of problem signalized intersections and installation of signs and pavement markings for traffic control for projects undertaken by the City of Rochester through their capital improvement program.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

**Estimated Annual Impact on the Operating Budget:**

Bond Life:	15 years
Annual Debt Service Payment:	\$247,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	\$ <u>0</u>
Net Operating Budget Impact:	\$247,100

## Traffic Sign Retroreflectivity Upgrade

**Project Description:** This project will replace and upgrade traffic signs on County/City roads that do not meet the minimum retroreflectivity standards as set forth by the Federal Highway Administration's (FHWA) Manual of Uniform Traffic Control Devices (MUTCD). By replacing signs that are identified not to meet the minimum standards with signs that do, the County's and City's road system will become safer by reducing the collisions that are associated with poor sign visibility and in turn, incur less liability. Due to the recent adoption of newer standards by the Federal Highway Administration's (FHWA) Manual of Uniform Traffic Control Devices (MUTCD), we are mandated to provide brighter signs for nighttime viewing that will benefit all drivers and in particular seniors, which are a growing segment of our population. This project will comply with that mandate.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$247,100
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$247,100

## RTOC Rehabilitation

**Project Description:** This project provides funds for rehabilitation and improvements to the Regional Traffic Operations Center (RTOC) to maintain the operations of the computerized signal system, the County's and NYSDOT's signal operations and the New York State Police. Improvements include roof replacement, HVAC upgrades, parking lot repaving/resurfacing, sidewalks, plumbing upgrades and other building/facility upgrades as required.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$61,800
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$ 0</u>
Net Operating Budget Impact:	\$61,800

# MONROE COUNTY WATER AUTHORITY

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## HIGHLIGHTS OF CAPITAL PROGRAM

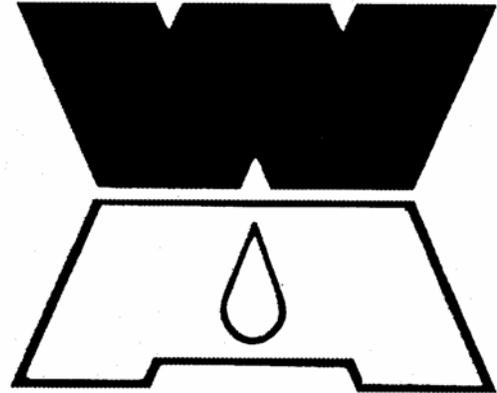
Continue with prudent infrastructure renewals and replacements in order to economically achieve a safe, secure and reliable water supply system for the community.

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The **Monroe County Water Authority** is the largest water supplier in the region, furnishing water to over 650,000 people in the region through 170,000 services on a retail or direct basis and 20,000 services on a wholesale basis. The Water Authority serves Monroe County and portions of each of the surrounding counties. The City of Rochester and the Village of Webster still operate their own water production facilities; however, the City and the Water Authority have an exchange agreement whereby each obtains substantial quantities of water from the other and the Water Authority also serves a portion of the Village of Webster.

Due to the size of the Water Authority's operation, substantial economies of scale are being realized in meeting the Region's increasing public water supply requirements. This scale allows for increased effectiveness in the production, transmission and storage of our water resources. The objective of using Lake Ontario as the principal source of supply allows the Authority to enjoy a relatively unlimited supply of high quality raw water, thereby, avoiding the water quality problems that have been experienced by many smaller public suppliers in the region.

The Water Authority's asset management planning focuses on timely renewals and replacements of the water supply infrastructure such that the economic life of these assets is maximized and the high degree of reliability demanded by the residential, commercial and industrial customers is achieved.



## Status of Previously Programmed Projects

The following projects were completed or underway during the passed year:

- Hydrant, valve and meter replacement candidates have been prioritized for replacement work.
- Engineering of the storage Tank Rehabilitation is underway.
- Planning, permitting and design development work for Cement Lining and Water Main Rehabilitation was completed and contracts were bid for spring/summer construction.

## WATER AUTHORITY - 2011-2016

PROJECT NAME	Budget		ANNUAL PROJECT COST		COST		Total Cost 6 Years
	2011	2012	2013	2014	2015	2016	
Hydrant Replacement Program d	570,000	570,000	570,000	570,000	570,000		2,850,000
Valve Replacement Program d	310,000	310,000	310,000	310,000	310,000		1,550,000
Residential Meter Replacement & Upgrade Program d	1,200,000	1,400,000	1,400,000	1,500,000	1,500,000		7,000,000
Storage Facilities Rehabilitation d	1,750,000	2,100,000	1,700,000	1,750,000	1,100,000		8,400,000
Cement Lining Water Main Rehabilitation d	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000		7,500,000
<i>Large Meter Replacement and Upgrade Program d</i>		335,500	335,500	335,500	335,500		1,342,000
TOTAL d	5,330,000	6,215,500	5,815,500	5,965,500	5,315,500	0	28,642,000

Italics denotes a new project

## Hydrant Replacement Program

**Project Description:** The hydrant replacement program is for the systematic, system wide replacement of older, leaking, or damaged hydrants. Hydrants are replaced based upon maintenance inspections, leak detection testing, and damage as a result of vehicular accidents. In order to keep the required fire protection throughout the water system, older, outdated and damaged hydrants have to be replaced on a regular schedule.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$248,500
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$248,500</u>
Net Operating Budget Impact:	\$ 0

## Valve Replacement Program

**Project Description:** Based on on-going inspection and problems discovered in operating the system, valves are selected for replacement or additional valves are installed. Properly functioning valves are essential for the daily operation and maintenance of the water system, and for rapid usage during emergency situations.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	10 years
Annual Debt Service Payment:	\$210,600
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$210,600</u>
Net Operating Budget Impact:	\$ 0

## Residential Meter Replacement and Upgrade Program

**Project Description:** The Water Authority policy is to replace residential meters on a 25 year cycle. The meter replacement program ensures optimum revenue through accurate registration of residential water consumption. The new meters installed will be read using radio frequency from the public street outside of the residence, and will report leakage, vacancy, and reverse flow incidents automatically. Access to the residence will not be needed.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	15 years
Annual Debt Service Payment:	\$720,700
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$720,700</u>
Net Operating Budget Impact:	\$ 0

## Storage Facilities Rehabilitation

**Project Description:** This is a long-term annual program to secure, upgrade, repair, and paint tanks in the Authority's production and distribution systems. There are currently 44 potable water storage tanks in the system, of which 33 are steel and the remainder concrete. The expected life of the paint coating systems ranges from 15-25 years, depending on conditions and existing coating systems.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$732,400
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$732,400</u>
Net Operating Budget Impact:	\$ 0

## Cement Lining Water Main Rehabilitation

**Project Description:** This is a long-term multi-year program for rehabilitation of old cast iron pipelines in the Authority's system with a target of cleaning and lining approximately 5 miles of water main per year. Cleaning and lining improves chlorine residual retention and reduces dirty water complaints. The lining process also provides increased hydraulic capacity in the vicinity of the lining project, and reduces internal corrosion, which has advantages over direct replacement and additionally is less disruptive to the community.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$653,900
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$653,900</u>
Net Operating Budget Impact:	\$ 0

## Large Meter Replacement and Upgrade Program

**Project Description:** The Water Authority has a continuous meter maintenance program for large meters that ensures optimum revenue through accurate registration of water consumption. Large meters installed in industrial and school settings will use radio reading meters to minimize time spent gaining access through security stations to obtain monthly meter readings. The project benefits both the customer and Water Authority by working towards the goal of accurate registration of water consumed by the largest customers and provides for accurate billings and revenue receivables.

**Environmental Review:** This project is a Type II Action and will not require further environmental review.

### Estimated Annual Impact on the Operating Budget:

Bond Life:	20 years
Annual Debt Service Payment:	\$117,000
Annual Operating Costs:	\$ 0
Attributable Revenues:	<u>\$117,000</u>
Net Operating Budget Impact:	\$ 0