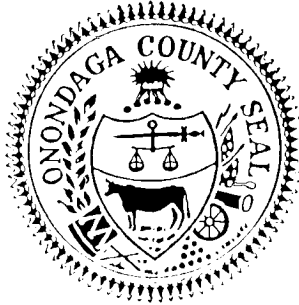


ONONDAGA COUNTY  
NEW YORK



2018 – 2023  
CAPITAL IMPROVEMENT PLAN

Joanne M. Mahoney  
*County Executive*

William P. Fisher  
*Deputy County Executive*

Mary Beth Primo  
*Deputy County Executive for  
Physical Services*

Ann Rooney  
*Deputy County Executive for  
Human Services*

Steven P. Morgan  
*Chief Fiscal Officer*



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## CAPITAL IMPROVEMENT PLANNING COMMITTEES

### CAPITAL PROJECTS COMMITTEE (CPC)

Joanne M. Mahoney  
*County Executive, Chair, CPC*

J. Ryan McMahon, II  
*Chairman, County Legislature*

David Knapp  
*Chair, Ways & Means Committee*

Patrick M. Kilmartin  
*Floor Leader, Onondaga County  
Legislature*

Mary Beth Primo  
*County Administrator for  
Physical Services*

Steven P. Morgan  
*Chief Fiscal Officer, Secretary, CPC*

Robert A. Durr  
*County Attorney*

Don Jordan  
*Deputy Director of Planning*

### ONONDAGA COUNTY PLANNING BOARD

Douglas B. Morris  
*Chairperson*

William P. Fisher

Daniel Cupoli (Vice Chair Person)

Lisa Dell

Marty Voss (ex officio)

James Corbett

Robert E. Antonacci (ex officio)

### STAFF TO THE PLANNING COMMITTEES

Rustan Petrela  
*Coordinator, Facilities Management*

Tara Venditti  
*Management & Budget*

Don M. Jordan  
*Planning*



Joanne M. Mahoney  
COUNTY EXECUTIVE

# Onondaga County Planning Board

## Onondaga County Planning Board Resolution Concerning the 2018 to 2023 Capital Improvement Plan

WHEREAS, pursuant to the Administrative Code of the County of Onondaga, Section 6.02 (d), the Onondaga County Planning Board has reviewed the 2018 – 2023 Tentative Capital Improvement Plan; and

WHEREAS, debt management remains a high priority in the 2018 – 2023 Tentative Capital Improvement Plan; and

WHEREAS, the projects proposed in the 2018 – 2023 Tentative Capital Improvement Plan emphasize the maintenance of existing county facilities and transportation assets, stewardship of the natural environment, and sound fiscal management; and

WHEREAS, the goals and policies of Onondaga County's comprehensive plan, the *2010 Development Guide and Framework For Growth in Onondaga County*, support economic growth, an attractive community, well maintained and cost effective infrastructure, stewardship of natural resources, investment in existing communities, and sustainable development practices; and

WHEREAS, the 2018 – 2023 Tentative Capital Improvement Plan is consistent with the goals and policies of the *2010 Development Guide* for Onondaga County; and

WHEREAS, the Capital Improvement Plan provides an effective means of communicating the intention of the County of Onondaga with respect to planned capital investments; and

NOW, THEREFORE BE IT RESOLVED, that the Onondaga County Planning Board endorses the 2018 – 2023 Tentative Capital Improvement Plan.

Douglas Morris, Chairman  
Onondaga County Planning Board  
October 4, 2017

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202  
Phone: (315) 435-2611, Fax (315) 435-2439  
[countyplanning@ongov.net](mailto:countyplanning@ongov.net)

# OVERVIEW

## *Section 1*





## INTRODUCTION TO CAPITAL PLANNING

A Capital Improvement Plan (CIP) serves as a guideline for the orderly acquisition and refurbishment of capital assets within the financial resources of the community. One of the key elements of a successful CIP is a clear position as to what a capital project is. In Onondaga County, a capital project is understood to be an expenditure of considerable cost that has a long, useful life. As a matter of policy, capital requests are not considered for the CIP if: 1) the total cost of the project is less than \$250,000; 2) the project has a useful life of less than five years; 3) the request involves the procurement of vehicles.

### About This Document

The 2018-2023 CIP contains four major sections. The first provides an understanding of the capital planning process and its relationship to development and land use planning. It also describes revenue sources and the county's debt management policy. The second section contains debt service narrative and summary information, as well as program summary analysis. A location map also appears at the end of section two. Section three contains narrative description and financing plans for proposed projects, as well as narrative description of completed and ongoing projects. This section is subdivided by the funds that support it. Section four contains a glossary of terms.

### The Capital Planning Process

Capital planning involves the County Executive, members of the County Legislature, heads of various county departments, and a citizen advisory board in a process that determines capital needs, alternatives, and priorities. The development of the CIP takes place over several months, beginning in February of each year, and includes five major phases:

- 1 In March, department heads begin preparation of project proposals in accordance with executive guidelines.
- 2 In May, proposals are submitted to the CIP Coordinator at Department of Facilities Management. The proposals are analyzed by CIP Coordinator in conjunction with DMB and the Syracuse-Onondaga County Planning Agency. The Law Department is consulted as needed.
- 3 By September, the County Executive has approved a tentative CIP, which is presented to the Capital Program Committee (a committee made up of legislators and representatives from the executive branch of county government). Later after the budget presentation to the County Legislature the CIP is presented to County Planning Board (a citizen advisory group).
- 4 In September, the Tentative CIP is presented with the county's Annual Operating Budget to the Ways & Means Committee of the County Legislature, and then to the full Legislature in October for approval.
- 5 From October to March, research on capital planning and management is conducted, and the prior year's process is critiqued. Revisions to forms and instructions are completed.

Coordination and interaction among units of government occurs throughout the process, both formally and informally. The heads of county departments are consulted to discuss questions and recommendations regarding particular projects. Some of the major criteria for evaluating proposals are:

- relationship of the project to the goals of the County Executive;
- degree of the overall need for the project;
- fiscal impact, including the county's capacity to borrow;
- non-county funding sources;
- consistency with the goals and policies in the 2010 Development Guide;
- community participation and support.

The final product of this process is a six-year plan to improve or construct those facilities or components of county infrastructure considered necessary to provide or maintain an adequate level of public service. Approval by the County Legislature is not a commitment to fund every project in the plan, but rather it is an

indication of support for the plan as a whole. Projects that require borrowing must be presented to the Legislature individually in order to secure authorization to incur debt.

## THE COUNTY'S INFRASTRUCTURE

Capital projects can be separated into two basic classes: infrastructure and facilities. Both infrastructure and facilities projects have an important role in economic development. Infrastructure includes water and sewer systems and highways. These linear systems drive the pattern of urban and suburban growth, and can be used as an important tool to influence economic development. County facilities such as the Civic Center, Onondaga Community College and the Whitney Applied Technology Center, County Parks, the Justice Center, the Correction Center at Jamesville, and the Convention Center provide locations for carrying out social, cultural, educational, and recreational programs.

The CIP serves to coordinate projects sponsored by different departments for maximum impact in a given location. Water, sewer, and highway projects - when coordinated - can provide capacity to support new development. New water service, while relatively inexpensive to provide, creates demand for sewers, wastewater treatment capacity, and improved highways. Significant savings in tax dollars can be achieved when priority is given to projects that utilize existing infrastructure over projects that require extensions to be built.

The goal of most capital expenses in this CIP is to maintain facilities at a level so as to prevent major replacement expenditures in the future. Some infrastructure projects could represent new capacity or enable development of new areas within the county. Wastewater treatment projects are designed to meet mandated water quality standards under the Federal Clean Water Act through the Amended Consent Judgment (ACJ).

### Water

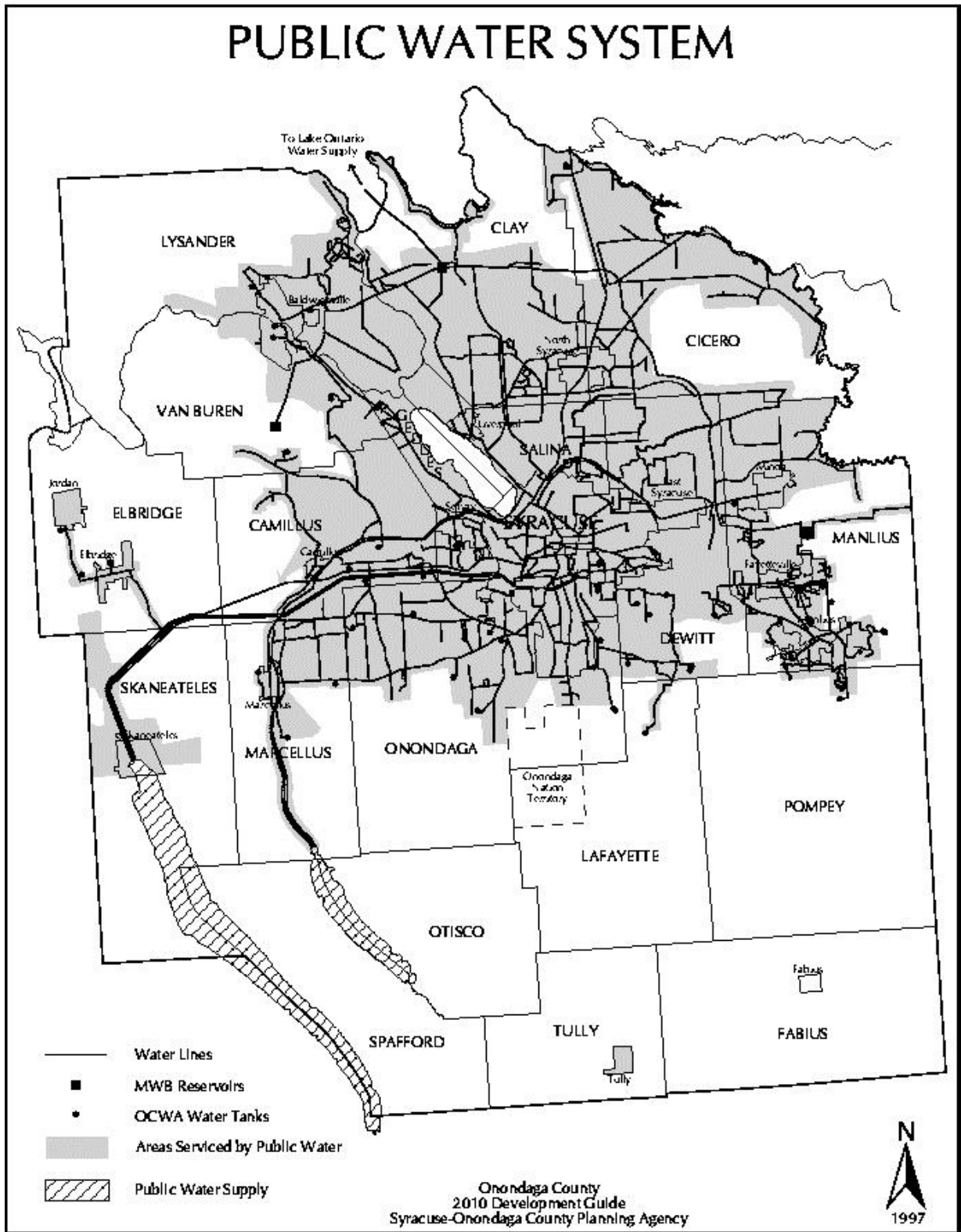
Effective January 1, 2017, Onondaga County entered into a Public Water Supply Cooperation Agreement with the Onondaga County Water Authority (OCWA), under which OCWA agreed to lease and operate the assets of the Onondaga County Water District.

Responsibility for capital projects initiated by the Metropolitan Water Board (MWB) was transferred to OCWA as of January 1, 2017. OCWA is also authorized and obligated to perform maintenance services on these assets.

The County continues to be responsible for existing debt obligations for and on behalf of the District and for operating costs expended through December 31, 2016. Under the terms of the Cooperation Agreement, the County retains the right to impose an ad valorem tax on specially benefitted properties within the District and to provide for an external charge to be passed on to OCWA's customers.

Under the Cooperation Agreement, OCWA is required to pay to the County the annual amount needed as a Revenue to balance the budgeted appropriations made by the county on behalf of the District, including costs of debt service.

The County does not plan to undertake any capital projects for, or on behalf of, the District.



### Sewers

The Department of Water Environment Protection (WEP) is responsible for wastewater treatment and transmission for the area within the Consolidated Sanitary District (CSD), which includes the City of Syracuse and all or part of eleven suburban towns including: Camillus, Cicero, Clay, Dewitt, Geddes, Lysander, Manlius, Onondaga, Pompey, Salina, and Van Buren. The Department also provides maintenance services for the following villages: Marcellus, Camillus, East Syracuse, Fayetteville, Liverpool, North Syracuse, Solvay and Manlius. The Sanitary District was formed in 1978 (see map on p. 7) to provide an equitable base for financing capital and operating costs associated with the wastewater system; a sewer unit charge (standardized fee) for service finances the system. The capital plan, maintenance, and operation of the CSD are entirely supported by fees for service, primarily through the sewer unit charge; no county tax support is provided to the CSD. The CSD boundary serves as a planning tool for decisions about extensions to new areas and other issues. The CSD provides approximately one-hundred-twenty thousand residential units (one unit per household and  $\frac{3}{4}$  unit per apartment) of service, and approximately sixty-six thousand units of commercial/industrial service, based on a unit volume equivalent of one-hundred-thirty seven thousand gallons per unit. The unit charge is only charged to properties in the district with a sewer connection. Industrial users are required to remove non-compatible pollutants, such as heavy metals, at the source. Certain high strength wastes, meeting strict local parameters, are also allowed by permit and with industrial waste surcharges.

The wastewater system infrastructure managed by WEP includes six sewage wastewater treatment plants: Baldwinsville-Seneca Knolls, Brewerton, Meadowbrook-Limestone, Oak Orchard, Syracuse Metropolitan Treatment Plant, and Wetzel Road Wastewater Treatment Plants. The CSD is responsible for the interceptor sewers of the combined sanitary and storm water sewer system (CSO); much of this combined sewer infrastructure was constructed many decades ago and serves most of Syracuse. During heavy rains, overflow from the combined sewers discharges into several creeks. The CSD is responsible for the maintenance and repair of more than two thousand one hundred miles (six inches to twelve feet in diameter) and for the operation, maintenance, and repair of fifty-two CSD owned sewage-pumping stations, one hundred six municipal pump stations, and nine combined sewer overflow treatment facilities. Asset maintenance responsibilities include the inspection, maintenance, and repair of four hundred seventy miles of County owned trunk and interceptor sewer infrastructure in the Consolidated Sanitary District. While capital repair and replacement of the local sewers remain the responsibility of the towns, villages or the city, the county maintains many of these aging assets via intermunicipal agreements, allowing fee-for-service reimbursement to the CSD for these routine maintenance services. Several municipal collection systems within the CSD also collect taxes to pay for the maintenance of local municipally owned pump stations and collection sewers.

### Transportation

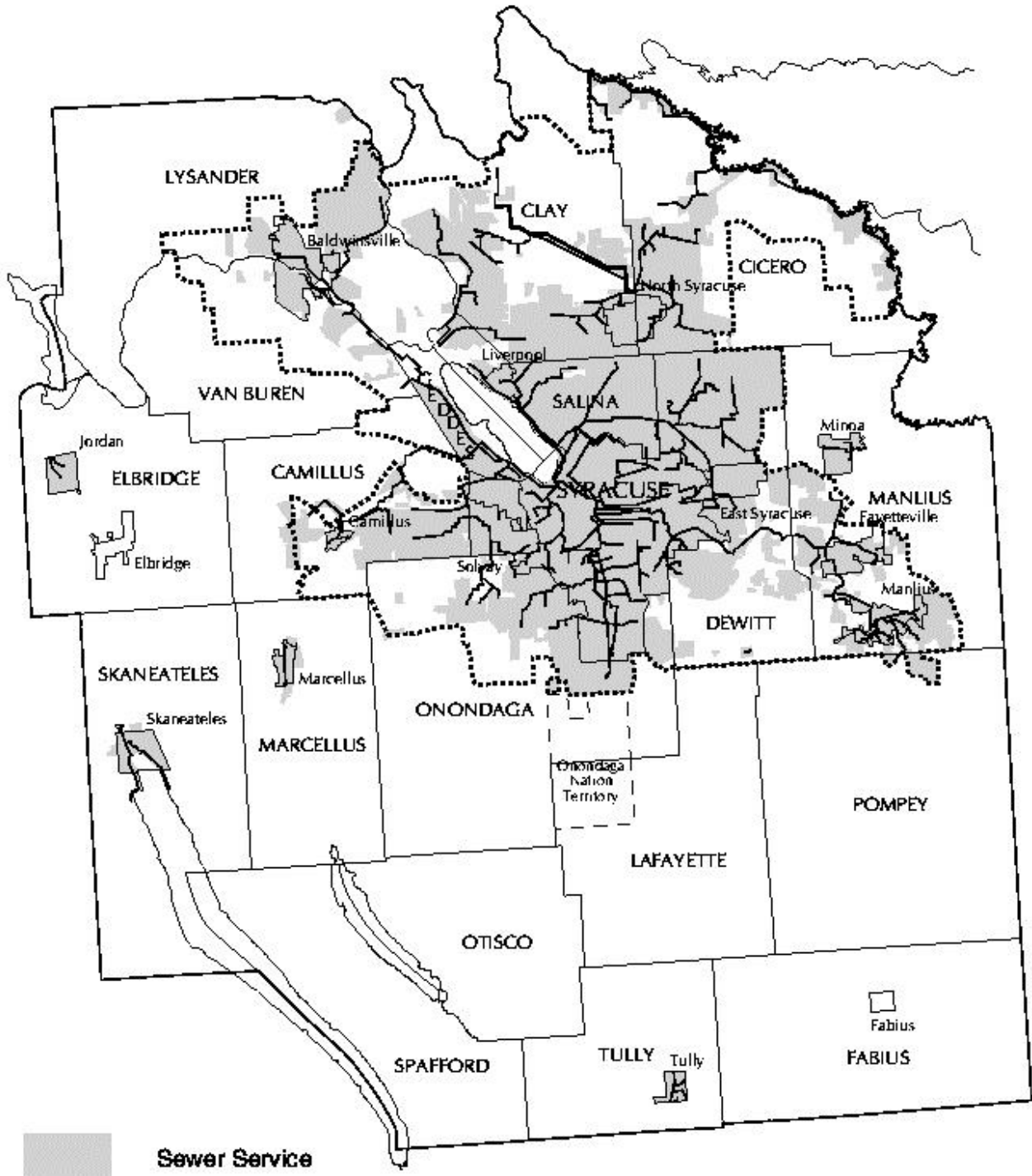
Onondaga County owns 25.4% of the total highway system including arterials, collectors, and local roads. The Department maintains over seven hundred ninety-three centerline miles of county owned roadway (see map p. 8), including thirty-nine miles of four or five lane highways. The Department of Transportation uses an annual pavement condition survey and a computerized system to determine priorities for maintenance, rehabilitation, and reconstruction. The goal of this system is to minimize the need for major reconstruction by performing timely maintenance.

The Department of Transportation is responsible for project planning, detailed project design, right-of-way acquisitions, construction layout, and inspection of major highway reconstruction projects, as well as the inspection, maintenance, and rehabilitation of the two hundred ten bridges, numerous culverts on county roads as well as operating and maintaining 125 signals and beacons throughout the County.

The Department of Transportation performs routine maintenance functions and limited repaving and rehabilitation with county forces. Private contractors are used to build major construction projects and to repave hot mix and cold mix bituminous highways. These projects are competitively bid as mandated by state law. The Department is currently administering federal highway funds on numerous projects.

The Department of Transportation operates four highway maintenance facilities - Camillus, Marcellus, Jamesville, and North Area - as bases for fleet maintenance, materials storage, and labor deployment.

# PUBLIC WASTEWATER SYSTEM



Onondaga County  
2010 Development Guide  
Syracuse-Onondaga County Planning Agency



# PATTERN OF COUNTY ROAD JURISDICTION



— County Roads

Onondaga County  
2010 Development Guide  
Syracuse-Onondaga County Planning Agency



## ONONDAGA COUNTY 2010 DEVELOPMENT GUIDE

In 1991, the Onondaga County Legislature adopted the 2010 Development Guide to outline county policy with respect to infrastructure, land development, the environment, and fiscal capacity. The Guide was updated with current demographic and economic data, better graphics, and a more concise, understandable format. The updated Guide was approved by the County Legislature on June 1, 1998, and is now the official Onondaga County plan. The County is currently working on an update to the Guide.

New water lines, sewers, and roads have the effect of creating new developable land. The Guide seeks to prevent premature public expenditures, which foster urban sprawl and create unnecessary capital and operating expenses. The Guide stresses the desirability of infill development in areas served by utilities, in order to balance trends toward sprawl with the ability of a static population to pay for infrastructure. Decisions to extend utilities to provide new urban land will be related to economic growth and job creation, as well as the capacity of complementary infrastructure systems to support growth in a particular location.

### Background

In New York State, municipalities - cities, towns and villages - have strong land use controls available through zoning and subdivision regulations. Counties, on the other hand, have no state enabling legislation with which to manage growth. Many urban counties, however, have large investments in infrastructure; the timing of highway, wastewater treatment, and water facility improvements can influence growth patterns very directly.

Onondaga County constructs and maintains many public works facilities, and therefore has the ability to affect land development patterns. The county adopted the 2010 Development Guide to define the conditions for extensions of county highways, sewer, and water lines. By implementing these policies through the capital program, the county can guide development and control capital and operating expenditures.

### Employment Trends

According to the New York State Department of Labor's Quarterly Census of Employment and Wages (QCEW), annual average employment by place of work in Onondaga County grew slightly from 239,704 in 2010 to 243,672 in 2016. The number of firms increased slightly from 12,690 to 12,963 over the same period, with wages experiencing steady modest increases from \$43,199 in 2010 to \$48,712 in 2016 (QCEW). The New York State Department of Labor Local Area Unemployment Statistics (LAUS) program reported that employment by place of residency in Onondaga County decreased from 218,000 in 2010 to 211,100 in 2016. The annual unemployment rate decreased from 8.0% in 2010 to 4.5% in 2016.

Losses within the past decade, as seen in the following table, are attributed mostly to the national economic recession, as well as a local economy transitioning away from the region's formerly strong manufacturing base.

## Overview

### Labor Statistics in Onondaga County

	2000	2005	2010	2016
Annual Average Employment (by Place of Work in Onondaga County)	252,378	248,278	239,704	243,672
Annual Average Establishments (# of Firms)	12,238	12,655	12,690	12,963
Average Annual Wages	\$32,499	\$37,641	\$43,199	\$48,712
Employment (by Place of Residency in Onondaga Co.)	221,400	223,300	218,000	211,100
Annual Unemployment Rate	3.5%	4.5%	8.0%	4.5%
<i>Source: NYS Dept. of Labor QCEW and LAUS Programs</i>				

## Demographic Trends

Demographic changes and growth patterns, along with changes in standards and technology (for wastewater treatment, for instance), will affect the need for capital projects in the next decade.

Population in Onondaga County has remained relatively unchanged over the past forty years, currently totaling 467,026 according to the 2010 US Census. In general, population within the towns has increased, villages have remained unchanged, and the City of Syracuse has seen a steady decrease in population, with the City losing approximately 50,000 residents between 1970 and 2000. According to the 2010 Census, however, these relatively dramatic population shifts from city to suburb may be slowing – likely a result of several factors including urban revitalization, immigration, the national housing market slump, and changes in household makeup.

### Demographic Statistics in Onondaga County

	1970	2000	2010
Onondaga County Population	472,835	458,336	467,026
Town Population	275,538	311,030	321,856
City Population	197,297	147,306	145,170
Housing Units	153,576	196,633	202,357
Households	145,122	181,153	187,686
<i>Source: US Census Bureau</i>			

Urban sprawl, available infrastructure capacity, and a trend toward smaller families have resulted in an increase of nearly 50,000 new housing units in Onondaga County since 1970, despite the stagnant regional population. Some of the new building activity is in response to changing family demographics, such as the aging population and smaller family and household sizes. However, when an excess of new housing is built at the edges of the urbanized area during a period of population stagnation, the result is decline and abandonment of the region's oldest stock, often in the center of the City and within traditional villages. The ability for local and regional governments to sustain existing infrastructure and housing stock, while also adding infrastructure and services in new areas is limited, particularly those with older neighborhoods and infrastructure.



The suburbanization of both jobs and housing and the coming of age of the baby boomers have meant an annual growth in driving, road infrastructure, and traffic congestion for the last two decades. Low-density, single-use patterns of development in suburban and rural areas have limited the region's ability to offer transit service as a feasible alternative. Trends toward urban expansion have also resulted in increased flows at certain wastewater treatment plants and capacity constraints at some facilities. Infrastructure needs are compounded by the age of some of the county's infrastructure including the more than one hundred year old sewers in Syracuse and suburban roads built to farm to market standards. All these factors have necessitated the 2010 Development strategy to prioritize redevelopment, minimize the need for expanded infrastructure and to take maximum advantage of existing infrastructure and limited population growth.

### The Land Use Plan

The 2010 Development Guide allows this community to anticipate the extent and location of growth over the coming decades. The plan considers the potential for further growth within the current service area of water and sewer lines, and anticipates only limited need for suburban growth beyond existing service areas. Desirable areas for growth have existing infrastructure capacity, and the cost effectiveness of public expenditures to support growth should be related to economic development and job creation and the need for additional urban land.

The plan provides a means for coordinating land use decisions by thirty-five municipalities with county plans for infrastructure and fiscal stability. The plan outlines the implications of continued low density development patterns: costs for building and maintaining water, sewers and roads increase directly with required lot width, as does the cost of police, fire, emergency services and school busing. Mass transit is effectively precluded from most towns by cost as well as trip times due to low density development patterns.

### Land Use Plan and the CIP

Capital Improvement Planning is one of the county's most useful tools for implementing the policies of the 2010 Development Guide. The CIP process provides an inventory of anticipated capital projects, prioritizes these according to need, provides cost estimates, and analyzes the community's financing capabilities. Finally, it provides a schedule of project execution that relates projects to one another (e.g. scheduling sewer and water lines prior to or concurrent with road work in a given right-of-way) and to financing requirements.

The plan and the capital program take into account revenue and real property tax base trends, outstanding debt, debt service trends and legal debt limits. The capital plan is a major means of communication between one government department and another, between the executive and legislative branches of county government, and between the county and the development community and local governments which must be able to plan for growth in relation to infrastructure improvements. The capital plan includes anticipated capital projects regardless of whether these projects will be financed from current tax revenues, borrowing or grants.

## 2018 - 2023 Capital Plan Priorities

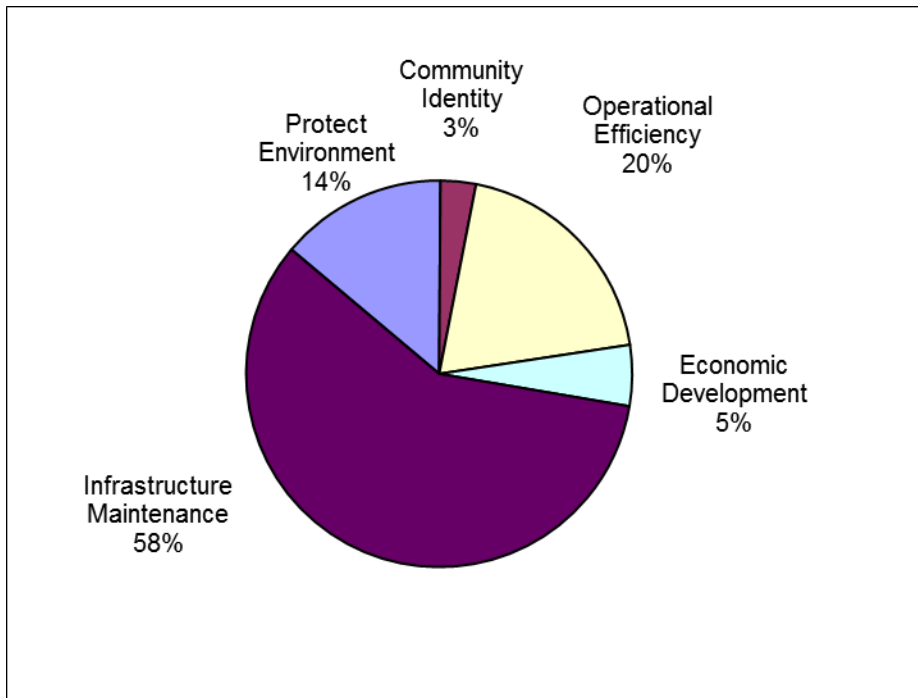
The 2018-2023 Capital Plan places high priority on projects that are consistent with the goals of the 2010 Development Guide. Most of our investments will be in the areas of infrastructure maintenance, environmental protection, and operational efficiency. Wastewater treatment projects account for 43% of the Capital Program. Mandated projects drive 37% of the proposed projects in this plan.

It should be noted that the Onondaga Lake project is now fully authorized. New wastewater treatment facilities and technologies will result in improved water quality in Onondaga Lake and the Seneca River system. The lake has become the focal point of large-scale private and public economic development projects, such as the Carousel Center, Inner Harbor redevelopment projects, William F. Walsh Transportation Center, the Alliance Bank Stadium and renovated Regional Market, as well as expanded recreation and tourism initiatives such as Lake View Amphitheater.

The highway program includes ten capital construction projects through 2023 in various locations throughout the urban and suburban parts of the county. Some of these projects represent reconstruction projects to address major rehabilitation of facilities, roads, bridges as well as drainage and shoulders, which will enhance safety. None of these projects are designed to increase capacity.

The graph that follows illustrates the percentage breakdown of the 2018-2023 Capital Plan priorities.

**2018-2023  
CAPITAL PRIORITIES**



## FUNDING SOURCES FOR CAPITAL PROJECTS

Funding sources for capital projects have, for the most part, been a combination of cash, municipal borrowing, and state and/or federal aid. More specifically, the sources cited in this document are as follows:

### Federal Monies

Federal Aid (FED) - The financing of eligible projects through the use of federal funds, other than federal revenue sharing.

### State Aid

State Aid (STA) - The financing of eligible projects through the use of state funds.

### Pay as You Go

Cash on Hand (COH) - Direct financing available from either surplus monies from prior years' taxation, unneeded balances in existing capital accounts, or earnings on temporary investments.

County Tax Revenues (CTR) - The cash financing of countywide, general fund supported projects by property taxes.

### Debt

#### Authorized

Countywide Authorized Borrowing (CAB) - The financing of a project by long or short-term borrowing that has been authorized by the County Legislature.

Special Districts Authorized Borrowing (DAB) - The financing of a project in a special district by long or short term borrowing that has been authorized by the County Legislature.

#### To Be Authorized

Countywide borrowing to be Authorized (CBA) - The financing of a project by long or short term borrowing that will require authorization by the County Legislature before the project can be undertaken.

Special Districts Borrowing to be Authorized (DBA) - Financing of a project in a special district by long or short term borrowing that will require authorization by the County Legislature before the project can be undertaken.

### Other Sources

Other (OTH) - The financing of projects from sources other than federal or state aid and not tax supported (i.e., private funds, fees).

### Operating Funds

Capital projects in this plan are managed in one of four separate operating funds. A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities which are segregated for the purpose of carrying on specific activities or attaining certain objectives. All activities and obligations of each fund are carried out within that specific fund alone. The four funds are:

1 General Fund: The largest fund within the county, the General Fund accounts for most of the county's financial resources. General Fund revenues include property taxes, licenses and permits, local taxes, services charges, and other types of revenue such as federal and state aid. This fund usually includes most of the basic operating services, such as public safety, finance, data processing, parks and recreation, highway, and other direct operating support. (Unlike the special funds below, the Community College Fund and Library Fund do not have separate taxing ability and for presentation purposes are included in the general funds totals in this document. Borrowing for capital projects in these funds is done through the county General Fund.)

2 Van Duyn Extended Care Fund: This fund was established to service the operating needs of the Van Duyn Long Term Care Facility. Costs are funded by revenues in the fund and supplemented by local tax dollars. Capital costs are financed through borrowing and are reimbursed by Medicaid on a two year lag.

3 Water Fund: The Water Fund was established to service the operations of the Metropolitan Water Board. Revenues raised through a combination of special district ad valorem levy and water sales revenues wholly support it. The cost of all system capital improvements undertaken since 1972 has been funded from the water sales revenue portion of this formula.

4 Water Environment Protection Fund: The Water Environment Protection Fund (sewer fund), like the Water Fund, is a special district fund, established to service the operations of the Department of Water Environment Protection. This fund is wholly supported by revenues generated from a schedule of sewer rent charges, calculated in units, and assessed to service users of the Onondaga County Consolidated Sanitary District.

## ONONDAGA COUNTY DEBT MANAGEMENT PLAN

The primary component of Onondaga County's debt management practice is the review of capital projects and the related debt service costs by the County Executive and the Division of Management and Budget. All capital projects are reviewed not only as they relate to current capital needs, but also to optimize the county's fiscal ability to meet its future capital needs.

A major emphasis in the county's debt management practice is the pay-as-you go concept. For debt that has to be retired within five years, for capital expenditures of less than \$250,000, and capital projects that are annually recurring costs, the objective is to pay the capital cost using operating funds.

Additionally, the county has established the following policies to guide its management of debt:

1 Debt service costs paid through the General Fund will not exceed 5.5% of total General Fund revenue.

2 The county's total net direct indebtedness will not exceed \$700 per capita or 1.5% of the full valuation of taxable property in the county.

3 Rapid pay down of debt will continue as a goal of the county's debt management policies, with a target of 65% of outstanding principal scheduled for retirement within ten years. This goal may be modified to reflect changes in the interest rate environment, which may argue for shorter or longer terms.

Local Finance Law prohibits the county from issuing debt in excess of the Debt Limit. The Debt Limit is defined as 7% of the five-year average full valuation of Taxable Real Property within the county. The county's use of its constitutional debt limit is 16.25% of its total capacity.

Bond counsel and the county's fiscal advisors play an important role in the bond issuing process. These consultants are influential in reducing borrowing costs by advising the county on how best to structure a bond issue and when best to go to market. They assist in the preparation of the county's Official Statement, ensuring that it meets all legal requirements, as well as including relevant information to present the county's financial status and economic activities and comparisons. Additionally, they assist the county in the application for bond ratings, which provides investors with a symbol of credit quality that is easily recognized. Through careful fiscal planning and sound financial management, Onondaga County has earned the following ratings: Fitch – AAA, S&P – AA+, Moody's – Aa2.

## Debt Management - Department of Water Environment Protection

For 2018, the County Executive is continuing the commitment to the current debt management efforts. While taking advantage of the current favorable interest rates we also utilize resources in the Department's operating budget to fund recurring capital needs. The main components of the plan call for greater investment in preventive maintenance, rapid retirement of debt that is issued, and the strategic use of the Water Environment Protection (WEP) designated fund balance and reserve for bonded. Many WEP authorized projects have been financed through the New York State Environmental Facilities Corporation (EFC). The EFC's no-interest construction loans and subsidized-interest long-term bonds have eased the interest rates the Department pays. The County Executive is committed to continued optimization of funding sources for the implementation of the plan.



# FINANCIAL SUMMARIES

## Section 2





## **ESTIMATED DEBT SERVICE**

### **Borrowing Funds**

Several methods are available to finance capital improvement projects. Onondaga County, like most governmental units, borrows money in order to acquire land and equipment, construct buildings, and make renovations and improvements. The cost of these capital projects is normally financed by the issuance of debt obligations, which are then repaid over several years along with the interest incurred on the borrowings. An amount is included in the county's annual operating budget to make these payments, which is defined as debt service. This policy enables the cost of these capital assets to be borne by the present and future taxpayers receiving the benefit of the capital assets or improvements.

The use of debt to finance capital projects has several advantages. Among other things, it allows the county to obtain for current use a capital facility that would go beyond its capacity to finance on a pay-as-you-go basis. In addition, the flexibility associated with the repayment of bonds allows the county to smooth out its expenditure pattern over a period of several years. The manner in which principal payments are structured has a large cumulative effect on interest payments, cash flow, and subsequently the county's operating budget.

Estimated debt service schedules are prepared to illustrate the current outstanding debt and the fiscal impact of new capital project requests on future debt service. This serves as a fiscal tool integral to the capital improvement planning process. These schedules, as well as graphs depicting the projected debt service payments if all projects were authorized, can be found in section 3 of this document.

In 2000, Onondaga County defeased \$10.7 million of debt using its fund balance. The County Legislature had passed a resolution in November 1999 that established a fund balance target of 10% of General Fund revenues. Any excess would be used to avoid or reduce debt and provide property tax relief. The defeasance had a benefit to taxpayers of \$11.7 million in 2000-2004. In August 2001, the county participated in a pooled financing with five other New York counties to sell its rights to the tobacco revenues guaranteed under the Master Tobacco Settlement Agreement with the four major tobacco companies. This resulted in defeasing \$95 million in Onondaga County General Obligation debt, lowering total debt service by \$130 million during the years 2002-2021. Again, in 2005, the county participated in another pooled financing with twenty-three other New York counties. With the proceeds, \$19.9 million of scheduled debt was defeased, benefiting the years 2007-2025. An additional \$11.6 million was set aside to finance energy saving initiatives, thereby avoiding debt. Taking advantage of the lowest interest rate environment in forty years, the county refunded \$18.5 million of ten year old bonds in 2003, saving \$1.8 million through 2014. In 2007, \$8 million in cash was used to fund capital projects, avoiding debt and maintaining the county's 10% fund balance target. In 2009 and 2012, successful refunding issues resulted in savings of \$3.3 and \$1.2 million respectively. In 2014 the county issued \$19.6 million of refunding bonds saving over \$1.1 million and in 2015 the county issued \$11.4 million in refunding bonds saving \$0.66 million. The County will once again refund bonds in 2016 totaling close to \$34.8 million resulting in NPV savings of approximately \$3.2 million for 2017 through 2033. The county actively monitors its outstanding debt, reviewing candidates for refunding opportunities, which will provide a target NPV of 3% savings. In 2010, the county maximized its interest savings by issuing a mix of tax-exempt, Build America (35% interest subsidy), and Recovery Zone (45% interest subsidy) bonds.

As evidenced on page 21, the county's net indebtedness is currently at 16.25% of its total borrowing capacity.

### **Borrowing Criteria**

In general, the State Legislature has granted the power and defined the procedure for the county to issue debt by enactment of the Local Finance Law (Chapter 33-A of the Consolidated Laws of New York). One central requirement states that the duration of debt payments cannot exceed the Period of Probable Usefulness (PPU). The maximum number of years over which bonded debt payments may be scheduled is determined by Bond Counsel in accordance with specifications outlined in the Finance Law relative to the item for which the debt is incurred (Ref. Paragraph A of Section 11 of the Local Finance Law; Paragraph C of Section 21 of the Local Finance Law).

Pursuant to the Local Finance Law, the Onondaga County Charter and the County Law, the county authorizes the issuance of bonds by the adoption of a bond resolution, which must be approved by at least two-thirds of the members of the County Legislature. Upon approval, the County Legislature delegates to the County's Chief Fiscal Officer the power to authorize and sell bond anticipation notes in anticipation of bonds. Each bond resolution authorizes the construction, acquisition or installation of the object or purpose to be financed, the plan of financing, the amount of money being borrowed, and the PPU, which is also the maximum maturity of the bonds subject to legal restrictions.

Within these bonding requirements, the county has considerable flexibility in its borrowing program by issuing two basic forms of debt instruments: Serial Bonds (bonds) and Bond Anticipation Notes (BANs). BANs, due to their short term duration, (one year or less, renewable up to four times, not to exceed the PPU) are used to facilitate those borrowings for projects that have a PPU of five years or less, or are relatively small in amount or otherwise inappropriate for long term borrowings. In addition, BANs allow the county the flexibility to convert BANs to Serial Bonds when interest rates are most beneficial for long term debt. Any adjustments in principal payments, whereby the intent is to schedule debt retirement in less than the mandated period, must be done while the debt is still in the form of BANs. Flexibility is lost once BANs are converted to serial bonds. There is an exception to the four-time renewal limitation on BANs for Special District borrowing for Sewer and Water. BANs may be renewed indefinitely for special districts as long as it does not violate the assigned PPU.

### Methodology

County departments' capital projects are organized alphabetically in this book. Each project includes a brief description, the cost summary and cash flow schedule for each of the years 2018-2023, the project detail, tentative financing plan, and status. Estimated debt service is calculated based on the cash flow schedule for those projects indicating the use of borrowing to finance the project in whole or in part.

Debt service for each capital project that anticipates borrowing has been calculated based on the following assumptions and calculations applied in projecting the payment schedules:

- 1 Interest rates are based on length and type of instrument used. While actual payments are determined by market conditions at the time of issuance, for planning purposes in this document, estimated payments were calculated using level debt payment schedules for a maximum of twenty years, at a 4% interest rate (certain Sewer Fund estimated payments could be calculated at 2.5% interest, anticipating the use of State revolving funds).
- 2 No principal payment is assumed in the first year.

### Market Factors Affecting Bonds

The market for Bonds and Notes is affected by a variety of factors, some of which are beyond the county's control. Adverse events or ratings downgrades at the Federal or State levels may occur, which could affect the market price of and the market for the Bonds and Notes. If a significant default or other financial crisis should occur in the affairs of the state or of any of its agencies or political subdivisions, it could impair the acceptability of obligations issued by borrowers within the state. Both the ability of Onondaga County to arrange for additional borrowings, and the market for and market value of outstanding debt obligations, including the Bonds and Notes, could be negatively affected.

## Debt Limits

Local Finance Law permits the county to issue General Obligation debt up to a statutory Debt Limit. The Statutory Debt Limit is seven percent of the five-year average full valuation of Taxable Real Property within the county. Total Net Indebtedness is calculated by adding the county's short and long-term debt and subtracting the legal exclusions. As of September 6, 2017 the county had utilized 16.25% of its Statutory Debt Limit. Should all Authorized and Unissued debt be issued this would represent 1.43% of the debt limit. If the entirety of the projects proposed in the 2018 CIP advance and the corresponding debt be issued by the county in 2018 to fund said projects, this debt would represent 1.75% of the debt limit but combined with the debt that will retire in 2018 the net effect is a 0.39% of the debt limit. The following table shows the calculation of Total Net Indebtedness.

### Calculation of Total Net Indebtedness

5-Year Average Full Valuation of Taxable Real Property	\$27,217,734,597			
Debt Limit (7% of 5-year average) <b>(1)</b>	\$1,905,241,422			
Outstanding Indebtedness	Scheduled Debt as of September 6, 2017	Authorized and Unissued Debt	Proposed Debt for 2018	Total Debt as of Dec 31, 2018
Bonds	\$607,542,023			
Bond Anticipation Notes	<u>\$28,165,093</u>			
Outstanding Gross Indebtedness	\$635,707,116	\$166,159,483	\$43,972,000	\$845,838,599
Less Exclusions (Sewer, Water, Defeased Debt)	(\$326,073,542)	(\$138,895,510)	(\$10,598,000)	(\$475,567,052)
Less Retired Debt			(\$25,946,055)	(\$25,946,055)
Total Net Indebtedness	\$309,633,574	\$27,263,973	\$7,427,945	\$344,325,492
Debt Limit Margin	\$1,595,607,848			\$1,560,915,930
Percentage of Debt Limit Exhausted	16.25%	1.43% <span style="color: green;">▲</span>	0.39%	18.07%

**(1)** The Debt Limit of the county is computed in accordance with the provisions of Article VIII of the State Constitution and Title 9 of article 2 of the Local Finance Law.

## CAPITAL PROJECT CLASSIFICATIONS

Capital projects are organized in this document by fund: County Wide Funds (General Fund, County Road, Community College and Library fund), and Special Funds (Water Fund, and Sewer Fund). They are then classified according to a continuum of capital project development from idea to completion. This serves two purposes. The first purpose is to provide better control of the individual project proposals by providing a series of milestones, each with increasingly stringent standards for planning and financial data, to track the progress of each project. Second, the system provides a more accurate perspective of the overall progress of the CIP. The project development classifications are:

- 1 *Completed Projects:* Those capital projects previously scheduled that have been completed in the preceding year.
- 2 *Authorized Projects:* Those projects which have been authorized by the County Legislature and are in varying stages of progression, ranging from bonds being authorized but not yet issued to anticipated project completion in the current year.
- 3 *Proposed Projects:* Those projects at a sufficient level of development to be scheduled in the CIP for legislative consideration. Each proposed capital project in this document has received a Level of Development rating. The rating was determined by the development phase of the project as outlined in the project application. These ratings and their descriptions are as follows:
  - **Advanced:** A project assigned an advanced rating is ready to be presented for Legislative authorization; the capital project application is complete and information is reliable.
  - **Intermediate:** A project is assigned an intermediate rating when the problems and causes have been identified, possible alternative solutions have been examined, and a plan has been selected. An intermediate rating is also assigned to projects that have established or are in the process of establishing project scope, and/or maintenance and operations estimates.
  - **Preliminary:** A project is assigned a preliminary rating when project definition is being established or an in-depth needs assessment is being conducted in order to determine any of the following: in-depth identifications, examination, selection and description or alternative solutions to the problem.

## PROJECT ACTIVITY BY DEPARTMENT

Department	Completed Projects	Authorized Projects	Proposed Projects	Fund
COUNTY CLERK (RECORDS)	0	1	0	General Fund
DEPARTMENT OF CORRECTIONS	5	0	1	General Fund
ELECTIONS BOARD	1	0	0	General Fund
EMERGENCY COMMUNICATIONS	12	7	9	General Fund
FACILITIES MANAGEMENT	12	5	8	General Fund
FINANCE DEPT	0	1	0	General Fund
HILLBROOK DETENTION HOME	1	0	1	General Fund
INFORMATION TECHNOLOGY	0	1	0	General Fund
METROPOLITAN WATER	2	2	0	Water
OFFICE OF ENVIRONMENT	0	0	1	General Fund
ONONDAGA COMMUNITY COLLEGE	32	1	4	Community College
ONONDAGA COUNTY PUBLIC LIB.	1	2	1	Library
PARKS & RECREATION DEPT.	6	5	13	General Fund
SHERIFF CUSTODY	1	0	0	General Fund
SHERIFF POLICE/CIVIL	1	1	1	General Fund
TRANSPORTATION	0	0	10	County Road
TRANSPORTATION	3	0	0	General Fund
VAN DUYN EXTENDED CARE	6	0	0	Van Duyn
WATER ENVIRONMENT	20	12	9	Drain & San
<b>Total</b>	<b>103</b>	<b>38</b>	<b>58</b>	

## PROPOSED CAPITAL PROJECT SUMMARY (2018-2023)

The following is a list of proposed projects and their estimated six year cost broken down by fund (\$ in 000's)

### County Wide

Department	STATUS	PROJECT	2018 - 23 Total
<b>General Fund</b>			
DEPARTMENT OF CORRECTIONS			
	<b>new</b>	Physical Plant Improvements and Security Upgrades	1,311
		Subtotal	\$ 1,311
EMERGENCY COMMUNICATIONS			
		Auxiliary Power Systems Replacement	622
		Computer Aided Dispatch (CAD) System Hardware Refresh	784
		Next Generation 911 (NG-911) Telephone System Replacement/Refresh	3,659
		Oblique Aerial Digital Imagery Refresh (2019)	394
		Public Safety Radio Tower Replacement	604
	<b>new</b>	Repave E911 Center Parking Lot	327
		Replacement of Mobile Data Communications Network (MDCN) Infrastructure	6,467
	<b>new</b>	Tower Site Shelter Rehabilitation	1,091
		Trunked Land Mobile Radio Network Backup Prime Site	1,964
		Subtotal	\$ 15,912
FACILITIES MANAGEMENT			
		Carnegie Library Rehabilitation	4,101
		Civic Center Office Maintenance, Repairs and Improvements	686
		Community Plaza Garage	1,350
		Courthouse - HVAC Renovations	10,000
		Facilities Various Capital Improvements	9,000
	<b>new</b>	LED lighting upgrade in various buildings in downtown campus	535
		Oncenter Rehabilitations	1,500
		Remodeling Social Services Reception	3,000
		Subtotal	\$ 30,172
HILLBROOK DETENTION HOME			
	<b>new</b>	Hillbrook Detention Facility Improvements (NEW)	141
		Subtotal	\$ 141
OFFICE OF ENVIRONMENT			
		Ash Tree Management	4,500
		Subtotal	\$ 4,500
PARKS & RECREATION DEPT.			
		Beach Development at Onondaga Lake Park	300
		Building an AZA Required Animal Medical Care Center with African Savannah Exhibit	14,100
		Carpenters Brook Fish Hatchery Pond Repair	402
	<b>new</b>	Energy efficiency and reliability upgrade at the zoo (NEW)	503
		Lights on the Lake Storage Facility	370
		Long Branch Park Improvements	1,950
	<b>new</b>	Loop the Lake Trail (NEW)	1,500
		Park Buildings	757
		Park Improvements/Willow Bay	2,740
		Park Roads, Parking Areas, and Trail Paving	3,750
		Park Roofs	300
	<b>new</b>	Playground Improvements (NEW)	2,000
		Salt Museum Rehabilitation	310
		Subtotal	\$ 28,982
SHERIFF POLICE/CIVIL			
	<b>new</b>	Sheriff's New Headquarters Facility	900
		Subtotal	\$ 900
		<b>General Fund Total</b>	<b>\$ 81,918</b>

## Financial Summaries

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### County Wide

Department	STATUS	PROJECT	2018 - 23 Total
<b>Library</b>			
ONONDAGA COUNTY PUBLIC LIBRARY			
	new	Petit Branch Library addition and improvements	885
			-----
<b>Library Total</b>			<b>\$ 885</b>

### Community College

ONONDAGA COMMUNITY COLLEGE			
		Allyn Hall Upgrades and Improvements	2,780
		Elevator Replacement and Upgrades/ Protection of the Campus E-mail and Phone Servers	646
		Infrastructure - Campus Wide	10,488
		Site Improvements	2,718
			-----
<b>Community College Total</b>			<b>\$ 16,632</b>

### County Road

TRANSPORTATION			
		Bituminous Surface Treatment	12,898
		Bridges	11,512
		Capital Highway Construction	29,867
		Caughdenoy Road / NYS Route 31 Road Improvements	4,120
		Cold Mix Bituminous Paving	21,084
		Guide Rail	2,720
		Rehabilitation of North Area and Camillus Highway Maintenance Facilities	10,000
		Repaving Program (Hot Mix Bituminous)	57,439
		Testing, Drainage and Facilities Repair	4,774
		Traffic Systems Management	1,910
			-----
<b>County Road Total</b>			<b>\$ 156,324</b>
<b>County Wide Total</b>			<b>\$ 255,759</b>

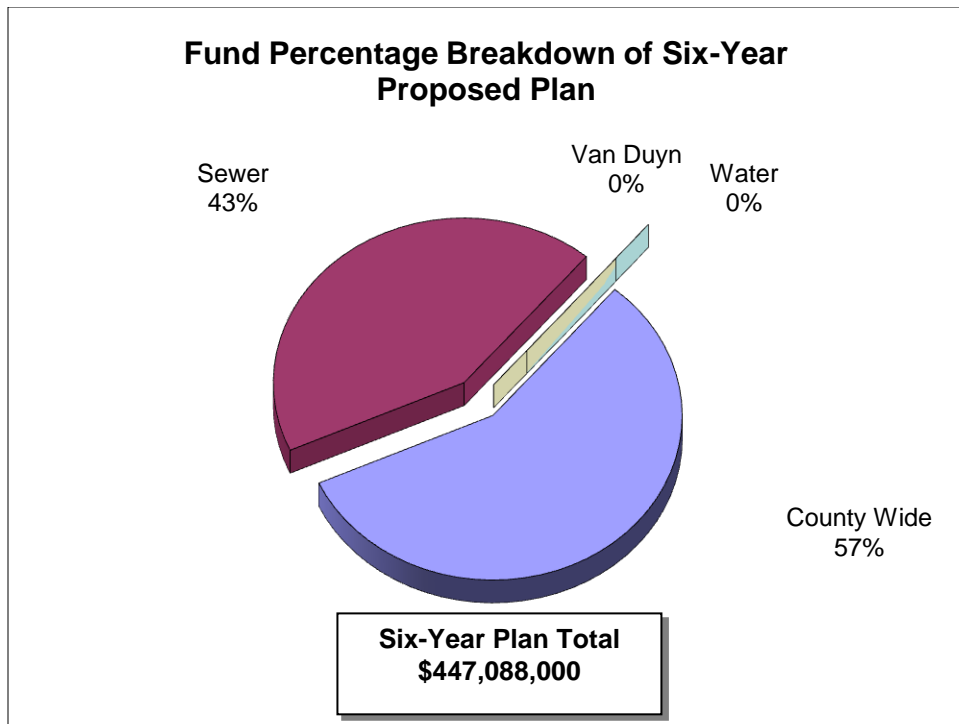
### Special Funds

Department	STATUS	PROJECT	2018 - 23 Total
<b>Sewer</b>			
WATER ENVIRONMENT PROTECTION			
		Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	26,220
		Brewerton WWTP Asset Renewal Improvements	10,122
		Camillus Force Main Replacement	9,500
		Energy Efficiency Improvements/Performance Contracting	26,000
	new	Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project	17,800
	new	Metropolitan (Metro ) Wastewater Treatment Plant - Phase II Digester Improvements (New)	16,103
		Oak Orchard WWTP Disinfection and Lagoon Cleaning	11,540
		Oak Orchard WWTP Secondary Clarifier Rehabilitation	6,200
		Wastewater Transportation System Improvements	67,844
			-----
<b>Sewer Total</b>			<b>\$ 191,329</b>
<b>Special Funds Total</b>			<b>\$ 191,329</b>
<b>Grand Total</b>			<b>\$ 447,088</b>

## Financial Summaries

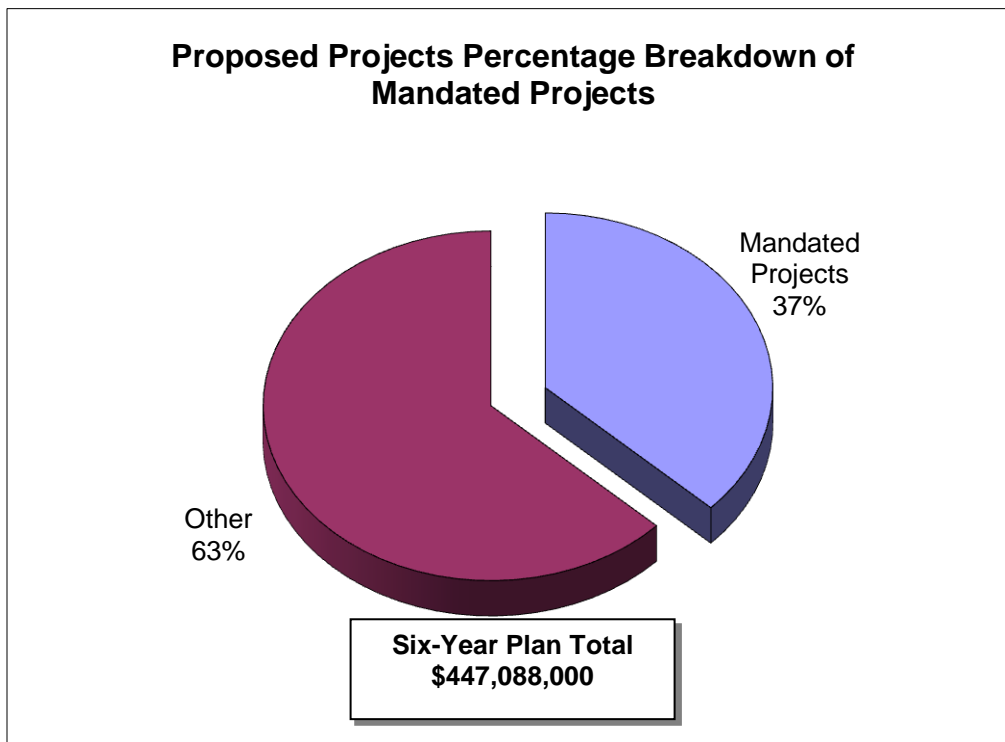
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Out of the 58 projects proposed in this plan, 49 are in the Countywide Funds, and they account for 57% of the costs, as illustrated by the graph below.



## MANDATES

Of the \$447,088,000 in proposed projects, 37% are the result of environmental and other mandates established by either federal or state law. These are projects that the county is compelled to do by legal requirement, and in some cases, as a result of court order. Failure to place a high priority on projects addressing mandated requirements could result in fines, license restrictions, and loss of aid. Within the confines and challenges that mandates have placed on the county's capital planning efforts, 63% of this plan's proposal focuses on non-mandated infrastructure maintenance, operational efficiency, environmental protection, community identity, and economic development in an effort to preserve existing assets and enhance growth and development opportunities in the county.



## PROPOSED FUNDING SOURCES

To achieve a balanced program that effectively serves the community's needs, careful attention must be given to the methods or sources of funding for capital projects. Customarily, projects are funded through the issuance of debt, cash capital, federal and state aid, and to a lesser degree other sources such as private donations, fees, etc. Projects that benefit present and future taxpayers are generally financed through the issuance of debt so as to more fairly spread the cost. Cash capital is the preferred method of financing for smaller projects, and more importantly, recurring or maintenance related projects. Federal and state aid is sought for any appropriate project, as well as alternate sources of funding such as donations and fees. To the extent that a municipality carefully plans for the strategic use of these various funding sources, taxpayer dollars will realize maximum effectiveness. The chart below shows the anticipated sources of funding for the proposed projects in this plan, by fund and for all funds combined. The following page shows the impact of the county's effort to address the issue of financing sources in the General Fund and other funds.



## FUNDING SOURCES OF PROPOSED PROJECTS

<b>County Wide</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>
<b>General Fund</b>							
Pay as You Go		1,000	1,000	1,000	1,000	1,000	<b>5,000</b>
Authorized Borrowing	869	500					<b>1,369</b>
Borrowing to be Authorized	17,431	18,396	11,066	18,949	6,150	2,941	<b>74,933</b>
State Aid	175	91	350				<b>616</b>
<b>SUB TOTALS</b>	<b>\$18,475</b>	<b>\$19,987</b>	<b>\$12,416</b>	<b>\$19,949</b>	<b>\$7,150</b>	<b>\$3,941</b>	<b>\$81,918</b>

<b>County Road</b>							
Pay as You Go	294	8,730	10,395	12,223	13,990	15,902	<b>61,534</b>
Borrowing to be Authorized	15,943	6,523	2,500	2,503	2,850	2,850	<b>33,169</b>
Federal Aid	19,200	650	2,400				<b>22,250</b>
State Aid	8,941	5,640	6,090	5,640	5,640	5,640	<b>37,591</b>
Other	1,780						<b>1,780</b>
<b>SUB TOTALS</b>	<b>\$46,158</b>	<b>\$21,543</b>	<b>\$21,385</b>	<b>\$20,366</b>	<b>\$22,480</b>	<b>\$24,392</b>	<b>\$156,324</b>

<b>Library</b>							
Borrowing to be Authorized		485					<b>485</b>
State Aid		350					<b>350</b>
Other		50					<b>50</b>
<b>SUB TOTALS</b>		<b>\$885</b>					<b>\$885</b>

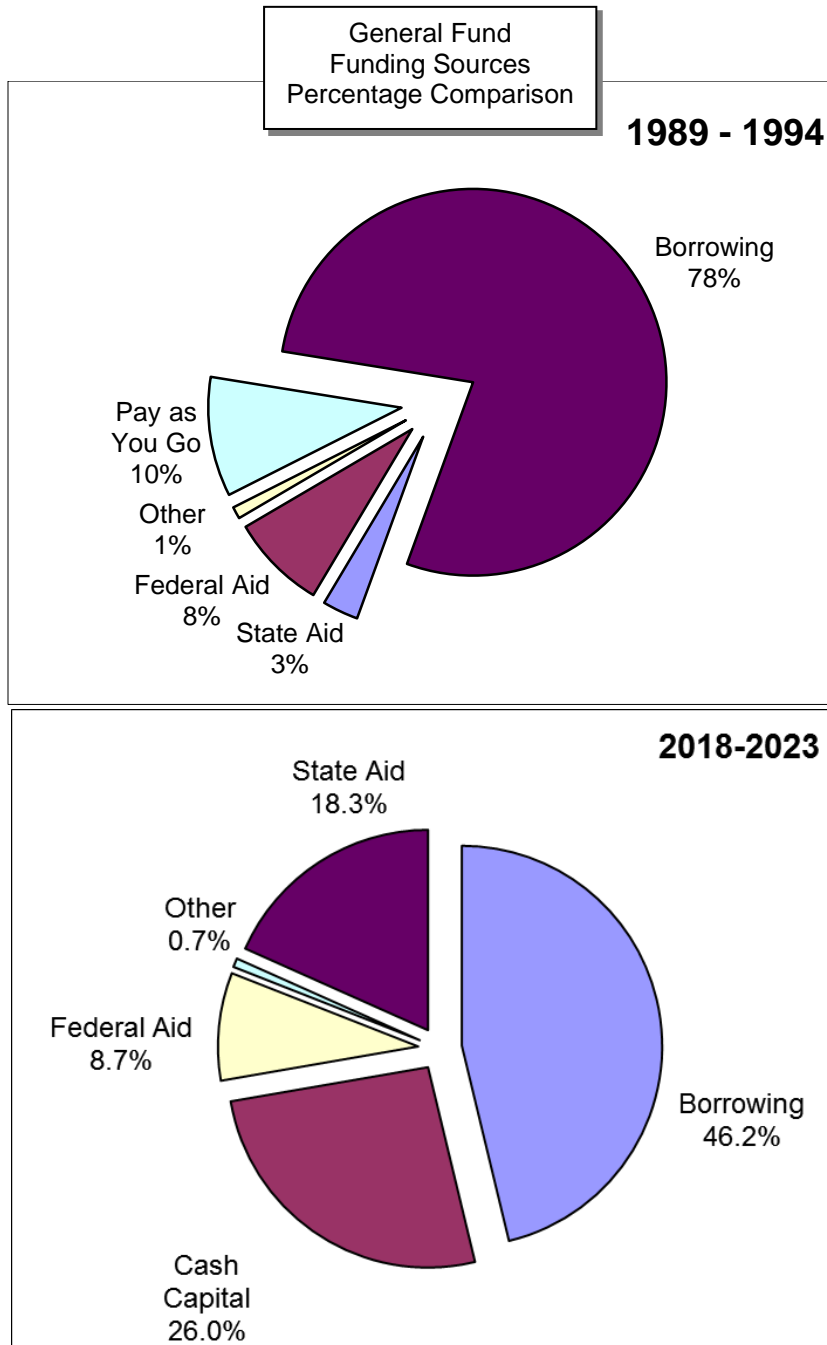
<b>Community College</b>							
Borrowing to be Authorized		1,390	1,682	5,244			<b>8,316</b>
State Aid		1,390	1,682	5,244			<b>8,316</b>
<b>SUB TOTALS</b>		<b>\$2,780</b>	<b>\$3,364</b>	<b>\$10,488</b>			<b>\$16,632</b>

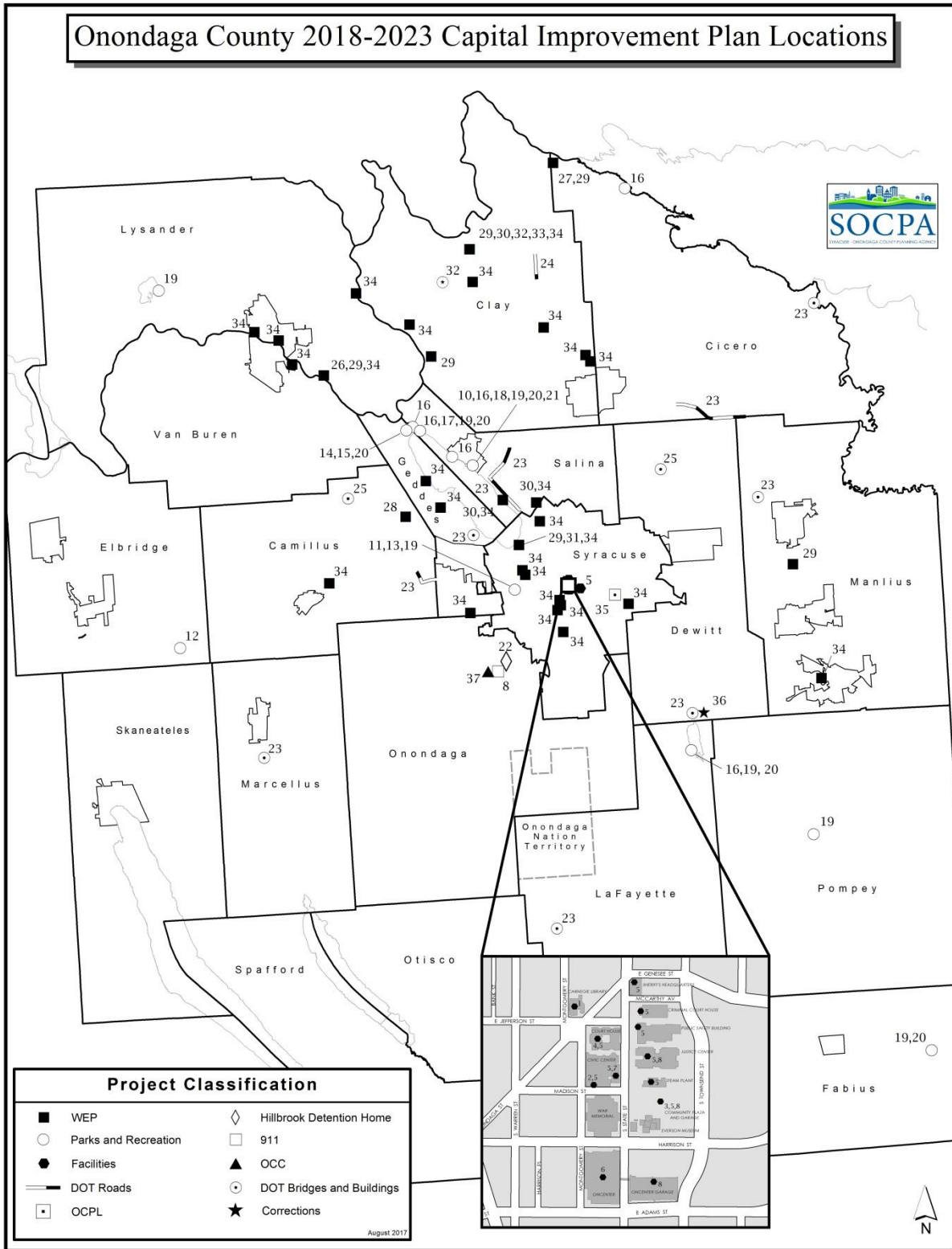
**County Wide TOTALS    \$64,633    \$45,195    \$37,165    \$50,803    \$29,630    \$28,333    \$255,759**

<b>Special Funds</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>
<b>Sewer</b>							
Pay as You Go	6,735	6,990	5,639	5,214	5,142	5,085	<b>34,805</b>
Authorized Borrowing	9,510	5,995	688	572	155		<b>16,920</b>
Borrowing to be Authorized	10,598	18,248	32,795	36,008	22,105	19,850	<b>139,604</b>
<b>Sewer TOTALS</b>	<b>\$26,843</b>	<b>\$31,233</b>	<b>\$39,122</b>	<b>\$41,794</b>	<b>\$27,402</b>	<b>\$24,935</b>	<b>\$191,329</b>
<b>GRAND TOTAL</b>	<b>\$91,476</b>	<b>\$76,428</b>	<b>\$76,287</b>	<b>\$92,597</b>	<b>\$57,032</b>	<b>\$53,268</b>	<b>\$447,088</b>

## Financial Summaries

Recognizing national trends and growing mandate requirements, the county is continuously examining its financing strategies. The goal has been to reduce debt issuance when possible, saving taxpayer dollars and maximizing other resources without compromising the commitment to preserving existing assets and stimulating growth and development. This has resulted in far fewer dollars being spent on interest costs for general fund supported projects. This is illustrated in the comparison of the two graphs below, one depicting the funding source percentages for general fund projects in the current plan, and the other depicting those sources for the 1989-1994 Capital Plan. You will note that the 1989 plan anticipated funding 78% of the General Fund proposed project costs through borrowing, while the current plan calls for 46.2% funding through borrowing.





# Financial Summaries

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## FACILITIES MANAGEMENT

- 1. Carnegie Library Rehabilitation
- 2. Civic Center Office and Masonry Improvements
- 3. Community Plaza Garage
- 4. Court House - HVAC Renovations
- 5. Facilities Various Capital Improvements
- 6. Oncenter Rehabilitation
- 7. Remodeling TA Intake
- 8. LED Lighting Upgrades

## EMERGENCY COMMUNICATIONS (E-911)

- 9. Auxiliary Power Systems Replacement
- 9. Computer Aided Dispatch (CAD) System Hardware Refresh
- 9. Repave E911 Center Parking Lot
- 9. Next Generation 911 (NG-911) Telephone System Replacement/Refresh
- 9. Oblique Aerial Digital Imagery Refresh
- 9. Public Safety Radio Tower Replacement
- 9. Replacement of Mobile Data Communications Network Infrastructure
- 9. Tower Site Shelter Rehabilitation
- 9. Trunked Land Mobile Radio Network Backup Prime Site

## PARKS AND RECREATION

- 10. Beach Development at Onondaga Lake Park
- 11. Building an AZA Required Animal Med. Care Center with African Savannah Exhibit
- 12. Carpenter's Brook Fish Hatchery Pond Repair
- 13. Energy Efficiency and Reliability Upgrade at the Zoo
- 14. Lights on the Lake Storage Facility
- 15. Long Branch Park Improvements
- 16. Park Buildings
- 17. Park Improvements/Willow Bay
- 18. Park Roads, Parking Areas, and Trail Paving
- 19. Park Roofs
- 20. Playground Improvements
- 21. Salt Museum Rehabilitation

## HILLBROOK DETENTION HOME

- 22. Hillbrook Detention Facility Improvements

## TRANSPORTATION

- 23. Capital Highway Construction
- 24. Caughdenoy Road/NYS Route 31 Road Improvements
- 25. Rehabilitation of North Area and Camillus Highway Maintenance Facilities

## WATER ENVIRONMENT PROTECTION

- 26. Baldwinsville-Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements
- 27. Brewerton WWTP Asset Renewal Improvements
- 28. Camillus Force Main Replacement
- 29. Energy Efficiency Improvements/Performance Contracting
- 30. Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project
- 31. Metro WWTP Phase II - Digester Improvements
- 32. Oak Orchard Disinfection and Lagoon Cleaning
- 33. Oak Orchard WWTP Secondary Clarifier Rehabilitation
- 34. Wastewater Transportation System Improvements

## ONONDAGA COUNTY PUBLIC LIBRARY

- 35. Pettit Branch Library Additions and Improvements

## DEPARTMENT OF CORRECTIONS

- 36. Physical Plant Improvements and Security Upgrades

## ONONDAGA COMMUNITY COLLEGE

- 37. Alyn Hall Upgrades and Improvements
- 37. Elevator Replacement and Upgrades/Protection of the Campus E-mail and Phone Servers
- 37. Infrastructure - Campus Wide
- 37. Site Improvements

# CAPITAL PROJECTS

## Section 3

### COUNTYWIDE FUNDS

GENERAL

COMMUNITY COLLEGE

COUNTY ROADS

### SPECIAL FUNDS

WATER DISTRICT

SEWER DISTRICT



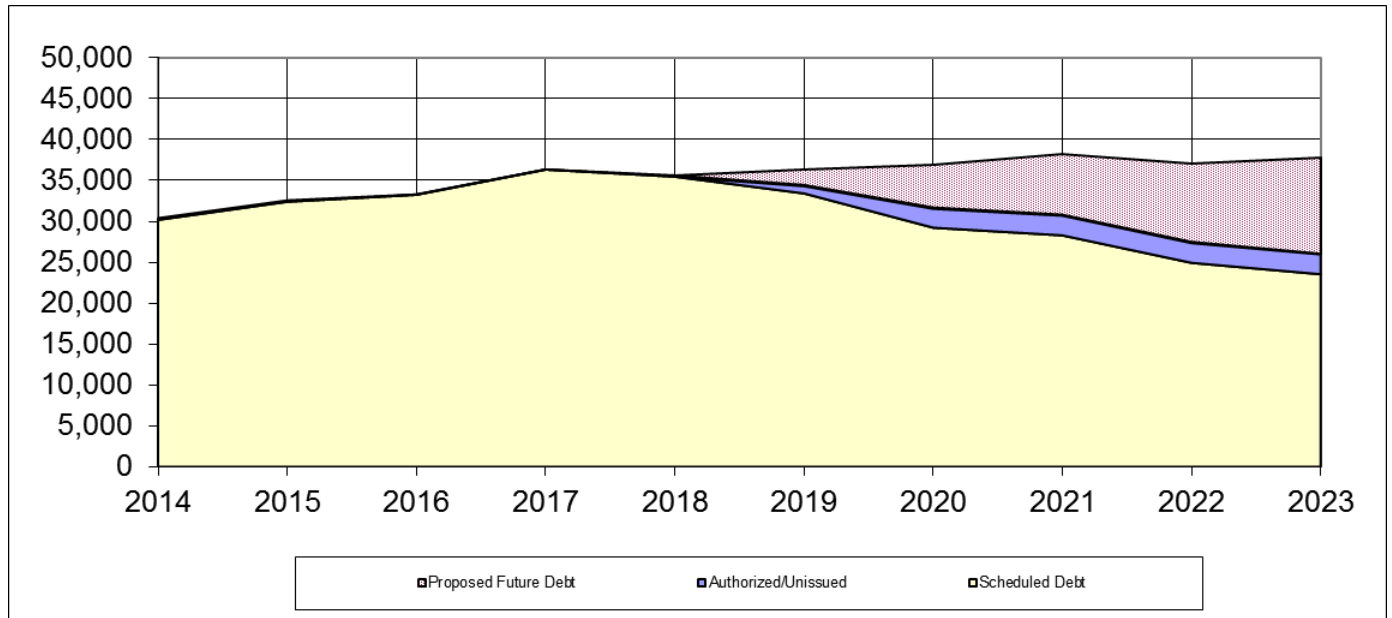
## COUNTYWIDE CAPITAL PROJECTS

Capital projects are organized into two sections: Countywide projects that include the General Funds, the Library Fund, and the Community College Fund; and Special Funds, which are the Van Duyn Fund, the Water Fund and the Sewer Fund. All projects require the recommendation of the County Executive and the authorization of the County Legislature. The Countywide fund projects address most of the basic operating services such as public safety, finance, data processing, parks and recreation, highway, and other direct operating services. Debt service for borrowing associated with these capital projects is an operating budget expense supported primarily by the property tax levy and sales tax revenues. As discussed in previous sections, the county has placed a high priority on maximizing the use of taxpayer dollars through judicious use of debt issuance.

Unlike the Countywide projects, projects initiated through the Special Funds departments are supported by revenues raised within those individual funds. They do not rely on financial support from the general property tax levy.

Below is a graph depicting scheduled debt service supported by the General Fund as well as estimated debt service for projects that have been authorized by the County Legislature but debt has not yet been issued, and estimated debt service for the proposed projects that follow in this section. Borrowing for the Community College and the County Library is included in General Fund borrowing. Special funds borrowing is not included.

**General Funds  
Scheduled & Estimated Debt Service  
2014-2023**



A debt service summary associated with the graph above can be found on the next page, followed by summary information of the currently authorized projects. Following the authorized project information is information on proposed future projects to be supported by the general funds, beginning with a summary of projects and estimated six year expenses, then a breakdown of the proposed source of funds for these projects and the estimated debt service for these projects that will require part or whole funding with borrowed funds. The estimated debt service for these projects is shown in the graph above. The same information is presented for the special funds.

*Countywide Funds*

**General Funds  
Debt Service Summary**

*Payments in (\$000's)*

	2013	2014	2015	2016	2017	2018	2019	2020
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	27,102	30,187	32,399	33,251	36,334	35,528	33,488	29,299
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	886	2,302
<i>Proposed Future Debt</i>	0	0	0	0	0	0	2,025	5,362
<b>Total</b>	<b>27,102</b>	<b>30,187</b>	<b>32,399</b>	<b>33,251</b>	<b>36,334</b>	<b>35,528</b>	<b>36,399</b>	<b>36,963</b>

	2021	2022	2023	2024	2025	2026	2027	2028
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	28,355	24,996	23,604	20,676	18,441	16,030	13,620	11,250
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	2,402	2,417	2,422	1,993	1,993	1,993	1,993	1,993
<i>Proposed Future Debt</i>	7,483	9,661	11,804	12,331	12,064	11,340	10,818	9,662
<b>Total</b>	<b>38,240</b>	<b>37,074</b>	<b>37,830</b>	<b>35,000</b>	<b>32,498</b>	<b>29,363</b>	<b>26,431</b>	<b>22,905</b>

	2029	2030	2031	2032	2033	2034	2035	2036
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	10,196	9,362	7,391	6,762	5,534	5,204	4,548	3,681
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	1,792	1,792	1,792	1,792	1,792	1,660	1,507	1,489
<i>Proposed Future Debt</i>	9,230	7,944	7,663	7,393	6,634	6,425	5,749	4,795
<b>Total</b>	<b>21,218</b>	<b>19,098</b>	<b>16,846</b>	<b>15,947</b>	<b>13,960</b>	<b>13,289</b>	<b>11,804</b>	<b>9,965</b>

	2037	2038	2039	2040	2041	2042	2043	TOTAL
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	2,988	2,652	2,635	2,621	2,601	2,578	0	<b>324,040</b>
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	1,480	1,480	0	0	0	0	0	<b>36,970</b>
<i>Proposed Future Debt</i>	4,118	3,483	2,945	1,871	1,152	796	271	<b>163,019</b>
<b>Total</b>	<b>8,586</b>	<b>7,615</b>	<b>5,580</b>	<b>4,492</b>	<b>3,753</b>	<b>3,374</b>	<b>271</b>	<b>524,029</b>



## AUTHORIZED PROJECTS

Currently there are several Countywide Capital Projects that have been authorized by the County Legislature and are in varying stages of development, ranging from funds being authorized but not yet issued to projects anticipated to be completed in 2017. A brief summary of most of them follows.

### COUNTY CLERK (RECORDS DEPT)

#### **Replacement of Legacy County Clerk Document Management System**

Project On-going

In June 7, 2016 the County Legislature authorized \$600,000 to replace the legacy document management system for County Clerk. The application was written in-house and the documents are stored a 10 year old obsolete content management system. The content management system is nearly out of space and the County Clerk Office is also in need of new functionalities to reduce manual processing and also generate income. The main feature desired is the means to allow for request and pay for copies (via credit card) of property documents online (on the internet). Such copies requested are mortgages, deeds, abstracts, judgments, power of attorney, etc. The funding for this project will be used for application licensing, customization, conversions and hardware.

### EMERGENCY COMMUNICATIONS

#### **Computer Aided Dispatch (CAD) System Refresh**

Project On-going

This project funds a refresh of Onondaga County's current Computer Aided Dispatch (CAD) system, which was installed in 2007. These computer workstations and servers were over 5 years old in 2012 and beyond their recommended lifecycle. This entails the scheduled refresh of computer hardware and the implementation of necessary software updates. This is critical to the reliability of dispatch operations. In April 2012 the contract with Intergraph, the CAD System vendor was executed. The system has been installed. We are currently working with Intergraph and other vendors on minor issues.

#### **E911 Center Console Furniture Replacement**

Project On-going

On June 4, 2013, by resolution # 91, the County Legislature authorized borrowing of \$648,840 to replace thirty-six call taking, dispatch, and training room console furniture workstations that were installed in 2003 and are not compliant with the most recent computer workstation standards. This replacement took place simultaneously with the installation of the radio system replacement to minimize operational interruption and was completed in August 2014. We are still working on some minor updates on carpeting.

#### **E911 Center Facility Rehabilitation**

Project On-going

This project consisted in engaging an architectural firm to review current operational, administrative, technical support, storage needs, and physical and mechanical condition of the current E911 Center, and to make recommendations and provide cost estimates for replacements and repairs, improvements, and adjustments required to accommodate advancements in technology. This goal of this project was to study the current E911 Center, the former Hillbrook/Fire Control/OCSO South Station building and the campus area (parking lot, fences, etc.).

The County has engaged C&S Engineers to conduct the study. C&S has surveyed the properties and met with E911 staff on several occasions between December 2016 and April 2017. An initial draft of the study has been written and is currently being reviewed by E911 and C&S Engineering.

#### **E911 Center Roof Replacement**

Project On-going

The goal of this project is to replace the roof at the E911 Center. The roof is the original one, which was installed when the building was constructed in 1991 and was rated for 20 years. The roof is now 25 years old and significantly past the end of its

useful life. The roof has already begun to leak. A leak in the roof could cause costly damage to the electrical, telephone, radio, and other equipment at the E911 Center.

This project will engage the services of Onondaga County's contracted roofing vendor to replace the 18,408 square foot roof at the Onondaga County E911 Center with a Thermoplastic polyolefin (TPO) roof in September 2017. This will include additional R-20 insulation, flashing, roof drains, and refilling existing pitch pockets.

**E911 Main Center HVAC System Replacement**

Project            On-going

In Fall 2014 we received legislative authorization for \$350,000 to fund the engineering design and to develop a request for proposals (RFP), which was issued in June 2015 and subsequently awarded through the County procurement process. The engineering design was completed in May 2016.

In May 2016 the County Legislature authorized \$1,788,852 for the construction phase of this project.

The replacement of the heat pumps will be accomplished by the successful bidder in close cooperation with engineers, County Facilities, and E911 Center staff to ensure that public safety communications operations and systems are not disrupted. Call taking and dispatch areas will be moved to the Civic Center back-up site, as necessary, to permit work to be done on heat pumps, ducts and ventilation in operations floor area. Bids were awarded in mid-2016 and Airside Technology was selected as the HVAC contractor. Knapp Electric was selected as the electrical contractor. FirstPoint, LLC, was selected as the project manager. Work began in late 2016 and is in-progress at this time. Expected completion of the project is on June 2017.

**Radio Tower & Property Rehabilitation**

Project            On-going

This project will fund the necessary refurbishing of selected 9-1-1 Center remote tower sites. This will include replacement of security fencing, upgrade of the IP remote video/audio monitoring system, installation of proximity detection, replacing roofs, siding, and doors as well as replacing the HVAC system at the Pompey legacy site to increase energy efficiency. We will also add quick generator connect "Jones Plugs" at all sites to allow emergency hook up of a portable generator in the event of a catastrophic generator failure.

Progress has been on-going. Fence repairs have been made and Jones plugs have been installed at all tower sites except E911. IP security cameras have been replaced but work is being done to accommodate the additional bandwidth of the new system. Work is pending on tower lighting and other incidentals.

**Replace E911 Radio Consoles**

Project            On-going

On April 4, 2013, by resolution # 049, the County Legislature accepted \$4,959,000 in NY State grant funds to replace twenty-three Motorola Gold Elite radio consoles including integrated radio recorders at the E911 Center, and twelve Motorola Gold Elite radio consoles including integrated radio recorders at the E911 back-up site. Consoles and associated back room equipment are computer based and were originally installed in 2003 (Main Center) and 2005 (back-up site), and are not fully compatible with future functionality improvements. The consoles have been replaced but there are still several on-going adjustments to the system which are being addressed with the remaining balance of the project.

**Replacement of Mobile Data Communications Network (MDCN)**

Project            Proposed

Legislative authorization for \$245,000 has been approved to determine the most efficient, cost-effective, and reliable method of providing data connectivity to emergency responders and implement that solution. The E911 Center's Mobile Data Communications Network (MDCN) Infrastructure will reach its predicted end-of-life at the end of 2017. This will take into account the advances in wireless broadband communications technology and the cost of acquisition and maintenance of proprietary communications infrastructure. This included both data communications hardware as well as encryption software that meet federal CJIS standards for data security and integrity, infrastructure, and mobile data radio equipment.

## **FACILITIES MANAGEMENT**

### **Center for Forensic Sciences Building Rehab./Renovations (NEW)**

Project On-going

On June 7, 2016 the County Legislature authorized borrowing \$335,000 to finance this project which will provide for various improvements in the Center for Forensic Sciences. The scope of these improvements includes:

1. Installation of additional proximity card readers, electric locks and door position contacts on doors for six areas.
2. Retrofitting showers and eyewash stations for tempered water through the installation of tempering valves.
3. Architectural study and design related to the reorganization of forensic disciplines and staff in some areas within the Center, which are in need of renovations.
4. Replacement of the old remote entry intercom system
5. Replacement of old morgue cooler door mechanisms
6. Replacement of Medical Examiner overhead garage doors
7. Sidewalk and Parking Lot Repair
8. Replacement of water heaters

Carpet and tile replacement in Center for Forensic Sciences and morgue floor resurfacing, which have previously been part of this project are already completed with 2016 funds, reducing the amount we need to borrow from \$390,000 to \$335,000.

### **Civic Center Re-roof**

Project On-going

On June 7, 2016 the County Legislature authorized \$1,383,000 to re-roof the Civic Center.

The built-up IRMA roofs on the Civic Center Office Tower and theaters are, substantially, the original roofs installed in 1975, making them forty years old and beyond their expected life. Lately, we have experienced acceleration in leak conditions above the IT department. This project will require replacement of all insulation, wood blocking, walk path pavers, stone ballast, coping covers, brick veneer repointing, restoration of the integrity of the davit bases and associated flashings. An improvement in the thermal insulation value is required by code, which will offset some of the capital cost with ongoing added energy savings. Due to emergencies experienced during 2014 we used \$500,000 cash in hand to replace the theater roofs.

The rest of the scope of this project will be completed in 2017.

### **Community Plaza and Walks Renovations**

Project On-going

The Community Plaza, Bernthal Way, and portions of the walks around the Everson Museum are repaired. A project to restore the deteriorated expansion joints is underway in design development. This will mitigate the leaks through the plaza into the museum spaces. Surrounding concrete sections will be replaced as well. Many of the walks in the proximity of the expansion joints, which are settled and/or heaved and severely cracked and uneven, will be addressed with this project, making the Community Plaza and Everson Museum areas more accessible to the public.

### **Courthouse Sidewall Copper Flashing Replacement**

Project On-going

New copper flashing has been installed and has been successful on the north elevation of the building. This project was delayed while another season of investigation could be completed. Preliminary observations indicate it may be relative to the joints in the ornamented stonework at the parapet. This project is now ongoing and we expect to finish by late fall of 2017

### **Edward Kochian County Office Building Rehab./Renovation**

Project On-going

This project entails the continued renovation of the Edward Kochian County Office Building, giving it an extended useful life of forty-five to fifty years with improved fire safety, reduced maintenance, and energy cost savings. As a result of the asbestos abatement we will continue upgrading finishes, mechanical systems, fire protection, lighting, furniture and improve energy management. Three of the eight floors (3, 7, and 8), as well as the basement, were completed in the past 10 years. We now have also renovated the 6,5 and 1st floors. Our rehabilitations include ADA compliance and security enhancements. The asbestos abatement in the Edward Kochian County Office Building (County Office Building) was completed in May 2013. As result of this abatement, the basement, first, second, fourth, fifth, and sixth floors as well as seventh and eighth floor lobbies, and the mechanical penthouse were made ready for renovation. We replaced air handlers, pumps, exhaust fans, drives, piping, chiller and

controls. We provided specific climate control for new data closets. We added fire protection to the renovated floors. We completed the renovations of the first, fifth and sixth floors by fall of 2014 and this work included upgrades to the bathrooms on these floors. This allowed the Probation Department to move to the 1st and 5th floors before the end of 2014.

The additional funds authorized in 2015 will be used to continue to carry this project to completion, which means renovations of 4th floor, as well as the elevator lobbies on floors 2, 7 and 8, including bathrooms. The rehabilitation of the County Office Building will include HVAC systems and controlling upgrades, fire alarm, fire protection, managed electrical service, water use reduction in plumbing, safety and security provisions, audio and visual technologies, lighting enhancement with programmable technology, as well as ergonomics and ADA improvements. We expect energy use reduction and savings, department staff performance improvements, and increased useful life and security of our asset upon completion of this project. The 4th floor has been completed. The next and last floor we expect to renovate is the 2nd floor.

#### **Elevator Modernization - Public Safety Building**

Project Completed

This project is completed and it modernized and upgraded elevators in the PSB. The elevators received new, state of the art control systems; the sophistication of the control system as applied to each elevator depends on the specific purpose and traffic assignment of each elevator. Modernization of the elevators included replacement of most existing elevator components with new equipment. The elevators received remedial repair work that upgraded them to the level necessary in order to maintain their compliance with all codes, and to minimize future repair and maintenance costs. The City of Syracuse is 61% owner of the Public Safety Building and is responsible for 61% of the capital improvement costs on this project. The County of Onondaga has the initial maintenance responsibility and 39% of capital improvement costs.

## **FINANCE DEPT**

#### **Tax Collection and Delinquency Software**

Project On-going

This project was authorized by the County Legislature in December 2014 (Resolution # 212). The goal of this project is to standardize and modernize its delinquent tax collection software, as well as the tax collection software systems utilized by the nineteen towns, fifteen villages, and twenty-five school districts for which it guarantees taxes. There are currently several different vendors providing varying levels of services and support. At the end of each collection period a report of paid and unpaid taxes are turned over to the County and are uploaded/entered into the delinquency program so that we can begin to accept payments and enforce collection. These reports are often formatted differently, or in some instances, hand written. In addition, this process relies heavily on the experience, expertise, and technical ability of each individual Tax Collector/Receiver to send accurate and timely information. Standardizing the collection systems will ease this burden and allow the reconciliation process to be automated, while providing the County with a consolidated database throughout the collection period. We are now in the process of selecting a vendor and the project implementation will start this summer and finish in 18 months.

## **INFORMATION TECHNOLOGY**

#### **Enterprise Resource Planning (ERP)**

Project On-going

The new system will integrate the payroll, financial and other systems into one, providing the ability to enter time, track leave balances, enter benefits information, view and process payroll and budget information, in one countywide system. This system will be flexible and robust enough to provide shared services. The end users will be provided with real time data and the ability to inquire into specific transactional information. The various numbers of platforms supported by IT and the in-house applications written around the current systems, which cost time and money to create and maintain, will be reduced.

In June 2010 the County Legislature authorized \$9,887,416 (BR-127) which was amended in May 2014 by issuing another \$988,741.

Under the initial investment of \$9,887,416, the County implemented PeopleSoft Financials and Hyperion modules which now support Budgets, Purchasing and Payables for all departments within the County. The amended amount of \$988,741 is currently being used to implement PeopleSoft Human Capital Management which will support all processes associated with HR, Payroll and Benefits.

## *Countywide Funds*

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There are 3 projects we need to support to enhance our enterprise systems for PeopleSoft financials. All three projects need professional services and expertise to implement. The total funding needed for three projects is \$775,000. The county Legislature authorized this amount on February 2, 2016.

1. Supplier Contract Management, Strategic Sourcing and Supplier Portal – these modules allow for us to streamline contracts, purchasing, payments and overall processing with vendors. For professional services and hardware we are asking \$350,000.
2. Asset Management – allows us to automate many manual processes and integration with Financial Management and Supply Chain. This module will also improve accuracy associated with tracking assets and assist in meeting regulatory requirements. For professional services to perform the configuration, customization, training and testing: \$125,000.
3. Upgrade PeopleSoft Financial Environment (FSCM) to the current release and take advantage of new feature sets. Oracle will start to discontinue support of version 9.1 in 2017. We estimate that the upgrade will be at least a 9 month project and will require assistance from experienced PeopleSoft consultants. The upgrade not only brings to a current level of technology and positions us for longer term support, but it gives us a number of new features that benefit the County. The new features include:
  - Fluid User Interface – provides multiple applications and view from central tiles/pages
  - Pivot Grids – to support enhanced queries, reporting and charts
  - Update Manager – simplifies PeopleSoft upgrades (going forward) saving time and money on future upgrades
  - Usability with tablets and other mobile devices
  - Forms & Approval Builder – support elimination of paper form processesFor professional services need to perform the configuration, customization, training and testing: \$300,000

## **ONONDAGA COMMUNITY COLLEGE**

### **Campus Wide Energy Projects**

Project Completed

Various upgrades across campus took place to enhance performance and energy efficiency within our facilities. Boiler upgrades, and HVAC control upgrades are complete.

### **Other Improvements - Technology and Administrative Offices**

Project Completed

This project involved on-going initiatives to address administrative office needs and expand computer labs, update Smart classrooms, and provided adequate training facilities for both internal and external usage.

### **Site Improvements - Safety and accessibility**

Project Completed

This project addressed a number of campus safety and accessibility initiatives. It enhanced pedestrian safety on campus as well as addressed overall campus safety concerns through the expansion of Onondaga's campus sidewalk system and upgrades to the campus fire alarm/panel system.

### **Technology Improvements**

Project Completed

The growing demand on the college's technology infrastructure created a need for upgrades in a number of areas including the wireless network and core technology infrastructure. Current systems were updated as they were obsolete and at maximum capacity.

### **West Quad Renovation: Ferrante/Coulter Project**

Project On-going

On June 2, 2015 the County Legislature authorized this project in the amount of \$8,800,000. The total project was approved at \$17,600,000, 50% funded from Onondaga County and 50% from the State.

This project consists of major repairs and redesign for the campus quad area as well as two (2) of the College's main academic buildings, Ferrante and Coulter. All of these fundamental areas of the College's physical plant are in need of repairs as all, or parts, have not been renovated for years.

Exterior quad work consisting of major repairs and redesign to eliminate excessive "hardscape", empty plaza, deteriorating retaining walls, pavements and steps is complete. This area is now a major hub of activity on campus and is far more accessible for those traversing on campus.

The Coulter building renovations are substantially complete. The College library, a critical component of the learning landscape on campus, occupies the majority of the Coulter building. This structure has not been renovated since its construction in 1969. The renovation to Coulter Hall transformed a dark, tired building into a new "reinvented" library coupled with a number of student support services (Veterans, EOP, Honors, Career and Transfer, Office of Accessibility Resources, etc.) and much needed student gathering space. These services are centered around a mission of improving retention and completion for our full "community of learners" embracing all students from those needing to build skills to honors. Work in this building included abatement, code compliance, roof replacement, elevator refurbishment, major HVAC system updates, sprinkler system work, new flooring, lighting, bathroom fixtures, doors, hardware replacements and a new entranceway that clearly defines and separates the library function from student gathering/study spaces.

Ferrante, the home of Onondaga's nursing and key science programs will be the final component of this project. This project will include major renovations to primarily the first floor including life safety upgrades (sprinklers, elevator), abatement, elevator refurbishments, classroom upgrades and entranceway repairs. In addition, a new innovative teaching and learning space will be developed focusing on the disciplines housed within Ferrante Hall.

The overall project is anticipated to be complete by August 2018.

## **ONONDAGA COUNTY PUBLIC LIBRARY**

### **Central Library Reconstruction**

Project                      On-going

The Robert P. Kinchen Central Library was constructed as part of The Galleries of Syracuse in 1988 as a 120,000+ square foot facility. The entrance to the Library is on the second floor of The Galleries, with no street presence. With no entrance to the street, the Library has been rendered virtually invisible to the community. In addition, the services the Library offers have evolved over the past two decades. Demand has shifted from the need for a facility that is primarily a warehouse for books and media, to one that also provides access to online and digital resources, and serves as a community gathering place. Our physical space requirements have shifted to reflect this change. Finally, staffing patterns have changed significantly since the Library opened. Large areas of the library are closed to the public for part of each day. When open, they are covered by only a few employees, leaving those areas unsecured. To help ensure the safety of staff and patrons alike, and to provide better efficiency and work flow, it is critical to consolidate our physical space, to make it more manageable. This renovation project will consolidate public service areas, improve access and visibility, maximize public services, and increase overall operational efficiency.

The first floor will be expanded from the existing approximately 3,000 square feet to approximately 19,000 square feet. New spaces will be created, including a public meeting room (with after-hours separate entrance), a reading lounge, designated young adult area and small group study spaces, staff and enlarged public rest rooms. The Special Technologies and Adaptive Resources (STAR) services for persons with disabilities will be located here. There will also be a room for public programs such as learning and using technologies (i.e., 'maker space').

The second floor will be expanded from the existing approximately 12,000 square feet to approximately 22,000 square feet. It will include the following, all of which will be relocated from their current locations on the fourth floor: Children's World, including a new educational, interactive, child-sized environment for children and their parents; our adult literacy program; and media collections. A computer lab for public instruction classes and a study room for independent learners will be located here. The administrative and OCPL system services operations will also be located on the second floor.

The third floor will be redesigned to include new, secure and environmentally protected space for local history and genealogy collections; business and non-profit resources; adult materials collection; and a meeting space for training.

The fourth and fifth floors will no longer be part of the library, representing a reduction of approximately 62,500 square feet.

The basement houses the sorting and delivery functions of the Library System, serving all thirty-two library sites in the County. Plans call for the library to relinquish use of one of its elevators and to share a second with the future tenants on the fourth and fifth floors. A new elevator is installed, linking the basement, ground, second and third floors. A stairway is installed to extend the existing one down to the first floor.

Automation is implemented to enable patrons' self-service where it is feasible. Overall, the facility shrunk from approximately 120,000 square feet to approximately 80,300 square feet.

This project was completed on time and within budget

### **City Branch Library Improvements**

Project            On-going

This project improves the critical infrastructure and addresses necessary maintenance for each of the eight branch libraries in the City of Syracuse. This includes safety and security initiatives, managing general construction needs such as replacing necessary windows and lighting with energy efficient types and insuring the soundness and insulation of the roofs, replacing HVAC systems, and attending to significant plumbing and/or electrical needs.

The project is nearing completion. Since 2010, the following has been accomplished:

- Restrooms were retrofitted for ADA compliance at Beauchamp, Hazard, Paine, Petit and White branches
- Roofs were replaced at Beauchamp, Hazard, Mundy, Petit and Soule branches
- Windows were replaced at Beauchamp, Paine, and Petit branches
- Fire alarm systems were installed at Betts, Hazard, Mundy, Paine, Petit, Soule and White branches
- Elevators were installed at Hazard and White branches
- Wheelchair lift was installed at Soule Branch
- HVAC systems were replaced at Betts, Hazard, Paine, Petit, Soule and White branches
- Foundation repairs and drainage improvements were made at White branch

This project was completed on time and within budget

## **PARKS & RECREATION DEPT.**

### **Highland Forest Parking Improvements**

Project            On-going

In 2/2016 the County Legislature authorized \$805,000 to fund this project.

Under this project, the Skyline Lodge parking lot reconstruction and expansion added 90 parking spaces. This project also included the addition of LED lighting in the parking lot and adjacent walkways to improve safety. Work started in early March 2017 and concluded in May 2017.

### **Onondaga Lake Park Shoreline Stabilization**

Project            On-going

In 12/16 the County Legislature authorized \$756,000 to fund this project.

The Shoreline around Onondaga Lake Park has seen some significant erosion and is in need of stabilization to prevent further deterioration. This is a phased project that will address several hundred feet of shoreline each year over the next four years. Phase one has begun and will finish in the Fall of 2017. We are in the process of applying for the permitting of phases two through four, phase one permit is in hand.

### **Onondaga Lake West Shore Revitalization Project**

Project            Completed

In 10/11 and 11/12 the County Legislature authorized funding for this project.

This project is a significant community revitalization initiative for the Western shore of Onondaga Lake, the Village of Solway and Town of Geddes. This project is authorized and funded through a combination of State grants and County funds. An important component of the project is the Lakeview Park and Amphitheater, which was completed in 2015. In addition to this

component, this project involves community development, road, bridge and sewer work, which is being performed by county departments other than the Parks Dept.

**Rosamond Gifford Zoo Boardwalk Replacement**

Project            On-going

The funding (\$1,005,000) was approved in August of 2016, BR-132

Parks desires to repair or replace the elevated walkway and viewing stations at the Rosamond Gifford Zoo. The elevated boardwalk was constructed in the early 1980's and the precast spans of concrete are starting to delaminate and deteriorate. The new boardwalk design will include a service access road to better accommodate service vehicles.

**Veteran's Cemetery Expansion**

Project            On-going

In 2/16 the County Legislature authorized \$480,000 to fund this project.

This project is the expansion of the Veterans Memorial Cemetery. A master plan was completed in late 2015 and we have started the implementation of this plan with a phase one expanded roadway to access future burial sites. These additional burial sites will accommodate the needs of the cemetery for several years. Phase two will include the construction of a new maintenance building to better accommodate the larger site.

The scope of this project is being re-evaluated based on higher than anticipated quotes for the development of the engineering plan. We will start the construction in the Fall of 2017.

**Zoo HVAC Rehabilitation**

Project            Completed

The Onondaga County Legislature authorized the funding of this project in November of 2012.

A part of this funding was used to rehabilitate and replace the major components of the HVAC system at the Zoo in 2015. The remaining component of this project concerns the chiller lines. In the Spring 2016, the chilled water lines were replaced and associated systems upgraded. The design and construction is complete and this project used all of the remaining funds.

**SHERIFF POLICE/CIVIL**

**Special Operations Facility Renovation**

Project            On-going

In 09/2012, resolution #BR-185 authorized the Sheriff's Office to borrow \$400,000 to relocate the Sheriff's Special Operations Facility. Approximately \$31,000 was used for a study and site selection for the Special Operations Facility. The Sheriff's Office will use the remaining balance of \$369,172 to pay for the proposed project to conduct a study for a new HQ facility which will include the Special Operations Facility.



## PROPOSED CAPITAL PROJECT SUMMARY

**County Wide**

Department	STATUS	PROJECT	2018 - 23 Total
<b>General Fund</b>			
DEPARTMENT OF CORRECTIONS			
	<b>new</b>	Physical Plant Improvements and Security Upgrades	1,311
		Subtotal	\$ 1,311
EMERGENCY COMMUNICATIONS			
		Auxiliary Power Systems Replacement	622
		Computer Aided Dispatch (CAD) System Hardware Refresh	784
		Next Generation 911 (NG-911) Telephone System Replacement/Refresh	3,659
		Oblique Aerial Digital Imagery Refresh (2019)	394
		Public Safety Radio Tower Replacement	604
	<b>new</b>	Repave E911 Center Parking Lot	327
		Replacement of Mobile Data Communications Network (MDCN) Infrastructure	6,467
	<b>new</b>	Tower Site Shelter Rehabilitation	1,091
		Trunked Land Mobile Radio Network Backup Prime Site	1,964
		Subtotal	\$ 15,912
FACILITIES MANAGEMENT			
		Carnegie Library Rehabilitation	4,101
		Civic Center Office Maintenance, Repairs and Improvements	686
		Community Plaza Garage	1,350
		Courthouse - HVAC Renovations	10,000
		Facilities Various Capital Improvements	9,000
	<b>new</b>	LED lighting upgrade in various buildings in downtown campus	535
		Oncenter Rehabilitations	1,500
		Remodeling Social Services Reception	3,000
		Subtotal	\$ 30,172
HILLBROOK DETENTION HOME			
	<b>new</b>	Hillbrook Detention Facility Improvements (NEW)	141
		Subtotal	\$ 141
OFFICE OF ENVIRONMENT			
		Ash Tree Management	4,500
		Subtotal	\$ 4,500
PARKS & RECREATION DEPT.			
		Beach Development at Onondaga Lake Park	300
		Building an AZA Required Animal Medical Care Center with African Savannah Exhibit	14,100
		Carpenters Brook Fish Hatchery Pond Repair	402
	<b>new</b>	Energy efficiency and reliability upgrade at the zoo (NEW)	503
		Lights on the Lake Storage Facility	370
		Long Branch Park Improvements	1,950
	<b>new</b>	Loop the Lake Trail (NEW)	1,500
		Park Buildings	757
		Park Improvements/Willow Bay	2,740
		Park Roads, Parking Areas, and Trail Paving	3,750
		Park Roofs	300
	<b>new</b>	Playground Improvements (NEW)	2,000
		Salt Museum Rehabilitation	310
		Subtotal	\$ 28,982
SHERIFF POLICE/CIVIL			
	<b>new</b>	Sheriff's New Headquarters Facility	900
		Subtotal	\$ 900
		<b>General Fund Total</b>	<b>\$ 81,918</b>

*Countywide Funds*

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**County Wide**

Department	STATUS	PROJECT	2018 - 23 Total
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**Library**

ONONDAGA COUNTY PUBLIC LIBRARY			
	new	Petit Branch Library addition and improvements	885
			-----
<b>Library Total</b>			<b>\$ 885</b>

**Community College**

ONONDAGA COMMUNITY COLLEGE			
		Allyn Hall Upgrades and Improvements	2,780
		Elevator Replacement and Upgrades/ Protection of the Campus E-mail and Phone Servers	646
		Infrastructure - Campus Wide	10,488
		Site Improvements	2,718
			-----
<b>Community College Total</b>			<b>\$ 16,632</b>

**County Road**

TRANSPORTATION			
		Bituminous Surface Treatment	12,898
		Bridges	11,512
		Capital Highway Construction	29,867
		Caughdenoy Road / NYS Route 31 Road Improvements	4,120
		Cold Mix Bituminous Paving	21,084
		Guide Rail	2,720
		Rehabilitation of North Area and Camillus Highway Maintenance Facilities	10,000
		Repaving Program (Hot Mix Bituminous)	57,439
		Testing, Drainage and Facilities Repair	4,774
		Traffic Systems Management	1,910
			-----
<b>County Road Total</b>			<b>\$ 156,324</b>
<b>County Wide Total</b>			<b>\$ 255,759</b>

## Countywide Funds

The remainder of this section provides information on proposed future projects. Below is the proposed source of funding and the estimated associated debt service schedule followed by the descriptive information for each proposed project.

### County Wide

#### SOURCE OF FUNDS

	2018	2019	2020	2021	2022	2023	6yr Total
Pay as You Go	294	9,730	11,395	13,223	14,990	16,902	<b>66,534</b>
Authorized Borrowing	869	500					<b>1,369</b>
Borrowing to be Authorized	33,374	26,794	15,248	26,696	9,000	5,791	<b>116,903</b>
Federal Aid	19,200	650	2,400				<b>22,250</b>
State Aid	9,116	7,471	8,122	10,884	5,640	5,640	<b>46,873</b>
Other	1,780	50					<b>1,830</b>
<b>TOTALS</b>	<b>\$64,633</b>	<b>\$45,195</b>	<b>\$37,165</b>	<b>\$50,803</b>	<b>\$29,630</b>	<b>\$28,333</b>	<b>\$255,759</b>

### Estimated Debt Service

Payment Schedule (\$ in 000's)

#### County Wide

##### General Fund

##### FACILITIES MANAGEMENT

	2018	2019	2020	2021	2022	2023
Facilities Various Capital Improvements	0	90	165	207	248	288
Courthouse - HVAC Renovations	0	0	60	227	497	869
Carnegie Library Rehabilitation	0	0	0	121	286	334
LED lighting upgrade in various buildings in downtown	0	0	27	62	60	59
Remodeling Social Services Reception	0	120	240	266	260	254
Civic Center Office Maintenance, Repairs and	0	41	62	60	59	58
Oncenter Rehabilitations	0	0	0	30	45	44
Community Plaza Garage	0	0	81	121	119	116
<b>Department Total</b>	<b>0</b>	<b>251</b>	<b>635</b>	<b>1,094</b>	<b>1,574</b>	<b>2,022</b>

##### DEPARTMENT OF CORRECTIONS

	2018	2019	2020	2021	2022	2023
Physical Plant Improvements and Security Upgrades	0	19	57	94	124	134
<b>Department Total</b>	<b>0</b>	<b>19</b>	<b>57</b>	<b>94</b>	<b>124</b>	<b>134</b>

##### EMERGENCY COMMUNICATIONS

	2018	2019	2020	2021	2022	2023
Public Safety Radio Tower Replacement	0	20	46	54	52	51
Oblique Aerial Digital Imagery Refresh (2019)	0	0	24	95	91	88
Auxiliary Power Systems Replacement	0	0	37	66	65	63
Trunked Land Mobile Radio Network Backup Prime Site	0	118	275	267	259	251
Replacement of Mobile Data Communications Network	0	388	905	880	854	828
Next Generation 911 (NG-911) Telephone System	0	0	0	13	258	876
Tower Site Shelter Rehabilitation	0	0	0	0	0	0
Repave E911 Center Parking Lot	0	0	20	35	34	33
Computer Aided Dispatch (CAD) System Hardware	0	0	47	188	182	176
<b>Department Total</b>	<b>0</b>	<b>526</b>	<b>1,354</b>	<b>1,598</b>	<b>1,795</b>	<b>2,366</b>

##### OFFICE OF ENVIRONMENT

	2018	2019	2020	2021	2022	2023
Ash Tree Management	0	45	225	399	567	729
<b>Department Total</b>	<b>0</b>	<b>45</b>	<b>225</b>	<b>399</b>	<b>567</b>	<b>729</b>

## Countywide Funds

### PARKS & RECREATION DEPT.

	2018	2019	2020	2021	2022	2023
Park Buildings	0	0	16	58	80	78
Park Roads, Parking Areas, and Trail Paving	0	6	83	177	240	299
Lights on the Lake Storage Facility	0	0	0	0	22	39
Park Improvements/Willow Bay	0	0	13	101	235	288
Carpenters Brook Fish Hatchery Pond Repair	0	6	27	36	35	34
Playground Improvements (NEW)	0	12	51	104	156	194
Building an AZA Required Animal Medical Care Center	0	30	438	663	1,057	1,239
Salt Museum Rehabilitation	0	0	19	33	32	31
Beach Development at Onondaga Lake Park	0	0	0	18	27	26
Park Roofs	0	0	18	27	26	26
Long Branch Park Improvements	0	0	57	161	205	200
Loop the Lake Trail (NEW)	0	113	150	146	143	139
Energy efficiency and reliability upgrade at the zoo	0	20	35	34	33	32
<b>Department Total</b>	<b>0</b>	<b>187</b>	<b>907</b>	<b>1,558</b>	<b>2,291</b>	<b>2,625</b>

### SHERIFF POLICE/CIVIL

	2018	2019	2020	2021	2022	2023
Sheriff's New Headquarters Facility	0	32	127	123	119	115
<b>Department Total</b>	<b>0</b>	<b>32</b>	<b>127</b>	<b>123</b>	<b>119</b>	<b>115</b>

### HILLBROOK DETENTION HOME

	2018	2019	2020	2021	2022	2023
Hillbrook Detention Facility Improvements (NEW)	0	8	20	19	19	18
<b>Department Total</b>	<b>0</b>	<b>8</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>18</b>

**General Fund Total**                    **0**                    **1,068**                    **3,325**                    **4,885**                    **6,489**                    **8,009**

### County Road

#### TRANSPORTATION

	2018	2019	2020	2021	2022	2023
Guide Rail	0	15	27	26	25	25
Bridges	0	0	55	148	245	364
Capital Highway Construction	0	67	188	305	410	507
Cold Mix Bituminous Paving	0	66	117	114	111	109
Rehabilitation of North Area and Camillus Highway	0	600	900	880	860	840
Testing, Drainage and Facilities Repair	0	30	53	52	51	49
Caughdenoy Road / NYS Route 31 Road Improvements	0	0	247	439	428	417
Repaving Program (Hot Mix Bituminous)	0	164	292	284	281	277
Traffic Systems Management	0	15	46	80	114	147
<b>Department Total</b>	<b>0</b>	<b>957</b>	<b>1,925</b>	<b>2,328</b>	<b>2,525</b>	<b>2,735</b>

### Library

#### ONONDAGA COUNTY PUBLIC LIBRARY

	2018	2019	2020	2021	2022	2023
Petit Branch Library addition and improvements	0	0	29	44	43	42
<b>Department Total</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>44</b>	<b>43</b>	<b>42</b>

### Community College

#### ONONDAGA COMMUNITY COLLEGE

	2018	2019	2020	2021	2022	2023
Infrastructure - Campus Wide	0	0	0	0	315	734
Elevator Replacement and Upgrades/ Protection of the Site Improvements	0	0	0	19	45	44
Allyn Hall Upgrades and Improvements	0	0	83	125	122	120
<b>Department Total</b>	<b>0</b>	<b>0</b>	<b>83</b>	<b>226</b>	<b>604</b>	<b>1,018</b>

**County Wide Total**                    **0**                    **2,025**                    **5,362**                    **7,483**                    **9,661**                    **11,804**

## Countywide Funds

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**DEPARTMENT:** DEPARTMENT OF CORRECTIONS

**Project:** Physical Plant Improvements and Security Upgrades (NEW)

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Intermediate

**Budget Impact:** (\$31,700)

**Project Description:**

This project provides for improvement to original structures, building equipment and enhances security around the facility. Building repairs include repair/replacement of kitchen flooring, housing unit entries, programs corridor ceiling replacement, air conditioning in Hsg Units 1, 2 & 3, and the replacement of inmate housing unit entry and cell doors. The kitchen dish washer and the food service delivery carts need to be replaced and a large laundry washing machine needs to be purchased. Security enhancement includes the installation of lighting on facility roadways and an alternative entry and egress from the facility. Grounds and exterior improvements include resurfacing of roadways and parking lots of the facility. The completion of these projects will maintain the safety and security of the facility and the compliance of health and safety standards.

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Borrowing to be Authorized	0	325	368	342	276			1,311	1,311
<b>TOTALS</b>	<b>0</b>	<b>325</b>	<b>368</b>	<b>342</b>	<b>276</b>			<b>1,311</b>	<b>1,311</b>

**Project Detail and Status:**

This project provides for needed improvements to and replacement of aging original structures and unserviceable building equipment. It also provides for safety and security enhancements. The items below are listed in priority order.

- 1) Kitchen Floor Restoration & Restoration of Housing Unit Entries. This is necessary to maintain compliance with health codes and for basic safety and sanitary reasons in the kitchen and housing unit entry ways. (\$29,000)
- 2) Food Service Delivery Carts – Existing carts are becoming unserviceable as doors are not closing properly and motors are not working. Parts are no longer available for these models. The carts are needed to maintain food standards of proper refrigeration and heating temperatures of the food. (\$158,000)
- 3) Laundry washing machine – Current 100-lb washer is over 50 years old and beyond repair. Current contracted vendor is not efficient as there have been numerous problems with inmate laundry returning wet which leads to the added expense of us having to use an officer and our equipment to dry. (\$35,000)
- 4) Kitchen Dishwasher – Current washer continues to breakdown causing high repair expenses being incurred. Also, when machine is down, it creates major disruptions in service and the operations of the facility in addition to our using Styrofoam which is an added supply and trash removal expense. (\$101,000)
- 5) Repairs to Roadways & New Entry/Egress - This is an issue as poor road conditions lead to damaged vehicles. We cannot use the forklift on various areas due to poor road conditions. The new entrance is needed to relieve the back up at the perimeter post and ease congestion for staff entry and exit. The entrance will require gates and proximity readers and cards. (\$235,000)
- 6) HVAC Upgrades in housing units 1, 2 & 3 - The amount of heat in the housing units is excessive and getting worse due to population increases. The heat & moisture builds up and ruins metal fixtures and causes peeling paint and buildup of floor humidity which is a safety issue as it causes mold, metal rust and fatigue of the floors as the units have multiple floor levels. (\$439,000)
- 7) Replacement of Housing Unit Doors & Cell Door replacement – Existing doors are deteriorating, rusted, welds are broken and cracked, with gaps at bottom which impedes security and creates a problem with climate control issues.

## *Countywide Funds*

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Many steel stiffened cell doors also need replacement due to similar issues and the expanding of the metal in the doors have made some difficult to open/close. (\$50,000)

8) Lighting on the grounds - Is needed as it will improve security camera operations and the overall safety and security of the facility. (\$48,000)

9) Ceiling Replacement in the Corridor Wing of facility – There is approx. 4,800 sq ft of current ceiling that was damaged by water leaking from previous old roofing. There are gaps in ceilings which lead to security issues of inmates hiding contraband. The ceiling needs to be replaced due to the extensive water damage which may lead to mold and health concerns if left untreated and the potential of ceiling failure, causing staff or inmate danger. (\$32,000)

10) Hot water on demand in the housing units will be more energy efficient than using boilers which can lead to cost savings as the boilers are expensive to replace. Consistently keeping water hot when not in use is wasteful of county tax dollars. Overnight, hot water is not used and this results in a waste of money. (\$53,000)

In fall 2017 we will seek legislative authorization for \$325,000. With these funds we will cover the items from 1 to 4 as listed above.

*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Auxiliary Power Systems Replacement

**Purpose:** Public/Employee Safety/Health

**Level of Development:** Intermediate

**Project Description:**

Replace end of life auxiliary power systems at the E911 Main Center. This includes the building generator, transfer switch, and the Uninterruptable Power Supply.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0		622					622	622
<b>TOTALS</b>	<b>0</b>		<b>622</b>					<b>622</b>	<b>622</b>

**Project Detail and Status:**

This project involves the replacement of the 125 kVA uninterruptable power supply (UPS) system and the 500 KW generator at the main E911 Center.

The UPS at the main E911 was manufactured in 2003 with a useful service life of 15-20 years. The CAT 500 KW generator was installed when the building was built and is 25 years old. Replacement of the E911 Center UPS will take place in 2019 in concert with the replacement of the emergency transfer switch and the addition of a 500 KW generator. The old generator will be retained as an auxiliary until parts are no longer available in the event of the failure of the new generator.

E911 intends to seek legislative authorization for this project in September 2018.

**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Computer Aided Dispatch (CAD) System Hardware Refresh

**Purpose:** Public/Employee Safety/Health

**Level of Development:** Preliminary

**Project Description:**

This project will refresh Computer Aided Dispatch (CAD) workstations and servers located at the main E911 Center and at the Civic Center Backup Operations Center (BOC) that will be six years old and at the end of their life cycle (originally installed in 2013) as well as continue to refresh CAD software every three years in order to keep pace with developments in technology (e.g., Next Generation 911 location addressing, changes in mobile computing, etc.) and improvements in functionality.

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Borrowing to be Authorized	191		784					784	975
<b>TOTALS</b>	<b>191</b>		<b>784</b>					<b>784</b>	<b>975</b>

**Project Detail and Status:**

This project involves the refresh of computer aided dispatch (CAD) software in 2017 and the replacement of CAD hardware (along with a concurrent software refresh) in 2019. CAD hardware and software was last refreshed in 2013. The hardware (CAD servers and workstations in the Main 911 Center and the Backup Operations Center) will be six years old in 2019.

Both the 2017 software refresh and the 2019 hardware/software refresh will require an on-site presence from the CAD vendor's engineering staff to ensure smooth implementation which is necessary due to the size and complexity of our system which serves 94 police, fire and EMS agencies.

CAD workstations and servers run 24 hours a day, 365 days a year, continuously processing information related to the safety of citizens and first responders, and must be highly reliable. After six years this equipment is no longer covered by service warranty, which increases costs for repair and down time. All operating systems (OS) and hardware (e.g., memory) must be capable of running software upgrades provided as a part of the software maintenance agreement.

The 2017 software refresh will cost approximately \$191,000 and will include an extended on-site presence from the CAD vendor's engineering staff. The 2019 component of the project will involve a software refresh as well as hardware replacements (i.e., 8 CAD Servers & 68 Workstations) for \$540,000 and Intergraph services (i.e., on-site presence to assemble new machines and load software on them; install new hardware, migrate data, implement, test) for \$244,000.



*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Next Generation 911 (NG-911) Telephone System Replacement/Refresh

**Purpose:** Public/Employee Safety/Health, Federal/State Mandate

**Level of Development:** Intermediate

**Project Description:**

This project will involve the replacement of Next Generation 911 (NG-911) call taking solution that was originally installed in 2016 at both the main 911 Center and the Backup Operations Center (BOC). Equipment was originally leased under contract (5 years) with Verizon and will need to be replaced and maintained through a private vendor in 2021.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0			212	3,447			3,659	3,659
<b>TOTALS</b>	<b>0</b>			<b>212</b>	<b>3,447</b>			<b>3,659</b>	<b>3,659</b>

**Project Detail and Status:**

The Airbus DS Vesta call taking solution that was installed in 2016 will need to be replaced/refreshed in 2021 as system hardware (i.e., computer workstations and servers) will be at the end of its useful service life based on 24x7 critical public safety service. At least 43 workstations (27 at the Main E911 Center and 16 at the Backup Operations Center) will need to be replaced along with other peripheral hardware, software and interfaces as necessary. Considerable labor will be expended to ensure continuity of public safety operations. Installation will need to be coordinated based on call volume activity and cannot occur at the main Center between June and August.

The current Vesta call taking solution has been provided through a lease with Verizon. Since Verizon is phasing out of the business of providing and maintaining 911 customer premise equipment (CPE), it will be necessary to consider other purchase options that may include migrating from the Vesta system that has been in use at E911 for many years. Consultant services will be necessary to assist the County in developing an RFP for equipment, services, installation and maintenance, evaluating proposals, and in implementation. In addition, if there are significant differences in the CPE acquired, the budgeting of overtime for the training of approximately 140 employees who call take will be necessary.

E911 intends to seek legislative authorization for engineering and bid specification work in September 2019 and for the call taking system and installation work in September 2020.

*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Oblique Aerial Digital Imagery Refresh (2019)

**Purpose:** Public/Employee Safety/Health, Community/Economic Development, Other

**Level of Development:** Intermediate

**Project Description:**

Refresh oblique aerial digital imagery that was taken during a May 2014 flyover of Onondaga County. Aerial imagery is used by the Department of Emergency Communications to assist in locating emergencies and is also used frequently by the Syracuse-Onondaga County Planning Agency (SOCPA), other county departments, towns, villages and the City of Syracuse.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0		394					394	394
<b>TOTALS</b>	<b>0</b>		<b>394</b>					<b>394</b>	<b>394</b>

**Project Detail and Status:**

Project will involve a flyover of Onondaga County and bordering areas by an airplane equipped with high resolution digital camera. Flyovers will be done during the time of year (e.g., late April, early May) when there are no leaves on the trees that might obstruct camera views. Digital imagery will be stored on County servers and made available on all E911 call taking and dispatch workstations and at SOCPA. Other County departments, the City of Syracuse, towns and villages will have access to the imagery.

The most recent oblique aerial imagery was secured in May 2014. Refreshes must be done periodically (i.e., four years) to remain accurate. Based on experience, aerial imagery that ages becomes increasingly unreliable. The cost of aerial "flyovers" must be balanced against the loss in value to the users as the imagery ages.

E911 intends to seek legislative authorization for this project in September 2018.

*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Public Safety Radio Tower Replacement

**Purpose:** Public/Employee Safety/Health

**Level of Development:** Intermediate

**Project Description:**

Replace two critical public safety radio communications towers that will have reached the end of their useful life cycle and do not meet current standards for critical public safety standards.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	339	265					604	604
<b>TOTALS</b>	<b>0</b>	<b>339</b>	<b>265</b>					<b>604</b>	<b>604</b>

**Project Detail and Status:**

In the summer of 2017, the existing 325' Rose Hill (ROS) radio tower, located at 2724 Rose Hill Road in the Town of Marcellus, will be replaced with a new 325' SSV type radio tower meeting TIA-222 public safety communications tower standards. Once the new tower is constructed adjacent to the old tower, and antennas and feed line are installed, the old radio tower will be decommissioned and removed from the site. The Rose Hill tower was constructed in the early 1960's.

In the summer of 2019, the existing 200' self-supporting Makyes (MAK) radio tower, located at 4050 Makyes Road in the Town of Onondaga, will be replaced with a new 165' self-supporting SSV type radio tower meeting TIA-222 public safety communications tower standards. Once the new tower is constructed adjacent to the old tower, and antennas and feed line are installed, the old radio tower will be decommissioned and removed from the site. The Makyes tower was inherited by Onondaga County and the age or origin is unknown. It is not of public safety communications grade.

E911 intends to seek legislative authorization for \$339,000 for this project in Fall 2017.

*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Repave E911 Center Parking Lot (NEW)

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment

**Level of Development:** Advanced

**Project Description:**

Repave and restripe the Onondaga County Department of Emergency Communications parking lot at 3911 Central Avenue, Syracuse, New York 13215. Project includes milling, 4" of new pavement, and striping of 43,082 square feet of existing parking lot and the addition of 1,027 square feet of new area pavement. Parking lot will be 28 years old in 2019 and is used 24/7 by E911 employees and visitors.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0		327					327	327
<b>TOTALS</b>	<b>0</b>		<b>327</b>					<b>327</b>	<b>327</b>

**Project Detail and Status:**

Repave approximately 43,082 square feet of the E911 Center parking lot at 3911 Central Avenue, Syracuse, and add approximately 1,027 square feet of new parking area. Stripe parking lot when complete. Project necessary due to age (28 years) deterioration of the existing parking lot and current lot being undersized. We plan to seek Legislative authorization in Fall 2018.

E911 will use the county's pavement vendor to execute the work during the summer of 2019. The county's fence vendor will be used to replace the in ground security gate sensors following completion of the paving.

*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Replacement of Mobile Data Communications Network (MDCN) Infrastructure

**Purpose:** Public/Employee Safety/Health

**Level of Development:** Preliminary

**Project Description:**

This project will replace the 800 MHz mobile data communications infrastructure, including fixed base station equipment at radio tower sites and mobile data radio modems in public safety vehicles. The end of life for the current Mobile Data Communications Network (MCDN) is December of 2017.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	6,467						6,467	6,467
Authorized Borrowing	245							0	245
<b>TOTALS</b>	<b>245</b>	<b>6,467</b>						<b>6,467</b>	<b>6,712</b>

**Project Detail and Status:**

The MDCN infrastructure will reach its predicted end-of-life at the end of 2017. Taking into account the advances in wireless broadband communications technology and the cost of acquisition and maintenance of proprietary communications infrastructure, the project will begin by determining the most efficient, cost effective and reliable method of providing data connectivity to emergency responders and implement that solution. This included both data communications hardware as well as encryption software that meet federal CJIS standards for data security and integrity, infrastructure, and mobile data radio equipment. In February 2016 E911 received legislative authorization for \$245,000 for a consultant to advise the County on the most efficient and effective option for replacing the MDCN and for engineering and design. An RFP was issued in May 2016 and Winbourne Consulting was selected as the vendor in October 2016. A kick-off meeting was held in December 2016. The consultant team met with stakeholders in January 2017 and the Phase I project report (Review of Current System/Needs) was completed in April 2017. Work on the next Phase II (System Recommendations) started in May and was completed in late August 2017.

E911 intends to seek legislative authorization for construction of this project in early 2018

*Countywide Funds*

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Tower Site Shelter Rehabilitation (NEW)

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment, Federal/State Mandate

**Level of Development:** Preliminary

**Project Description:**

Rehabilitate or replace equipment at various E911 radio tower site shelters that was installed in 2006 and will be at the end of the useful lifecycle. Equipment to be rehabilitated or replaced includes shelter doors/door hardware, HVAC equipment and controllers, DC power plants and batteries, power generators, fire/intrusion/temperature alarm sensor and controllers, and FCC/FAA tower painting and lighting.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0						1,091	1,091	1,091
<b>TOTALS</b>	<b>0</b>						<b>1,091</b>	<b>1,091</b>	<b>1,091</b>

**Project Detail and Status:**

E911 radio tower sites are critical infrastructure housing Department of Emergency Communications public safety land mobile radio and microwave systems that currently support more than 8,500 public safety and public service radios for 150 agencies operated within Onondaga County. This equipment must be maintained in a secure, dry, clean, and temperature controlled environment. Tower sites are often located on remote hill top locations and must be target hardened and continue to operate in the event of adverse conditions and/or utility failure. Some E911 radio towers require FCC/FAA mandated tower paint (aviation orange/white) that must be maintained within FCC/FAA specifications.

The 12'x20' CSI concrete shelters installed at most E911 tower sites were installed between 2006 and 2008. They must be maintained to ensure the reliability of critical public safety communications systems. HVAC systems and controllers, (48 volt DC battery power plants, alarm systems) will be at or near the end of their useful lifecycles in 2023 and should be replaced or overhauled to prevent a catastrophic failure. Other elements (e.g., generators) need to be refurbished to ensure continued reliability.

E911 intends to seek legislative authorization for this project in September 2022.

## Countywide Funds

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**DEPARTMENT:** EMERGENCY COMMUNICATIONS

**Project:** Trunked Land Mobile Radio Network Backup Prime Site

**Purpose:** Public/Employee Safety/Health

**Level of Development:** Advanced

**Budget Impact:** \$25,000

**Project Description:**

While there is redundancy in the OCICS digital trunked land mobile radio (TLMR) system, the system does have a single point of failure. A catastrophic failure of the OCICS TLMR would leave critical first responders without radio communications for a period of time. This project will provide a geographically redundant backup prime site solution that will serve to provide basic emergency communications support in the event of a complete TLMR system failure.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	1,964						1,964	1,964
<b>TOTALS</b>	<b>0</b>	<b>1,964</b>						<b>1,964</b>	<b>1,964</b>

**Project Detail and Status:**

This project will improve the reliability of the Onondaga County Interoperable Communications System (OCICS) by providing for the purchase and installation of a geographically redundant simulcast trunked land mobile radio (TLMR) system backup prime site with automatic switchover capability in the event of the failure of the existing radio system prime site. This will reduce the potential for a catastrophic failure of the existing prime site that currently serves 155 public safety and public service agencies operating 8,400 subscriber radios operating within Onondaga County. The backup prime site will provide continuity of radio system operation in the event of a catastrophic failure such as a major uninterruptable power supply failure, fire, or other disaster that would render the prime site equipment inoperable.

E911 will be filing a NYS DHSES Statewide Interoperable Communications Formula grant in 2017 and is hoping to use all or a portion of that grant to offset the legislative funding request.

E911 intends to seek legislative authorization for this project in April 2018.

## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Carnegie Library Rehabilitation

**Purpose:** Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development, Addition Capacity, Other

**Level of Development:** Advanced

**Budget Impact:** (\$600,000)

**Project Description:**

The Carnegie Library Building (circa 1912), is a registered Historical treasure that has been vacant since the Syracuse City School District ceased operating it as a special program location and returned it to Onondaga County. The building underwent a renovation nineteen years ago, in 1994. The County intends to rehabilitate the building by performing renovations that will prepare the building for department occupation and services.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0			2,015	1,736			3,751	3,751
State Aid	0			350				350	350
<b>TOTALS</b>	<b>0</b>			<b>2,365</b>	<b>1,736</b>			<b>4,101</b>	<b>4,101</b>

**Project Detail and Status:**

OCFM will design and manage this project from concepts that have been developed over the last years. We will undertake a facelift to the finishes, keeping in kind with the historical character of the building. We will deliver open floor office environments for strategic departments we would relocate into this property. We will need to expand on the HVAC system, the fire protection system, introduce a wireless network, and enhance security. The plan will be designed in-house, saving money and time, and maintaining concept continuity. Structural modifications will not be needed. We intend to start construction in early 2020 and finish in 2021. Therefore, we would like to request the authorization for construction funds in Fall 2019.



## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Civic Center Office Maintenance, Repairs and Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Addition Capacity

**Level of Development:** Advanced

**Project Description:**

This ongoing project consists of masonry repairs to the lower brick veneer, concrete stem wall, and columns located in front of the Civic Center, in addition to interior office renovations to multiple floors located in the Civic Center office tower. The project will include new office environments, painting and lighting, carpeting, and HVAC modifications. It will also provide ADA enhancements, sound masking systems and incorporate sustainable practices, such as energy reduction and ergonomic planning.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	686						686	686
Authorized Borrowing	4,531							0	4,531
Pay as You Go	400							0	400
<b>TOTALS</b>	<b>4,931</b>	<b>686</b>						<b>686</b>	<b>5,617</b>

**Project Detail and Status:**

In October 2011 the County Legislature authorized \$2,850,000, in 2012 appropriated \$400,000 from fund balance, and in December 2014 the County Legislature authorized \$880,000 to be used on the following scope:

Masonry repair of lower brick veneer - This eliminated structural issues and potential safety hazards that could occur by bricks falling off the building. It also eliminated water infiltration into basement and subbasement levels. Moisture in the brick veneered columns that has caused lighting fixture failures was also addressed.

In 2012 we successfully repointed many areas of brick veneer at ground level. We replaced almost half of the recessed lights in the exterior columns.

Renovations of floors 13 and 15 included new office environments, painting and lighting, carpeting and HVAC modifications. The floors were designed with the strategy of open floor planning. This increased operational efficiency for departments located in those spaces and improved air flow, as well as allowed more natural lighting into these spaces.

We are continuing with office environment rehabilitations and building system upgrades and replacements. We have completed the office design for floors 6 and 7, and construction was completed in 2016 for the 6th Floor. In 2016 completed the renovations of Bureau of Vital Statistics and Health Department, Floor 9 east.

In June 7, 2016 the County Legislature authorized \$801,000 which funds the construction of space renovations on floors 7 and 8 as well as HVAC upgrades, ADA upgrades, and security provisions in floors 7 and 8 that started in 2016 and will continue in 2017.

The funds allocated in 2018 will be used to continue and finish the above projects. We plan to seek legislative authorization for it in fall 2017.

## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Community Plaza Garage

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment

**Level of Development:** Intermediate

**Project Description:**

The floor of the Community Plaza parking garage has continued to delaminate as a result of chloride contamination of the steel reinforcing bars in the upper level of the slab. The floor of the garage is, in fact the foundation for the entire structure, including the plaza above. This project is intended to offer a long-term solution to prolong the life of the garage. The sump covers and trench drains are deteriorated as well and in desperate need of replacement.

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Authorized Borrowing	250							0	250
Borrowing to be Authorized	0		1,350					1,350	1,350
<b>TOTALS</b>	<b>250</b>		<b>1,350</b>					<b>1,350</b>	<b>1,600</b>

**Project Detail and Status:**

The garage and plaza were built in 1967 in support of the governmental plaza and the Everson Museum. The garage accommodates approximately 130 vehicles and the loading dock functions for the museum. It is linked by a tunnel system to the District Heating and Cooling Plant, War Memorial, Court House and the Public Safety Building. The plaza above is a critical plaza park in this area of downtown that hosts numerous civic and cultural events throughout the year.

An earlier engineering study (done in about 2004) recommended overwhelmingly invasive construction efforts that included sophisticated cathodic protection systems. At this time we have a more economical and effective solution than the earlier study.

In 2012 we asked and received legislative approval of \$250,000 to fund the engineering design for this project. This engineering design was completed by the end of 2013. According to this design we will strategically remove the top layer of the deteriorated floor, replace deteriorated reinforcing bars, replace the removed concrete layer and treat the surface with a protective coating. This new solution, recommended by the 2013 design, is bringing the cost down from \$2.85 million to \$1.15 million, which is a reduction of \$1.7 million. The cost of \$1.15 million estimated in 2013 is now escalated to reflect the 2018 cost of \$1.35 million. If we use the same escalation factor on the initial estimate of \$2.85 million this figure would have been \$3.2 million in 2018 money. In this case the savings are \$1.98 million.

We intend to seek legislative approval for construction funds in Fall 2018.

## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Courthouse - HVAC Renovations

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Federal/State Mandate

**Level of Development:** Advanced

**Budget Impact:** (\$160,000)

**Project Description:**

This project is designed to address the aging, 50+ year old HVAC systems in this important over a century old Landmark building. The goal of this project is to extend and improve the mechanical life of the building's infrastructure without the need to displace the critical functions that take place during the renovation process.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0		1,000	2,000	3,000	4,000		10,000	10,000
Authorized Borrowing	400							0	400
<b>TOTALS</b>	<b>400</b>		<b>1,000</b>	<b>2,000</b>	<b>3,000</b>	<b>4,000</b>		<b>10,000</b>	<b>10,400</b>

**Project Detail and Status:**

The County has completed major spatial and functional changes at the Courthouse in response to the NYS Court Facilities Act. Approximately 40% of the building was renovated with the focus on spatial changes; however, those changes did not address the building's infrastructure needs. Much of the HVAC, electrical switchgear, and electrical distribution systems are in excess of fifty years old. The air handlers and perimeter coil induction units throughout the building are in need of replacement. The pumps and environmental controls are obsolete and also need to be replaced. A comprehensive engineering study of the building's HVAC systems has been completed and will be instrumental in assisting the County to create a plan for the systematic replacement of the HVAC systems without temporarily displacing the functions within the Courthouse.

On June 7, 2016 the County Legislature approved \$400,000 to fund the engineering design for this project. We plan to seek legislative approval for construction funds in Fall 2018.

*Countywide Funds*

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Facilities Various Capital Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Addition Capacity

**Level of Development:** Advanced

**Project Description:**

This project will generate improvements in structural integrity, mechanical systems, energy efficiency systems, life/safety issues, office environments, building exteriors, infrastructure, ADA improvements and security and fire alarm systems of buildings and grounds in various facilities, as well as providing for the preservation of County assets.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	1,500	500	500	500	500	500	4,000	4,000
Pay as You Go	380		1,000	1,000	1,000	1,000	1,000	5,000	5,380
Authorized Borrowing	6,405							0	6,405
<b>TOTALS</b>	<b>6,785</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>9,000</b>	<b>15,785</b>

**Project Detail and Status:**

This is an ongoing project. In October 2011 the County Legislature authorized \$3,860,000 to be used in 2012 on the following scope:

**CENTER FOR FORENSIC SCIENCES: \$1,200,000**

We have completed the following projects: structural masonry repairs and window replacements.

**COURTHOUSE: \$50,000**

We completed the Motor Control Center replacement project.

**JUSTICE CENTER: \$413,000**

We have completed the project to refinish the exterior insulation and finish system. We have completed the kitchen floor and trench drain replacements. We purchased and installed a new industrial dishwasher. We have completed the fire alarm panel and system replacement.

**PUBLIC SAFETY BUILDING: \$350,000**

We have completed the third floor Central Intelligence Division. We have completed renovations on the fourth floor in the Finance and ABC areas, as well as relocation of the records division to the first floor.

**SHERIFF'S HEADQUARTERS: \$50,000**

We have completed selective abatement, as well as carpet and flooring replacement projects. We have also reconfigured and modified the lobby of this building.

**MULTIPLE BUILDINGS/EXTERIOR COMPLEX: \$800,000**

We have completed the storefront entries at the Civic Center, Public Safety Building, and Justice Center. We have completed the contract for upgrading the telecom room HVAC at the Civic Center. We have begun various lighting and controller replacements with new LED systems and have upgraded our War Memorial athletic fitness area.

**ED KOCHIAN COUNTY OFFICE BUILDING: \$1,246,000**

The abatement project for floors 1, 2, 4, 5 and 6 was completed. This project was the first step of a multiple floor rehabilitation project. In December 2012 the County Legislature authorized \$1,000,000 in our 2013 budget to continue the improvements.

## Countywide Funds

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### CRIMINAL COURTHOUSE: \$105,000

The elevator shaft pits have buckled under a combination of subgrade hydraulic pressure and structural failure and need to be repaired. Engineering expected in 2017.

### JUSTICE CENTER: \$70,000

The elevator shaft pits have buckled under a combination of subgrade hydraulic pressure and structural failure and need to be repaired. Engineering expected in 2017.

### PUBLIC SAFETY BUILDING: \$210,000

We completed the abatement, encapsulation and renovation on the third floor CID. In addition, the renovation of the 4th floor for Evidence (CSU) was completed.

### DH&C PLANT: \$250,000

Replacement of National Grid vaults, which are unsafe and unstable. Design is complete, project is delayed because of high bids and the design is being reevaluated.

### MULTIPLE BUILDINGS/EXTERIOR COMPLEX: \$435,000

Completed the installation of ADA operators for elevator lobby doors (\$160,000) and ADA improvements to the Theater Restrooms were completed in May 2017.

In Fall 2013 the County Legislature authorized \$500,000 in our 2014 budget as pay as you go funds and in 2014 they authorized \$645,000 to be used on the following scope:

### ASSET MANAGEMENT SYSTEM: \$650,000

The County has an immediate need to assess benchmark and input data pertaining to the condition of all County's assets. With an Asset Management System, we will have the tools necessary to analyze and review building conditions and systems in order to determine capital planning, prioritize investments, and protect the County's assets. The first step in the asset management system was deployed in 2016 with the application of Que Ware work order system.

### VARIOUS IMPROVEMENTS IN CIVIC CENTER \$180,000

This project provided for renovations of the Onondaga room for the use by the general public, county employees and the theater patrons. In 2015 and 2016 the former Onondaga room was renovated as well as the entrance to the cafeteria.

### EVERSON GARAGE/COMMUNITY PLAZA: \$330,000

This sub-project will address the following:

- Replacement of Everson Garage fire alarm system. (\$270,000)

- Concrete work on West Garage stairs/entrances (\$50,000) was completed in early 2017

On June 7, 2016 the County Legislature authorized \$1,100,000. These funds, which will be spent in 2017, as well as some of the funds allocated in 2018 and beyond, for which we plan to seek legislative authorization in the future years, will be spent on the following projects:

### VARIOUS IMPROVEMENTS IN CIVIC CENTER \$1,000,000

The main focus of this project is to continue the renovation efforts in the Civic Center, which include ADA enhancements in restrooms and security provisions for employees related to modifications of front entrances, key access doors and surveillance cameras.

### MULTIPLE BUILDINGS/EXTERIOR COMPLEX: \$946,000

This sub-project will address the following objects:

- Asbestos removals. We will continue removals and cleanups in various buildings and tunnels. (\$350,000)

- Sidewalk panel replacement - miscellaneous areas (\$100,000)

## *Countywide Funds*

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- Replace and enhance public address systems in compliance with PESH, Codes and Emergency Management reports (\$150,000)
- Repair Terrazzo flooring and drains at Civic Center entries. Replacement of the existing vestibule flooring with Pedigrid systems at entries.(\$60,000)
- Steam trap replacements in various buildings. This project has a 5 year payback due to savings in maintenance and energy (\$300,000 with \$99,000 NYSERDA incentive leaving a local cost of \$201,000)
- Justice Center: We have already started to modify and correct controlling for the booster pumps and domestic hot water. We are also replacing hot water storage tanks including master mixing valves, balancing the domestic hot water recirculation (circuit setters) and replacing solenoid valves that control the individual towers. We used previously authorized funds to finance this project. This work will be complete by end of summer 2017
- Civic Center: Various repairs to the compactor and dumpster station in the loading dock. Design has begun and the work is expected to be complete by fall 2017. (\$85,000).
- Board of Elections: Roof replacement. This roof has been in need of many repairs in the last 3 years. In 2010 a condition assessment of this roof was done and the recommendation was to replace it in 5 years. (\$350,000)

We intend to seek authorization for \$1.5 million of construction funds in fall of 2017

## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** LED lighting upgrade in various buildings in downtown campus (NEW)

**Purpose:** Reduce Operating Costs/Efficiency

**Level of Development:** Advanced

**Project Description:**

The goal of this project is to replace existing light bulbs in various buildings in the downtown campus with LED light bulbs. This retrofit will achieve savings in both energy and maintenance.

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Borrowing to be Authorized	0		444					444	444
State Aid	0		91					91	91
<b>TOTALS</b>	<b>0</b>		<b>535</b>					<b>535</b>	<b>535</b>

**Project Detail and Status:**

This project will consist of installing Light Emitting Diode (LED) bulbs and tubes in compatible existing fixtures in the Onondaga County Justice Center, Oncenter Parking Garage, Everson Parking Garage. For the most part, the existing fluorescent fixtures and ballasts are compatible with linear LEDs and bulbs and no substantial electrical work will be required. In a few instances, fixture or ballast replacement may be required. The use of LEDs will result in a 50% energy savings as compared with the lights being replaced and have a life of approximately 10 years when used about 12 hours per day. Thus the replacement of fluorescent and incandescent lights with LEDs will reduce maintenance costs as well as energy costs.

It is calculated that the costs, savings and the payback for the three locations included in the scope of this project are the following:

Justice Center:

Total Cost : \$440,000  
Local Cost: \$384,000  
National Grid incentives: \$56,000  
Annual Savings Maintenance and Electricity: \$62,000  
Payback: within 6.5 years

Oncenter Parking Garage:

Total Cost: \$81,000  
Local Cost: \$51,000  
National Grid incentives: \$30,000.  
Annual Savings Maintenance and Electricity: \$19,500  
Payback: within 3 years

Everson Parking Garage:

Total Cost: \$10,000  
Local Cost: \$4,500  
National Grid incentives: \$5,500.  
Annual Savings Maintenance and Electricity: \$2,000  
Payback: within 3 years

We plan to seek Legislative authorization for these funds in Fall 2018.

## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Oncenter Rehabilitations

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development

**Level of Development:** Advanced

**Project Description:**

We propose to replace, rehabilitate and restore various fatigued, out of date and failing systems and components within the Oncenter Building group. This will include, but will not be limited to, theater enhancements of acoustical treatments, ADA upgrades and appurtenances, building systems modifications, as well as lighting and insulation replacements.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	2,000	500	500					1,000	3,000
Borrowing to be Authorized	0			500				500	500
State Aid	100							0	100
<b>TOTALS</b>	<b>2,100</b>	<b>500</b>	<b>500</b>	<b>500</b>				<b>1,500</b>	<b>3,600</b>

**Project Detail and Status:**

In December 2012 the County Legislature authorized \$1,500,000 for reconstruction/construction of improvements at the Oncenter, including equipment and furnishings, for projects planned in 2013, 2014, and 2015. The following projects have been completed or are planned:

- Replaced a part of the Convention Center roof, specifically the lower west side roof over the loading dock (\$153,000). The east side of the lower roof will be replaced at an estimated cost of (\$125,000).
- Reinforced and secured Oncenter Garage safety cable fencing (\$78,000).
- Replaced dasher boards for ice hockey and indoor soccer events (\$345,000).
- Replaced the War Memorial laundry facility equipment (\$20,000).
- State St. door system (\$144,000).
- Harrison St. door system (\$72,000).
- Montgomery St. door system (\$20,000).
- Expansion of War Memorial of ice surface (\$500,000). The work was completed in October 2015.
- Replacement of the ballroom lights (\$141,000). The work was expected to begin in 2015. It was publicly bid and the low bid was over \$500,000. We have not started the work because the lowest bid was over budget. We have to work with SMG to make a decision on how to proceed. In June 7, 2016, the County Legislature authorized \$1,500,000, which will be spent in 2017-2019.
- Entry doors to the theater will be replaced with those meeting new attenuation standards and silent hardware (\$75,000).
- Replace the existing marquees with new digital marquees (\$875,000).
- Replace the inefficient high wattage lighting and controlling systems (\$500,000).



## *Countywide Funds*

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- Insulation repairs, Convention Center (\$250,000).

We have many areas of disrepair and disturbance, mostly in the mechanical, kitchen, and basement areas. They need to be restored to their original integrity. Leaking condensation is causing damage to assets and the loss of heating and cooling radiating away from our systems is costing money.

- Metasys system expansion (\$95,000).

We will extend the connections and interface into the DH&C plant where 24/7 monitoring is available. An expansion of network cabling and programming is needed.

- Replace the next section of Convention Center roof (\$205,000).

In fall 2019 we will seek legislative authorization for the remainder of funds.

## Countywide Funds

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**DEPARTMENT:** FACILITIES MANAGEMENT

**Project:** Remodeling Social Services Reception

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Addition Capacity

**Level of Development:** Advanced

**Project Description:**

This project will provide for efficiency improvements in the Department of Social Services by renovating the Division of Temporary Assistance Intake - with attention to congestion reduction, staff and public safety, as well as security - to allow for streamlined and effective delivery of services.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	2,000	1,000					3,000	3,000
Authorized Borrowing	378							0	378
<b>TOTALS</b>	<b>378</b>	<b>2,000</b>	<b>1,000</b>					<b>3,000</b>	<b>3,378</b>

**Project Detail and Status:**

The rehabilitation will include improved service environments, enhanced video surveillance, duress alarms, security stations, new public address systems, reconfigured client approaches, and progressive stations. The signage will be graphic lighted displays and call up. There will be interpretive language systems. In addition we will enhance access control on doors and barriers, and the new furnishings will be ergonomic, appropriately aligned with the program flow. The building systems will be rehabilitated to include improved, efficient and balanced HVAC, sustainable lighting solutions, and maintenance friendly BMS interfacing. ADA enhancements will include mechanical door operators, selective seating arrangements, comfortable approach, and service stations. We expect that a more comfortable yet durable environment will improve the services to the clients.

The asbestos abatement project in the Edward Kochian County Office Building was completed in May of 2013. Now we will continue with the design and a phased construction of this project.

In 2014 we received authorization of \$378,000, which is being spent for the study and design for construction. We will have this task completed by August 2017.

We intend to seek authorization for \$3 million of construction funds in fall of 2017.

## Countywide Funds

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**DEPARTMENT:** HILLBROOK DETENTION HOME

**Project:** Hillbrook Detention Facility Improvements (NEW)

**Purpose:** Public/Employee Safety/Health

**Level of Development:** Intermediate

**Project Description:**

Improvements and replacements of various elements of security and safety throughout the existing facility

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	253							0	253
Borrowing to be Authorized	0	141						141	141
<b>TOTALS</b>	<b>253</b>	<b>141</b>						<b>141</b>	<b>394</b>

**Project Detail and Status:**

The scope of this project will include several elements:

On June 6, 2017 the County Legislature approved the resolution #67 which authorized the issuance of \$253,500 to cover the following:

1. Adding pole mounted IP cameras to the parking lot, access drive, fence line and service dock areas.
2. Replacing existing outdated control panel in the control room with updated touchscreen technology.
3. Replacement of existing surveillance system hardware and software.

The remaining scope includes the following elements:

1. Replacing the mobile duress response system.
2. Install security glass and doors in four unit lounge offices, which serve as counselor stations.
3. Replacing six gymnasium doors.

All the items mentioned above are outdated and at the end of their life. It is hard and costly to maintain them and keep them functioning appropriately.

We have estimated that the cost of the remaining scope elements will be \$140,500 and plan to seek legislative authorization for these funds in fall 2017.

## Countywide Funds

**DEPARTMENT:** OFFICE OF ENVIRONMENT

**Project:** Ash Tree Management

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Intermediate

**Project Description:**

Emerald Ash Borer (EAB), an invasive species of beetle that kills ash trees, arrived in the U.S. around 2002 and is spreading across the Country. The beetle is already infesting ash trees in Onondaga County. One in nine trees in Onondaga County is an ash tree.

Onondaga County has developed and is implementing an Emerald Ash Borer (EAB) management strategy in order to minimize the hazard risk to the community, the impact of EAB on County operations and to plan for and minimize EAB costs (tree removal/inoculation, manpower and equipment, disposal and tree replacement). All County-owned ash trees with potential targets in the drop zone (people or physical assets) will need to be removed or inoculated to protect the public, protect assets and reduce liability.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	750	750	750	750	750	750	750	4,500	5,250
Pay as You Go	250							0	250
Authorized Borrowing	750							0	750
<b>TOTALS</b>	<b>1,750</b>	<b>750</b>	<b>750</b>	<b>750</b>	<b>750</b>	<b>750</b>	<b>750</b>	<b>4,500</b>	<b>6,250</b>

**Project Detail and Status:**

The County owns approximately 300 parcels of land covering roughly 8,000 acres (including parkland, water supply and wastewater treatment plants, drainage districts, pumping stations, radio towers, institutional campuses for uses including administration, correctional facilities, emergency response operations and more) and nearly 800 miles of highway rights-of-way. These properties are home to tens of thousands of ash trees. Steps must be taken by the County to ensure that the threat of harm to humans and/or damage to County-owned property is minimized, that the public cost of managing affected trees on County-owned property is minimized and that overall disruption in the community is minimized (including tree replacement needs).

To this end the County has taken the following steps:

- 1) Conducted an inventory of ash trees on County-owned property
- 2) Managing ash trees on county owned properties (treating or removing)
- 3) Helping organize a community-wide task force to coordinate a Community EAB Management Strategy.

The inventory of ash trees (location, size, health, nearby targets) was initiated in 2012 and was completed in 2014. Early management efforts have been aimed at removing priority hazard trees, and damaged trees that are likely to become priority hazard trees in critical areas.

Onondaga County will implement a balanced or “selective” ash tree management strategy. The benefit of this balanced approach is that management of ash trees can be optimized at each location, preserving tree functions where they provide the greatest value, restoring lost canopy over time in other locations, and preemptively removing less valuable trees before they become a safety hazard. The County's program features the following key elements:

- 1) Preemptive removal of approximately 95% of inventoried ash trees over a period of 19 years (a little over 44,000 trees).
- 2) Replacement of approximately 10% of removed trees, phased over 19 years, primarily in the County's parks, with non-invasive, non-host tree species (a little over 4,400 replacement trees).
- 3) Preservation of approximately 5% of inventoried ash trees. These will be carefully chosen, high value ash

## *Countywide Funds*

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trees that provide significant amenities for up to 25 years (approximately 2,300 ash trees).

To carry out the County's Ash Tree Management Strategy, the County Office of Environment has entered into an Agreement with the Onondaga County Soil & Water Conservation District (SWCD) to prepare bid documents, administer contracts with vendors and to oversee tree removal and replacement. The SWCD will also assist the County with other EAB associated activities such as monitoring for infestations, community outreach and coordination with other municipalities within the county. It is estimated that the cost for the SWCD to provide these services to the County will be \$80,000/year. Though not part of these administrative and oversight costs, it is also expected that the SWCD will be responsible for inoculating trees selected for preservation.

The projected cost to carry out the County's ash tree management strategy over the next 25 years is approximately \$14 million, \$15.8 million if paid for through the issuance of bonds. In round numbers, estimated ash tree management costs include:

Estimated tree removal costs (over 19 years):	\$ 9.6 million
Estimated tree replacement costs (over 19 years):	\$ 1.5 million
Estimated tree inoculation costs (over 25 years):	\$ 1.6 million
Estimated administrative/oversight costs (over 19 years):	\$ 1.36 million
Estimated total cost (over 25 years):	\$ 14 million
Estimated cost to retire debt if bonds are issued:	\$ 1.8 million
Estimated total cost if bonds are issued:	\$ 15.8 million

We intend to seek legislative authorization for \$750,000 in the fall of 2017

*Countywide Funds*

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**DEPARTMENT:** ONONDAGA COUNTY PUBLIC LIBRARY

**Project:** Petit Branch Library addition and improvements (NEW)

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment, Community/Economic Development, Addition Capacity

**Level of Development:** Intermediate

**Project Description:**

The goal of this project is to build a community room as an addition to Petit Library. In addition this project will include various interior and exterior upgrades.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	0		350					350	350
Borrowing to be Authorized	0		485					485	485
Other	0		50					50	50
<b>TOTALS</b>	<b>0</b>		<b>885</b>					<b>885</b>	<b>885</b>

**Project Detail and Status:**

The Petit Library has never had a community room in which to hold programs or community based meetings. This library is located in a busy vibrant neighborhood (Westcott) and the community has expressed a desire to have this kind of space within the library. The addition will provide the community with this space and will include areas for meetings, programs and maker space activities.

In addition this project will address a variety of maintenance and repair needs in both exterior and interior of the library:

- Flammable storage locker
- Tyco Security Camera System
- Time Card Clock Installation
- Replace rear entrance door/replace steel shed door & frame
- New sidewalk from parking lot to Library entrance/Stampcrete design
- Install new ceiling tile/drop ceiling
- Upgrade existing emergency lighting

We plan to seek Legislative authorization for these funds in Fall 2018.

*Countywide Funds*

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**DEPARTMENT:** ONONDAGA COMMUNITY COLLEGE

**Project:** Allyn Hall Upgrades and Improvements

**Purpose:** Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

Complete the renovation of Allyn Hall.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	0		1,390					1,390	1,390
Borrowing to be Authorized	0		1,390					1,390	1,390
<b>TOTALS</b>	<b>0</b>		<b>2,780</b>					<b>2,780</b>	<b>2,780</b>

**Project Detail and Status:**

This project will complete the renovation of Allyn Hall including updating the existing locker rooms and restroom facilities, upgrading of the HVAC system, and the installation of a sprinkler system. A facility masterplan was completed in 2013 and this project is part of that masterplan.

We plan to request legislative authorization in June 2018.

*Countywide Funds*

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**DEPARTMENT:** ONONDAGA COMMUNITY COLLEGE

**Project:** Elevator Replacement and Upgrades/ Protection of the Campus E-mail and Phone Servers

**Purpose:** Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

Replace outdated elevators along with upgrading the College's e-mail and Phone servers.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	0			323				323	323
Borrowing to be Authorized	0			323				323	323
<b>TOTALS</b>	<b>0</b>			<b>646</b>				<b>646</b>	<b>646</b>

**Project Detail and Status:**

Replace existing elevators with new, energy efficient units. Upgrade and enhance the software protection associated with College's e-mail and Phone servers currently housed in the Mawhinney Hall basement. A facility masterplan was completed in 2013 and this project is part of that masterplan.

We plan to request legislative authorization in June 2018.



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**DEPARTMENT:** ONONDAGA COMMUNITY COLLEGE

**Project:** Infrastructure - Campus Wide

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

Various campus wide infrastructure enhancements.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	0				5,244			5,244	5,244
Borrowing to be Authorized	0				5,244			5,244	5,244
<b>TOTALS</b>	<b>0</b>				<b>10,488</b>			<b>10,488</b>	<b>10,488</b>

**Project Detail and Status:**

Provide for the addition and enhancement to various campus infrastructure items including the installation of a centralized emergency generator, installation of building kiosk system, update HVAC controls, campus lighting, technology upgrades, building access controls, and other various capital investment maintenance items. A facility masterplan was completed in 2013 and this project is part of that masterplan.

We plan to request legislative authorization in June 2019.

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**DEPARTMENT:** ONONDAGA COMMUNITY COLLEGE

**Project:** Site Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

Various campus site improvements and projects.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	0			1,359				1,359	1,359
Borrowing to be Authorized	0			1,359				1,359	1,359
<b>TOTALS</b>	<b>0</b>			<b>2,718</b>				<b>2,718</b>	<b>2,718</b>

**Project Detail and Status:**

Various campus site improvements and projects including: outdoor campus spaces, development of the overlook parking lot and upgrading the northeast part of campus. A facility masterplan was completed in 2013 and this project is part of that masterplan.

We plan to request legislative authorization in June 2018.

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Beach Development at Onondaga Lake Park

**Purpose:** Community/Economic Development, Addition Capacity

**Level of Development:** Preliminary

**Project Description:**

This project will provide funding to conduct a feasibility study regarding a beach at Onondaga Lake Park. With the cleanliness of Onondaga Lake acceptable to swimming levels, we will study the feasibility options to adding a third beach to the parks system.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0			300				300	300
<b>TOTALS</b>	<b>0</b>			<b>300</b>				<b>300</b>	<b>300</b>

**Project Detail and Status:**

At this point it appears that water quality levels could support the study of a potential beach along the shores of Onondaga Lake. When appropriate, the Parks Department will assess the feasibility for alternative types of water based recreation at Onondaga Lake Park.

The funds we are seeking now will serve to conduct a broad study to analyze possible locations for a swimming beach and other related shoreline activities on Onondaga Lake.

Legislative authorization for funds will be requested in Fall 2019.

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Building an AZA Required Animal Medical Care Center with African Savannah Exhibit

**Purpose:** Public/Employee Safety/Health, Federal/State Mandate, Community/Economic Development, Addition Capacity

**Level of Development:** Preliminary

**Project Description:**

This project seeks to design and construct a medical care center for animals which would include quarantine areas and medical facilities with the capacity for much larger zoo animals. This project also includes a large hoof-stock savannah exhibit that would be located directly adjacent to the medical facility.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	500	6,550	500	6,550			14,100	14,100
<b>TOTALS</b>	<b>0</b>	<b>500</b>	<b>6,550</b>	<b>500</b>	<b>6,550</b>			<b>14,100</b>	<b>14,100</b>

**Project Detail and Status:**

The Rosamond Gifford Zoo presently has a animal medical clinic which does not meet the requirements specified by the American Zoological Association (AZA). Therefore the existing clinic will be decommissioned. This space will be converted to program space for elementary school education and the housing for the outreach animal collection. New adequate facilities will be designed and constructed to meet the required standards, at the same time, creating a more interactive and educational experience for the visitors from the community. Also, this facility will enable the zoo staff to take care of much larger animals and more of them concurrently. This will be done in an environment that is medically and surgically compliant with the standards.

We plan to start the engineering and design in early 2018 and begin construction in 2019.

The Friends of Rosamond Gifford Zoo will begin a capital campaign to help defray the expenses of this project.

The other component of this project is a large hoof-stock savannah exhibit. The current configuration limits our ability to bring more varieties of larger species of animals in our zoo. Once we build this exhibit we will bring new animals to the zoo. This will cause increases in park visitation and revenues and will improve the identity of our zoo in our community.

We plan to start the engineering and design in early 2020 and begin construction in 2021.

In the Fall 2017 we plan to seek legislative authorization for \$500,000 that will fund the engineering design of the first phase of this project.

The Friends of Rosamond Gifford Zoo will begin a capital campaign to help defray the expenses of this Project.

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Carpenters Brook Fish Hatchery Pond Repair

**Purpose:** Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Advanced

**Project Description:**

This project will provide funding to patch & resurface the current 18 circular and 9 raceway ponds at Carpenters Brook Fish Hatchery.

Problem that Exists: The original concrete ponds were constructed in 1934. These ponds have been exposed to over 80 years of harsh environments. The ponds are leaking at a rapid pace making it more difficult to successfully raise fish.

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Borrowing to be Authorized	0	100	302					402	402
<b>TOTALS</b>	<b>0</b>	<b>100</b>	<b>302</b>					<b>402</b>	<b>402</b>

**Project Detail and Status:**

Carpenters Brook Fish Hatchery has 27 ponds that are in need of repair. Parks has researched other hatcheries in the North East to learn what is currently being done in this industry to improve fish production. Pricing was obtained based on these findings.

This price includes having the vendor ready the ponds' surfaces for proper fiberglass application and adherence by sandblasting loose particles off all ponds, then filling any cracks and crevices in the concrete to make the surface sturdy and level. Vendor will then clean and dry all surfaces to meet the specifications of product(s) being used. Once dry, the surface will be top coated with an aqua gel coat including an ultra violet inhibitor. The tanks will be primed, and then a layer of fiberglass applied. All materials will be FDA approved. The temperature will need to be above 60°F making our window to work on this project from late spring through early fall.

The Parks will be seeking \$100,000 in the fall 2017 to begin preparing and lining eighteen(18) 25' diagonal and twelve(12) 45'X6' concrete tanks with 3/16" thick fiberglass.

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Energy efficiency and reliability upgrade at the zoo (NEW)

**Purpose:** Reduce Operating Costs/Efficiency, Maximize Outside Funding, Addition Capacity

**Level of Development:** Advanced

**Project Description:**

Project entails installing a Combined Heat and Power unit that will provide electricity and heat more efficiently and less costly than from utility sources. In addition the unit will provide a source of emergency electrical power in the event of a utility power outage. This emergency power is necessary to maintain the habitat for exotic and expensive species housed at the zoo. NYSERDA funding is currently available to offset approximately 35% of the project cost. The estimated simple payback for the project is less than 12 years. The savings over the 30 year useful life of the project are estimated to be over \$350,000

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Borrowing to be Authorized	0	328						328	328
State Aid	0	175						175	175
<b>TOTALS</b>	<b>0</b>	<b>503</b>						<b>503</b>	<b>503</b>

**Project Detail and Status:**

The Rosamond Gifford Zoo has significant, ongoing, electrical and heating loads in order to maintain the habitat in, and to clean its exhibits. The Zoo currently relies entirely on utility provided electricity and natural gas to meet these needs. Technology in the form of Combined Heat and Power (CHP) equipment is available to meet a portion of the Zoo's electrical and heating needs in a more efficient manner that will reduce Zoo operating costs. In addition the proposed CHP equipment can provide emergency electric power sufficient to maintain the habitat of the most exotic and expensive animals housed at the Zoo. Currently, the Zoo has a small portable generator that needs to be moved from exhibit to exhibit to meet a portion of its electrical load in an emergency. The Combined Heat and Power (CHP) equipment consists of a small natural gas fired gas turbine generator to produce electricity with an integrated heat exchanger to heat water using the generator exhaust. This combined use of the fuel to both produce electricity and heat is more efficient than using electricity from the grid and natural gas to run a boiler or hot water heater thus producing energy savings. To minimize design costs and variability, NYSERDA has developed a "catalog" of pre-approved packaged CHP units. The NYSERDA "catalog" provides known incentive amounts for each particular CHP package. The proposed unit for the Zoo would meet approximately 60% of the annual heating load and 40% of the electricity load. Units are sized to ensure that they run as close as possible to 100% of their capacity year round thus they are sized below the maximum or peak usage at the facility.

The total cost of the project is \$503,000 including equipment and installation. The NYSERDA incentive for the proposed equipment is \$175,000 resulting in a total net cost to the County of \$328,000. Annual utility cost savings is expected to be approximately \$46,000 per year. Maintenance by the proposed equipment vendor is every 8,000 hours of operation or approximately once per year. Cost of the comprehensive maintenance plan covering all scheduled and any unscheduled parts and labor is approximately \$14,000 during years 1 – 5 and \$25,000 in each subsequent year. The operating life of the CHP unit is 30 years when the scheduled maintenance is performed as prescribed by the equipment manufacturer. On a standalone basis the unit will pay for itself in approximately 12 years and save over \$350,000 over the life of the unit. If it is assumed that emergency power is needed to protect the investment in the animals on exhibit, the estimated cost of a standalone emergency generator with equal electric power capacity to the CHP equipment is approximately \$75,000, for which there would be no calculated payback. If the \$75,000 is applied as an avoided cost to the purchase of the CHP equipment, the effective cost of the CHP unit is \$251,000 and the CHP payback period is less than 10 years with total net savings over the life of the equipment of \$430,000.

We intend to seek legislative authorization for this project in Fall 2018.

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Lights on the Lake Storage Facility

**Purpose:** Reduce Operating Costs/Efficiency, Maintain Existing Investment, Addition Capacity, Other

**Level of Development:** Advanced

**Budget Impact:** (\$34,800)

**Project Description:**

This project seeks to construct a warehouse facility to house the Lights on the Lake show inventory and also provide space in which to work on the light displays.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0				370			370	370
<b>TOTALS</b>	<b>0</b>				<b>370</b>			<b>370</b>	<b>370</b>

**Project Detail and Status:**

Onondaga Lake Park is home to the annual Lights on the Lake show and the approximately 200 displays are currently stored in a rented space. This is a construction project for building a warehouse and workspace for the lighting displays of the Lights on the Lake show. The new building would be located in Onondaga Lake Park, which increases convenience over the current location because it is on site; Parks employees would not have to leave the park to store or work on Lights on the Lake displays. The proposed building is expected to have a useful life of at least thirty years

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Long Branch Park Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development, Addition Capacity

**Level of Development:** Advanced

**Project Description:**

Long Branch Park is one of the most popular event destinations in the Onondaga County Parks system. This construction project is to replace the aging structures and improve the parking and entrance area to the park. This effort will also bring the aging park up to current ADA and building codes for restrooms, accessibility and parking.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	350							0	350
Borrowing to be Authorized	0		950	1,000				1,950	1,950
<b>TOTALS</b>	<b>350</b>		<b>950</b>	<b>1,000</b>				<b>1,950</b>	<b>2,300</b>

**Project Detail and Status:**

On 2/2/2016 the County Legislature authorized \$350,000 (BR -009). With this amount authorized we have accomplished and are working on the following:

The designs for the maintenance building, ADA compliant comfort station and parking lot are complete.

The shelters have been completed in the Spring of 2017. (\$296,000)

The entry and fencing will also be done in 2018. (\$60,000)

The electrical service upgrade design is complete and the construction work will be done in 2019.

The construction of the maintenance building, ADA compliant comfort station and parking lot are scheduled to begin in 2019.

In fall 2018 the Parks Department intends to seek legislative authorization for \$950,000 to continue the construction of the scope elements of this project planned for 2019.



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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Loop the Lake Trail (NEW)

**Purpose:** Community/Economic Development

**Level of Development:** Preliminary

**Project Description:**

Construction of a mile of multi-use trails on the southeast shore of Onondaga Lake known as Murphy's Island. This is a trail segment which will eventually be part of the completed Loop the Lake trail system.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	1,500						1,500	1,500
<b>TOTALS</b>	<b>0</b>	<b>1,500</b>						<b>1,500</b>	<b>1,500</b>

**Project Detail and Status:**

When completed, the Loop the Lake Trail will be a continuous trail around Onondaga Lake that connects to the City Creekwalk, the Erie Canal Trail and serves as a vital part of the Empire State Trail. The multiuse trail will serve as a major recreational attraction, as well as provide a transportation alternative to historical, recreational, and other destinations on and near the shores of Onondaga Lake.

The New York State Department of Transportation Planning approved preliminary plans in late 1992. Over time, Onondaga County has completed trail extension segments beginning with the West Shore Trail Extension in 2014 and will be completing the whole west shore trail system by 2019 including a bridge over the CSX railroad.

Since 1998, several studies have been conducted to assess public interest and project feasibility of the Loop the Lake trail. These studies are a SMTCC sponsored study of the Onondaga Lake Parkway, The Lake Front Development Corporation Waterfront Plan and most recently a study by FOCUS Greater Syracuse in 2012. The studies support the feasibility of the Loop the Lake Trail and indicate strong public support as well.

The Murphy's Island project segment will be a continuation of the Loop the Lake Trail and will traverse property Onondaga County Parks purchased in 1980 from the Estate of Donald Murphy. The trail segment begins at the Onondaga Creekwalk and continues along the southeast shore of Onondaga Lake. Eventually, this trail segment will be used for the future connection to the Onondaga Lake East Shore trail and the completion of the Loop the Lake trail system.

In 2017, Onondaga County Parks will seek bond authorization for \$1.5M to design and construct the trail on this County owned property.

**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Park Buildings

**Purpose:** Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development, Addition Capacity, Other

**Level of Development:** Intermediate

**Project Description:**

This project seeks to repair or repurpose existing structures and also to build new ones to increase capacity and improve the park customer experience. This effort will also bring our buildings up to current code and ADA specifications. This project will add new shelters in Onondaga Lake Park, Jamesville Beach Park, and Oneida Shores Park, along with repurposing the Onondaga Lake Park Concession Stand

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	325							0	325
Borrowing to be Authorized	0		260	497				757	757
<b>TOTALS</b>	<b>325</b>		<b>260</b>	<b>497</b>				<b>757</b>	<b>1,082</b>

**Project Detail and Status:**

Many of these buildings are in the design phase with construction projects starting this Spring and continuing for a couple of years. The following is an update to the progress and the plans for the next few years.

1. Willow Bay Shelter: Onondaga Lake Park (2017)

Design is 50% complete and construction will begin in the Fall of 2017

Scope of Work: Remove old, replace with new, upgrade electric distribution, new concrete pad, ADA accessible entry, fix drainage issues in immediate area.

Estimated Cost: \$150,000

2. Bay View Shelter: Onondaga Lake Park (2017)

Shelter has been designed and purchase and will be installed in the Summer of 2017.

Scope of Work: select site, provide electric distribution, new concrete pad, configure accessible entry.

Estimated Cost: \$85,000

3. New Shelter: Onondaga Lake Park (2017)

We are currently evaluating the location to maximize rental demand.

Problem that Exists: Shelter rentals are at capacity most weekends at Onondaga Lake Park. To increase shelter rental revenue a new shelter may be constructed near the boathouses and newly completed ADA Kayak launch.

Scope of Work: Establish new site, erect new shelter with new concrete pad, electric and an ADA accessible entry.

Estimated Cost: \$85,000

The projects planned for 2018 are:

1. Onondaga Lake Park Concession Stand Building Conversion: (2018) \$300,000

On the north side of Onondaga Lake Park near Long Branch Road is a Parks building that was used to house food concessions, bicycle rentals, and restroom facilities. Concessions and the bicycle rental have been relocated to the Griffin Visitor Center area of the park. This proposal is to convert the empty building into a reserved shelter space.

2. The Willow Bay Annex comfort station renovation (2018)

Estimated cost \$80,000

3. Hiawatha Point comfort station renovation (2018)

Estimated cost \$80,000

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The projects planned for 2019 are:

1. Point Tent: Jamesville Beach Park (2019)

Problem that Exists: Tent frame and canopy are aging; stone pad is not accessible;

Scope of Work: Remove tent, replace with new shelter, establish electrical distribution, new concrete pad, configure accessible entry.

Estimated Cost: \$85,000

2. New Shelter: Jamesville Beach Park (2019)

Problem that Exists: Shelter rentals are at capacity most weekends at Jamesville Beach Park. To increase shelter rental revenue a new shelter could be placed in the picnic area north of the Visitor Center. Parking would be in the main lot.

Scope of Work: Establish new site, erect new shelter with new concrete pad and add electric service and an accessible entry.

Estimated Cost: \$85,000

3. Maples Tent: Oneida Shores Park (2019)

Problem that Exists: Tent frame and canopy are aging; placement could be better situated.

Scope of Work: Remove tent, establish best placement, erect new shelter with new concrete pad and accessible entry, and establish electrical distribution.

## Countywide Funds

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Park Improvements/Willow Bay

**Purpose:** Maintain Existing Investment, Community/Economic Development

**Level of Development:** Preliminary

**Project Description:**

This project is to explore ideas to further develop Onondaga Lake Shoreline property. In 2012, the Onondaga County Parks Department invested limited resources in developing a preliminary plan for improvements to the Willow Bay area of Onondaga Lake Park. This preliminary investigation led to the determination that the Willow Bay area could benefit from significant capital improvements as attendance at Onondaga Lake grows and the cleanup of Onondaga Lake progresses into its final phases

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0		220	1,300	1,220			2,740	2,740
<b>TOTALS</b>	<b>0</b>		<b>220</b>	<b>1,300</b>	<b>1,220</b>			<b>2,740</b>	<b>2,740</b>

**Project Detail and Status:**

This project builds upon investments made in 2012 to improve trails, parking facilities, and ADA access within Onondaga Lake Park.

Preliminary investigations funded in 2012 of the various picnic shelters, parking facilities, and trails within the Willow Bay area of Onondaga Lake Park have indicated the need for investment in aging facilities and substandard parking facilities that no longer meet the demands of Onondaga Lake Park's visitors. Parking facilities require modernization and improvement, picnic pavilions need full replacement, and aged trail systems need to be removed and/or repaired.

These improvements will help to advance that long-term objective by ensuring that the trails, pavilions and parking facilities are up to modern standards for a public bathing beach, which is object of another project of this capital improvement plan.

In the fall of 2018, The Parks Department will seek legislative authorization for \$220,000 to fund a study and engineering of the future plan for Willow Bay.

*Countywide Funds*

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Park Roads, Parking Areas, and Trail Paving

**Purpose:** Maintain Existing Investment, Community/Economic Development

**Level of Development:** Advanced

**Project Description:**

This project is the ongoing maintaining, resurfacing or new construction of park roads, trails and parking

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	100	1,200	650	600	600	600	3,750	3,750
Authorized Borrowing	6,165							0	6,165
<b>TOTALS</b>	<b>6,165</b>	<b>100</b>	<b>1,200</b>	<b>650</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>3,750</b>	<b>9,915</b>

**Project Detail and Status:**

On 2/2/2016 the County Legislature authorized \$700,000 which was used to improve the following roads and parking lots. The balance will be used for The Salt Museum Parking lot and part of Ten Eyck Dr.

In the Fall of 2016 the following were paved:

McKinley entrance road at Oneida Shores \$233,000,

The Main Entrance road, Overlook lot, Maintenance lot, Skate Park lot at Onondaga Lake Park \$210,000.

The Salt Museum lot is currently being designed and will go out for bid this Summer for Fall of 2017

Ten Eyck Drive has become a priority as the new Kayak launch and Parking lot will be completed this Spring (2017).

Ten Eyck Dr. saw some heavy construction traffic that contributed to its further deterioration. We may look into doing a portion of this road in 2017.

The Parks Department intends to seek legislative authorization for \$100,000 in fall of 2017.

*Countywide Funds*

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Park Roofs

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Advanced

**Project Description:**

Many roofs throughout Onondaga County Parks are at or beyond their projected life. This project is to sequentially repair or replace the roofs identified in the scope of this project.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	541							0	541
Borrowing to be Authorized	0		300					300	300
<b>TOTALS</b>	<b>541</b>		<b>300</b>					<b>300</b>	<b>841</b>

**Project Detail and Status:**

In 2016 the County Legislature authorized \$261,000 and we used this money to repair the following roofs:

- Administrative Office roof \$47,412
- Overlook shelter at Jamesville Beach \$14,104
- The Tractor Bays at Pratt's Falls \$25,826
- Rosamond Gifford Zoo Café Roof is being replaced in 2017 (\$160,000)

In 2017 the County Legislature authorized an additional \$280,000 and we used this money to repair the following roofs:

- Beaver Lake Nature Center roof, which is being replaced in 2017 (\$280,000)

The future scope of this project will include replacing the following roofs:

- Highland Forest
- Community House Restrooms \$15,000 (2017)
- Community House Shelter \$16,000 (2017)
- Valley Camp \$18,250 (2017)
- Rosamond Gifford Zoo Café Roof \$160,000 (2017)
- Beaver Lake Nature Center
- Visitor Center \$280,000 (2017)
- Highland Forest
- Valley Camp Annex \$6,250 (2018)
- Skyline Lodge \$201,000 (2018)
- Jamesville Beach
- Overlook restroom \$11,000 (2018)
- Pratt's Falls
- Tractor Bays \$28,000 (2018)
- Onondaga Lake Park
- Willow Bay Restroom \$16,000 (2018)
- Marina Comfort Station \$12,500 (2018)

In fall 2017 the Parks Department intends to seek authorization for \$289,000 to continue and complete this project.

*Countywide Funds*

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Playground Improvements (NEW)

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Federal/State Mandate, Addition Capacity

**Level of Development:** Advanced

**Project Description:**

The Parks system is home to several major playgrounds that represent a multi-million dollar investment. Many of these playgrounds have expensive composite surfaces that deteriorate over time. This project seeks funding to maintain, repair, upgrade and create playgrounds at new sites.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	200	500	500	500	300		2,000	2,000
<b>TOTALS</b>	<b>0</b>	<b>200</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>300</b>		<b>2,000</b>	<b>2,000</b>

**Project Detail and Status:**

The following Playgrounds have been identified as needing repair, the playground, repair and cost estimates are listed below. The additional equipment or expansion sites and associated costs are also listed.

**Onondaga Lake Park**

Wegmans Boundless Playground

Surface: \$350,000 Full Tuff-Turf carpeting including expansion  
 Addition: \$300,000 Increase playground square-footage by at least 50% (preferably double the size)  
 Structures: \$500,000 Additional play structure, double the swing bays, climber

Willow Bay Annex

Surface: \$2,500 Additional Fiber (Engineered Wood Fiber)  
 Structures: \$45,000 Remove current out-dated structure, replace with similar structure

Willow Bay

Surface: \$75,000 Full Tuff-Turf carpeting  
 Addition: \$15,000 Second set of swings (2 additional bays)  
 Structures: \$100,000 Remove current out-dated structure, replace with similar, expanded structure

Long Branch

Surface: \$2,500 Additional Fibar (Engineered Wood Fiber)  
 Addition: \$15,000 Two bays of swings  
 Structures: \$45,000 Remove current out-dated structure, replace with new updated pieces

Wegmans Good Dog Park

Agility Playground: \$35,000 Two agility playgrounds: larger one on "any dog side", smaller one on "small dog side"

**Subtotal for OLP \$1,485,000**

**Oneida Shores**

Beach Playground \$69,300 Surfacing - removal current rubber surfacing and installation of Full Turf Carpeting

**Subtotal for Oneida Shores \$69,300 est \$18 per square foot**

*Countywide Funds*

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**Southern End**

Highland Forest    \$175,000            New playground - play pieces and surfacing designed with the lodge theme to fit into the landscape at Highland Forest

Jamesville Beach    \$81,090            Surfacing - removal current fibar surfacing and installation of Full Tuff Turf Carpeting

**Subtotal for Southern end            \$256,090    (est \$18 per square foot)**

**Grand Total                            \$1,810,390**

We intend to seek legislative authorization for \$200,000 in fall 2017.



## Countywide Funds

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**DEPARTMENT:** PARKS & RECREATION DEPT.

**Project:** Salt Museum Rehabilitation

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment, Community/Economic Development

**Level of Development:** Ongoing

**Project Description:**

The historic Salt Museum at Onondaga Lake Parks has deteriorated over time and is in need of some repair to protect from further decline. This project will replace the roof and fix the chimney to seal the building from the elements. In the second phase, which we plan to execute in 2019, we will address the need to repair the foundation and associated landscaping as well as windows.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	290							0	290
Borrowing to be Authorized			310					310	310
<b>TOTALS</b>	<b>290</b>		<b>310</b>					<b>310</b>	<b>600</b>

**Project Detail and Status:**

The Salt Museum is 82 years old and is a very important part of our historical heritage and identity. Due to its age and use throughout the years, it is now in need of comprehensive repairs. These repairs will include total roof replacement with chimney repointing, windows replacement, and siding repair and replacement with board and batten siding, as well as painting. The deck walkway will also be replaced together with asphalt side walk. The foundation and window replacement work has not started yet and will start in 2019.

Restoration of the Salt Museum began in the Fall of 2016. The siding was repaired and building was painted by the Facilities painters with two coats of paint. The roof repairs are 90% complete and will be completed during 2017. The chimney has been repaired and the broken bricks replaced and deteriorated mortar joints reconstructed. The chimney is being fitted with a steel cap to prevent water intrusion and as a long term protection for the chimney.

In August of 2016 the County Legislature approved \$290,000 to fund the construction of roof and chimney repairs. The rest of the work completed so far was done with funds from operating budget.

*Countywide Funds*

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**DEPARTMENT:** SHERIFF POLICE/CIVIL

**Project:** Sheriff's New Headquarters Facility (NEW)

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Addition Capacity

**Level of Development:** Preliminary

**Project Description:**

The goal of this project is to conduct a study to consolidate all of the Police and Civil operations into a central facility. The new facility will consolidate several existing facilities including Headquarters (South State Street), the Property and Evidence Facility/Impound Lot (Joy Road), the Special Operations Facility (Cessna Road), the Patrol Substations, and all administrative functions.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	531						531	531
Authorized Borrowing	0	369						369	369
<b>TOTALS</b>	<b>0</b>	<b>900</b>						<b>900</b>	<b>900</b>

**Project Detail and Status:**

Due to the age of the facilities currently in use by the Sheriff's Office, several of the facilities are in deteriorating conditions. These deteriorating facilities include the Sheriff's Headquarters building, the Special Operations Unit at Cessna Road, and the Property and Evidence building. The purpose of this project is to consolidate all of the Sheriff's Office facilities including the K-9 Unit and the Police Substations.

Initially, we intend to hire an engineering/consulting firm to conduct a study that will help us with identifying a location and configuration of this new facility as well as the cost of construction. The study should take into consideration county owned properties as an alternative for the new headquarter, as identified by Department of Facilities Management. The funds we are requesting will serve to acquire these services. Once we get the study and the engineering design completed, we will request the construction funds.

We have estimated that the funds needed for the study and engineering/design will be \$900,000. We intend to seek legislative authorization for \$531,000 in the fall of 2017.

## Countywide Funds

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**DEPARTMENT:** TRANSPORTATION

**Project:** Bituminous Surface Treatment

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Ongoing

**Project Description:**

This project provides for the treatment of County highways with a bituminous surface treatment to prolong the life of the wearing surface.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	974	1,250	450	450	450	450	450	3,500	4,474
Pay as You Go			1,440	1,650	1,900	2,100	2,308	9,398	9,398
Prior Year Funding	400							0	400
<b>TOTALS</b>	<b>1,374</b>	<b>1,250</b>	<b>1,890</b>	<b>2,100</b>	<b>2,350</b>	<b>2,550</b>	<b>2,758</b>	<b>12,898</b>	<b>14,272</b>

**Project Detail and Status:**

The bituminous surface treatment program is designed to protect 375 centerline miles of the low volume County cold mix highway system. The program's focus is to preserve the cold mix roads using a data driven, system-wide decision making approach. Consistent with the New York State Department of Transportation's Forward Four Guiding Principles, a "preservation first" strategy is being implemented as part of this capital plan to keep good cold mix roads in a state of good repair in order to realize a lower-cost preservation cycle, as opposed to using a "worst first" approach.

This process seals the surface of low volume highways while enhancing the traction and stopping abilities of the wearing surface, thereby reducing the County's liability.

Pavement ratings and traffic volumes will be used as a basis in the selection of the needed highway work. In addition, the importance of each highway as it relates to the overall transportation system will be considered as well.

*Countywide Funds*

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**DEPARTMENT:** TRANSPORTATION

**Project:** Bridges

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Federal/State Mandate, Community/Economic Development

**Level of Development:** Ongoing

**Project Description:**

This program addresses the maintenance and repair of bridges within the County highway system.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Federal Aid	4408	2,864						2,864	7,272
Borrowing to be Authorized			920	1,080	1,110	1,500	1,500	6,110	6,110
Pay as You Go	180	140	190	195	200	200	200	1,125	1,305
State Aid	1370	533						533	1,903
Other	880	880						880	1,760
<b>TOTALS</b>	<b>6,838</b>	<b>4,417</b>	<b>1,110</b>	<b>1,275</b>	<b>1,310</b>	<b>1,700</b>	<b>1,700</b>	<b>11,512</b>	<b>18,350</b>

**Project Detail and Status:**

The Department of Transportation operates an ongoing bridge construction program, using Department forces, to maintain the 210 bridges within the County highway system in a safe and acceptable condition. Site selection is determined through inspection results. Contract forces, frequently with State and Federal aid, undertake larger projects.

The New York State Department of Transportation conducts an annual inspection of all bridges in the State with a span of twenty feet or greater. Each bridge receives a condition rating based on a scale of zero to seven. The Onondaga County Department of Transportation's goal is to raise the average condition rating of its bridges to over five. The increased annual funding of this project reflects the Department's efforts to meet this goal.

## Countywide Funds

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**DEPARTMENT:** TRANSPORTATION

**Project:** Capital Highway Construction

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development, Maximize Outside Funding

**Level of Development:** Ongoing

**Project Description:**

This project involves construction of major highway improvements.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized		1,110	1,163	1,090	1,000	1,000	1,000	6,363	6,363
State Aid		2,768		450				3,218	3,218
Federal Aid	5920	16,336	650	2,400				19,386	25,306
Authorized Borrowing	649							0	649
Other	840	900						900	1,740
<b>TOTALS</b>	<b>7,409</b>	<b>21,114</b>	<b>1,813</b>	<b>3,940</b>	<b>1,000</b>	<b>1,000</b>	<b>1,000</b>	<b>29,867</b>	<b>37,276</b>

**Project Detail and Status:**

This project encompasses major highway improvements as follows:

1. - Traffic Capacity - includes improvements to signalization, grading, and alignment using designs based upon the projection of traffic volumes 20 years into the future.
2. - Accident Reduction - using NYS "Accident Location Information System" (ALIS) accident rate reports, improvements to pavement quality, highway geometrics, road shoulders, turning lanes, traffic control devices, guide rail, and the elimination of roadside hazards, are made in an effort to reduce the accident rates at identified locations.
3. - Green Infrastructure - Projects under this category would utilize means and methods of green infrastructure to encourage the retention and infiltration of storm water runoff.
4. - Maintenance Costs - improvements such as full depth replacement of the pavement, paved shoulders, improved drainage, and provisions for sub base drainage are made to extend the pavement life of highways.
5. - Right of Way Acquisitions – the purchase of needed Rights of Way necessary to complete the programmed projects.

The program's focus is to preserve our highway system consistent with the New York State Department of Transportation's Forward Four Guiding Principles. This "preservation first" strategy is being implemented as part of this capital plan to keep pavements in a state of good repair in order to realize a lower-cost preservation cycle, as opposed to using a "worst first" approach. Accordingly, our capital improvement projects have been realigned.

Individual highway projects are at various stages of development. Due to the severely rising costs of construction and the need to maintain an even flow of funding, some projects have been funded over multiple years. The schedule is as follows:

Traffic Signs Upgrades – This project is intended to replace roadway traffic regulatory, guide, and warning signs in the County in order to meet current reflectivity standards as promulgated by the Federal Highway Administration. Funding from 2018 through 2021 will be necessary to complete this project.

Locally Administered, Federally Aided Highway and Bridge Construction projects have been funded as part of this plan. Projects include Fremont Road Bridge over Butternut Creek, Bridge Maintenance Phase II, Bridge Painting, Tuttle Road Bridge, and capital paving improvement projects for Old Route 5 & Warners Road, Electronics Parkway, West Taft Road, Buckley Road, and Route 57. The Onondaga Lake Canalway Trail Extension Project has also been funded in this plan.

*Countywide Funds*

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**DEPARTMENT:** TRANSPORTATION

**Project:** Caughdenoy Road / NYS Route 31 Road Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development, Maximize Outside Funding, Addition Capacity

**Level of Development:** Preliminary

**Project Description:**

This project will improve Caughdenoy Road from NYS Route 31 to 0.61 miles north in conjunction with the White Pines Business Park Development. The intersection of NYS Route 31 and Caughdenoy Road will also be improved.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	530							0	530
Borrowing to be Authorized	0		4,120					4,120	4,120
<b>TOTALS</b>	<b>530</b>		<b>4,120</b>					<b>4,120</b>	<b>4,650</b>

**Project Detail and Status:**

The scope of this project is to replace the existing two lane Caughdenoy Road with a three lane section from NYS Route 31 to the railroad crossing 0.61 miles north in conjunction with the development of the White Pines Business Park. As part of the project, the Caughdenoy/Route 31 intersection will be improved by adding dedicated left turn lanes on all legs and the addition of a new three colored traffic signal. The funding for engineering design of this project was authorized by Resolution #165 dated November 9, 2012. The construction, by contract forces, is anticipated to start in 2019 and be completed in 2019.

*Countywide Funds*

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**DEPARTMENT:** TRANSPORTATION

**Project:** Cold Mix Bituminous Paving

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Ongoing

**Project Description:**

This project entails the repaving of the 375 miles of secondary County roads on a rotating basis.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized		1,100						1,100	1,100
Pay as You Go	0	0	1,275	1,650	2,120	2,500	3,039	10,584	10,584
State Aid	1410	950	1,690	1,690	1,690	1,690	1,690	9,400	10,810
Authorized Borrowing	560							0	560
Prior Year Funding	200							0	200
<b>TOTALS</b>	<b>2,170</b>	<b>2,050</b>	<b>2,965</b>	<b>3,340</b>	<b>3,810</b>	<b>4,190</b>	<b>4,729</b>	<b>21,084</b>	<b>23,254</b>

**Project Detail and Status:**

The cold mix bituminous paving program is designed to maintain 375 centerline miles of the low volume County cold mix highway system. The cold mix bituminous pavement is laid with a paving machine, and then surface treatment is applied.

The program's focus is to preserve the cold mix roads using a data driven, system-wide decision making approach. Consistent with the New York State Department of Transportation's Forward Four Guiding Principles, a "preservation first" strategy is being implemented as part of this capital plan to keep good cold mix roads in a state of good repair in order to realize a lower-cost preservation cycle, as opposed to using a "worst first" approach.

Pavement ratings and traffic volumes will be used as a basis in the selection of the needed highway work. In addition, the importance of each highway as it relates to the overall transportation system will be considered as well.

*Countywide Funds*

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**DEPARTMENT:** TRANSPORTATION

**Project:** Guide Rail

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment

**Level of Development:** Ongoing

**Project Description:**

This program involves the installation of guide rail at various locations on County highways.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Pay as You Go	453		490	490	490	500	500	2,470	2,923
Borrowing to be Authorized		250						250	250
<b>TOTALS</b>	<b>453</b>	<b>250</b>	<b>490</b>	<b>490</b>	<b>490</b>	<b>500</b>	<b>500</b>	<b>2,720</b>	<b>3,173</b>

**Project Detail and Status:**

Guide rail has been used extensively in the last thirty years as a means to protect the traveling public from roadside hazards. This program is an ongoing annual program that will upgrade existing guide rail and provide for the installation of new guide rail at various locations on County highways to improve safety and reduce liability where roadside hazards are impossible or too costly to eliminate. Costs for guide rail replacement have increased since the New York State Department of Transportation now requires the usage of box beam type of guide rail. Costs shown reflect the additional cost to upgrade existing "W" beam rail with "box beam" rail.



*Countywide Funds*

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**DEPARTMENT:** TRANSPORTATION

**Project:** Rehabilitation of North Area and Camillus Highway Maintenance Facilities

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency

**Level of Development:** Advanced

**Project Description:**

This project addresses the need for substantial renovations and repairs to DOT's Camillus and Dewitt highway maintenance facilities.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	10,000						10,000	10,000
Authorized Borrowing	10,624							0	10,624
<b>TOTALS</b>	<b>10,624</b>	<b>10,000</b>						<b>10,000</b>	<b>20,624</b>

**Project Detail and Status:**

The Department of Transportation's current North Area and Camillus maintenance facilities were both built in the 1960s. Neither site was designed or intended to be a highway maintenance facility. The North Area facility was originally a United Parcel Service distribution center, and the Camillus facility was built to serve as a small airport. The current layout and condition of the facilities result in significant operating inefficiencies and costs. There is a critical need for major structural renovations to both facilities. In addition, building systems in both facilities need complete rehabilitation (HVAC, electrical, plumbing). Design and construction estimates for rehabilitation of both facilities range from \$20 million to \$21 million.

Preliminary feasibility studies have been made to compare the new construction versus rehabilitation for the two facilities with rehabilitation being the preferred alternative. The County Legislature has already authorized \$10,624,000 to fund the construction at Camillus which started in late Spring with completion anticipated in the first quarter of 2018. Design of North Area is scheduled for completion in 2017 with construction planned for 2018. We intend to seek legislative authorization for the remainder of fund (\$10,000,000) for North Area in fall 2017

## Countywide Funds

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**DEPARTMENT:** TRANSPORTATION

**Project:** Repaving Program (Hot Mix Bituminous)

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development, Maximize Outside Funding

**Level of Development:** Ongoing

**Project Description:**

This program provides for the repaving of major, high volume County roads to maintain our investment in the transportation system.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
State Aid	3253	3,440	3,500	3,500	3,500	3,500	3,500	20,940	24,193
Pay as You Go	0		4,535	5,600	6,683	7,850	9,015	33,683	33,683
Borrowing to be Authorized		2,733			63	10	10	2,816	2,816
Authorized Borrowing	3072							0	3,072
<b>TOTALS</b>	<b>6,325</b>	<b>6,173</b>	<b>8,035</b>	<b>9,100</b>	<b>10,246</b>	<b>11,360</b>	<b>12,525</b>	<b>57,439</b>	<b>63,764</b>

**Project Detail and Status:**

This ongoing bituminous hot mix program, which began in 1978, is designed to protect the County's investment in 428 centerline miles, equating to 477 two lane equivalent highway miles of higher-type roads.

The program's focus is to preserve the hot mix roads using a data driven, system-wide decision making approach. Consistent with the New York State Department of Transportation's Forward Four Guiding Principles, a "preservation first" strategy is being implemented as part of this capital plan to keep good hot mix roads in a state of good repair in order to realize a lower-cost preservation cycle, as opposed to using a "worst first" approach.

Pavement ratings and traffic volumes will be used as a basis in the selection of the needed highway work. In addition, the importance of each highway as it relates to the overall transportation system will be considered as well.

## Countywide Funds

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**DEPARTMENT:** TRANSPORTATION

**Project:** Testing, Drainage and Facilities Repair

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Ongoing

**Project Description:**

This project provides support programs for the Department of Transportation's Annual Work Plan.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Pay as You Go	753	154	800	810	830	840	840	4,274	5,027
Borrowing to be Authorized		500						500	500
<b>TOTALS</b>	<b>753</b>	<b>654</b>	<b>800</b>	<b>810</b>	<b>830</b>	<b>840</b>	<b>840</b>	<b>4,774</b>	<b>5,527</b>

**Project Detail and Status:**

The Department of Transportation operates and maintains ongoing Testing, Drainage and Facilities Repair programs to support our Annual Highway Work Plan and maintain the County highway system in a safe, acceptable and reliable condition. The testing program provides funds to continue our Pavement Management System, allowing us to prepare and prioritize our highways for Hot and Cold Mix Paving and Surface Treatment applications. The drainage project covers drainage repairs that need to be made in advance of the maintenance paving programs in order to perform these operations in a cost effective manner. The facilities repair project allows us to make repairs and perform maintenance to our four maintenance facilities not provided for in the annual budget.

## Countywide Funds

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**DEPARTMENT:** TRANSPORTATION

**Project:** Traffic Systems Management

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Ongoing

**Project Description:**

This program addresses Traffic System improvements on County highways.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized		250	320	330	330	340	340	1,910	1,910
Authorized Borrowing	320							0	320
<b>TOTALS</b>	<b>320</b>	<b>250</b>	<b>320</b>	<b>330</b>	<b>330</b>	<b>340</b>	<b>340</b>	<b>1,910</b>	<b>2,230</b>

**Project Detail and Status:**

This program provides funds to upgrade various County highway intersections to improve traffic flow and safety. Highway capacity and safety can be increased at minimal cost on many County roads through intersection improvements. These projects are identified through our ongoing traffic count program, or through the use of the Accident Location Information System (ALIS). Types of work included in this classification are:

- Traffic signal installation or modification.
- Addition of turning lanes at an intersection.
- Complete intersection reconstruction including signals, adequate lanes, paving, striping, roadside hazard elimination, etc.

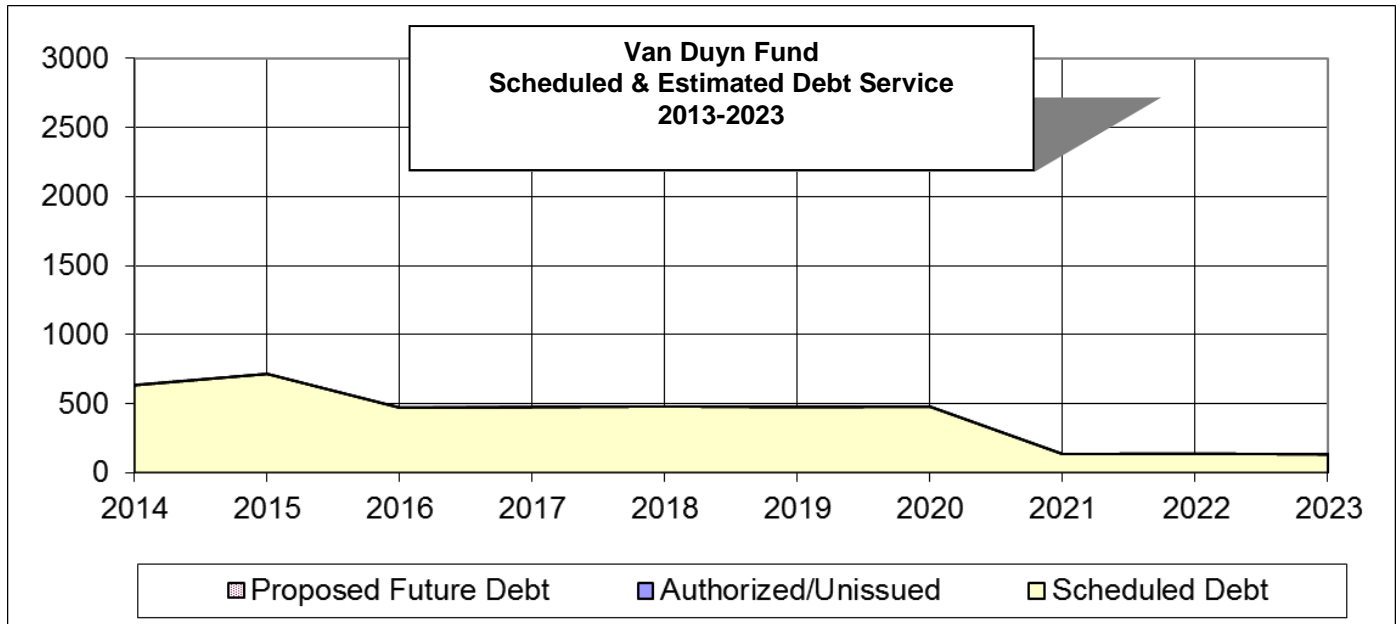
The Department is constantly working to acquire Federal and State funds to supplement this program.

## SPECIAL FUNDS

This section presents proposed and authorized projects in the special funds category. Those funds are the Van Duyn Fund, and the special district funds, which include the Water Fund and the Sewer Fund. The operations in Water and Sewer funds are financed in whole by the revenues in those funds, including the financing of capital projects. A brief description of each fund and its operational purpose, as well as the capital project activity and financing information follows.

### Van Duyn Extended Care Fund

For the CIP 2018-2023 there are no proposed capital projects under Van Duyn Fund. There is only some scheduled debt that is left to be paid and will be paid by 2023



*Special Funds*

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**Van Duyn Fund  
Debt Service Summary**

Payments in (\$000's)

	2013	2014	2015	2016	2017	2018	2019	2020
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	554	634	716	473	475	481	475	479
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>554</b>	<b>634</b>	<b>716</b>	<b>473</b>	<b>475</b>	<b>481</b>	<b>475</b>	<b>479</b>

	2021	2022	2023	2024	2025	2026	2027	2028
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	136	140	133	0	0	0	0	0
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>136</b>	<b>140</b>	<b>133</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	2029	2030	2031	2032	2033	2034	2035	2036
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	0	0	0	0	0	0	0	0
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

	2037	2038	2039	2040	2041	2042	2043	TOTAL
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	0	0	0	0	0	0	0	1,844
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,844</b>

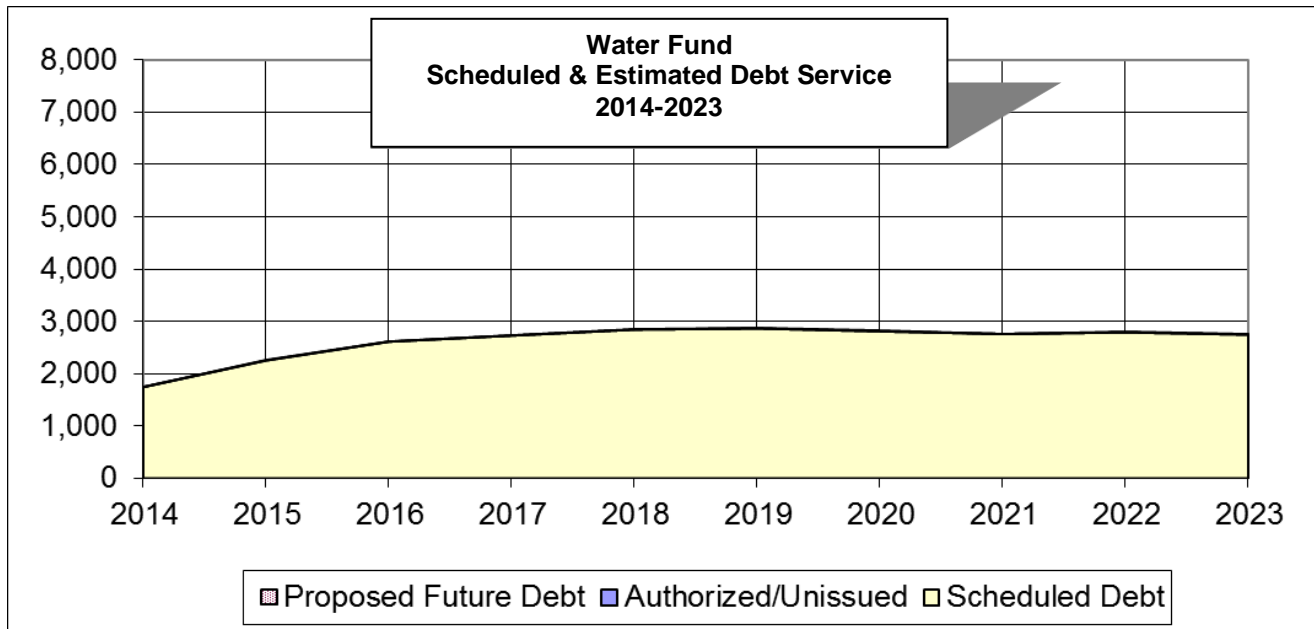
## Special Districts

Special districts have been created in Onondaga County to provide water and sewer services for the residents of the districts. These districts have the authority to assess the users for the cost of operations, maintenance and capital projects to maintain the integrity of the operations. Separate funds were created to account for the activities of each district.

### Water Fund

The Metropolitan Water Board (MWB) is the administrative body of the Onondaga County Water District (OCWD). Until January 1, 2017, MWB was responsible for operating and maintaining the wholesale drinking water systems and infrastructure from Lake Ontario to the Central New York region, both within and outside of Onondaga County. On January 1, 2017, Onondaga County entered into a Cooperation Agreement with Onondaga County Water Authority (OCWA), which now leases and operate the assets of the OCWD. OCWA is a public benefits corporation under New York State law and was the primary customer of MWB. All MWB employees were transferred to OCWA in accordance with the agreement. Under OCWA, the region continues to be served primarily from Ontario and Otisco Lakes, with a consolidated mission of providing clean, safe, reliable, sustainable, and cost-efficient wholesale drinking water to the Central New York region for public health and economic development benefits, as well as emergency fire response. OCWA currently provides water to homes and industry, hospitals and schools, located in forty municipalities in Onondaga, Oswego, Madison, Oneida and Cayuga counties.

Existing Water Fund debt service will continue to be the responsibility of Onondaga County and revenues used for such debt service will be collected by the County through the Water District's ad valorem assessment, with the remaining funds needed to support existing debt service to be received from OCWA under the Cooperation Agreement. All future maintenance expenditures and capital projects will be funded by OCWA for the 30-year term of the agreement.



*Special Funds*

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**Water Fund  
Debt Service Summary**

Payments in (\$000's)

	2013	2014	2015	2016	2017	2018	2019	2020
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	616	1,746	2,253	2,613	2,729	2,844	2,866	2,810
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>616</b>	<b>1,746</b>	<b>2,253</b>	<b>2,613</b>	<b>2,729</b>	<b>2,844</b>	<b>2,866</b>	<b>2,810</b>

	2021	2022	2023	2024	2025	2026	2027	2028
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	2,760	2,791	2,747	2,711	2,591	2,587	2,338	2,307
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>2,760</b>	<b>2,791</b>	<b>2,747</b>	<b>2,711</b>	<b>2,591</b>	<b>2,587</b>	<b>2,338</b>	<b>2,307</b>

	2029	2030	2031	2032	2033	2034	2035	2036
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	2,339	2,258	2,246	2,196	2,179	1,250	1,001	616
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>2,339</b>	<b>2,258</b>	<b>2,246</b>	<b>2,196</b>	<b>2,179</b>	<b>1,250</b>	<b>1,001</b>	<b>616</b>

	2037	2038	2039	2040	2041	2042	2043	TOTAL
<b>Principal &amp; Interest <u>Scheduled Debt</u></b>	534	0	0	0	0	0	0	43,971
<b><u>Estimated Debt</u></b>								
<i>Authorized &amp; Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
<b>Total</b>	<b>534</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>43,971</b>

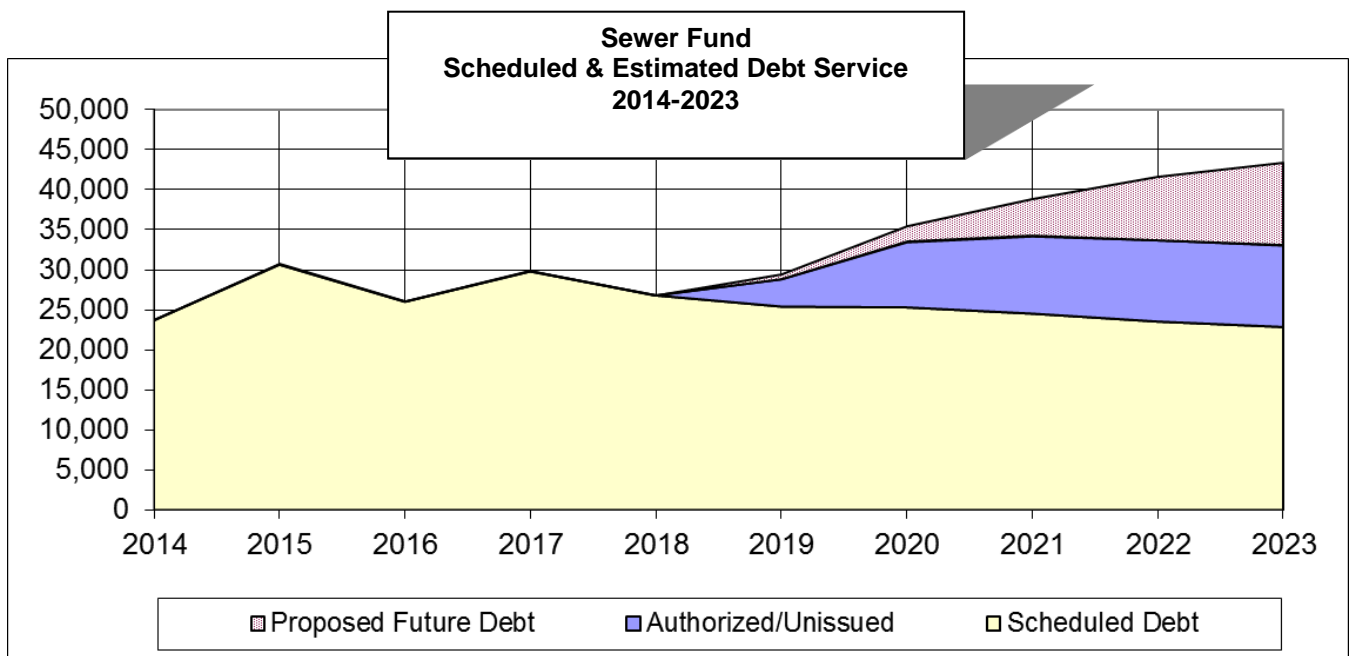


## Sewer Fund

The County Legislature established the Onondaga County Consolidated Sanitary District in 1978 by consolidating all the various sanitary districts within Onondaga County. They established a sewer rent schedule to defray all costs of operation, maintenance, indebtedness, and all other obligations of the Water Environment Protection operations to be allocated on the basis of unit charges. The commercial/industrial and institutional property units are based on one hundred forty thousand gallons of water use per unit.

The Department of Water Environment Protection also operates and maintains flood control facilities within four special drainage districts: Bear Trap-Ley Creek; Bloody Brook; Harbor Brook and Meadowbrook. The special districts were created in order to address flooding problems that crossed multi-municipal boundaries. Taxable properties within each of the districts are assessed a drainage district tax for operations and maintenance, plus debt service.

Current and proposed future debt service obligations for the Department of Water Environment Protection are shown in the graph and the debt service summary on the next page.



*Special Funds*

**Sewer Funds  
Debt Service Summary**

Payments in (\$000's)

	2013	2014	2015	2016	2017	2018	2019	2020
<b>Principal &amp; Interest Scheduled Debt</b>	20,981	23,703	30,644	26,008	29,794	26,802	25,411	25,311
<b>Estimated Debt Authorized &amp; Unissued</b>	0	0	0	0	0		3,396	8,112
<b>Proposed Future Debt</b>	0	0	0	0	0	0	636	2,049
<b>Total</b>	<b>20,981</b>	<b>23,703</b>	<b>30,644</b>	<b>26,008</b>	<b>29,794</b>	<b>26,802</b>	<b>29,443</b>	<b>35,472</b>

	2021	2022	2023	2024	2025	2026	2027	2028
<b>Principal &amp; Interest Scheduled Debt</b>	24,524	23,538	22,854	22,126	19,749	19,193	18,094	16,550
<b>Estimated Debt Authorized &amp; Unissued</b>	9,639	10,143	10,169	9,981	9,943	9,914	9,914	9,914
<b>Proposed Future Debt</b>	4,543	7,830	10,305	12,147	12,679	12,369	12,057	11,745
<b>Total</b>	<b>38,706</b>	<b>41,511</b>	<b>43,328</b>	<b>44,254</b>	<b>42,371</b>	<b>41,476</b>	<b>40,065</b>	<b>38,209</b>

	2029	2030	2031	2032	2033	2034	2035	2036
<b>Principal &amp; Interest Scheduled Debt</b>	15,531	15,178	14,136	13,062	12,276	11,252	10,344	9,196
<b>Estimated Debt Authorized &amp; Unissued</b>	9,914	9,914	9,914	9,914	9,914	9,842	9,801	9,801
<b>Proposed Future Debt</b>	11,435	11,123	10,813	10,100	9,405	8,727	8,064	7,816
<b>Total</b>	<b>36,880</b>	<b>36,215</b>	<b>34,863</b>	<b>33,076</b>	<b>31,595</b>	<b>29,821</b>	<b>28,209</b>	<b>26,813</b>

	2037	2038	2039	2040	2041	2042	2043	TOTAL
<b>Principal &amp; Interest Scheduled Debt</b>	6,350	5,553	5,495	5,464	5,410	5,350	0	<b>378,749</b>
<b>Estimated Debt Authorized &amp; Unissued</b>	9,801	9,801	2,952	939	49	0	0	<b>193,681</b>
<b>Proposed Future Debt</b>	7,568	7,321	7,075	6,297	5,160	3,529	1,797	<b>202,590</b>
<b>Total</b>	<b>23,719</b>	<b>22,675</b>	<b>15,522</b>	<b>12,700</b>	<b>10,619</b>	<b>8,879</b>	<b>1,797</b>	<b>775,020</b>

## **AUTHORIZED PROJECTS**

### **METROPOLITAN WATER BOARD**

#### **Comprehensive Asset Renewal and Energy (CARE) Program**

Project            On-going

This project addresses the need to replace aging infrastructure with innovative, integrated process and technology solutions that will reduce energy consumption and improve operational efficiency. The original equipment motors, pumps, drives and controls within the Raw Water, Clear Water and Farrell Pump Stations are predominately original 1960's equipment - approaching forty-five years of operation - with fixed-speed operability and limited automation. As part of Onondaga County's 2005 energy performance contract with Carrier Corporation, it was determined that 1,052,600 kilowatt hours of energy could be saved annually by replacing four of twelve units with variable frequency drives. The current Energy Efficiency and Conservation Block Grant Assessment being performed by Johnson Controls Incorporated (JCI) recommends a broader scope of work with additional operational and energy savings. These pump stations are an integrated system and the exclusive means of conveying water from the Lake Ontario intake to the water storage facilities for the region.

This is a design-build project in accordance with New York State Energy Law. Technical Memoranda Describing the Basis of Design has been completed and reviewed. Final design, procurement and installation will be completed in 2017.

#### **Water Treatment Plant Comprehensive Improvements**

Project            On-going

Existing Water Treatment Plant facilities/infrastructure are now nearing fifty years old, have received minimal capital investment since their construction and do not operate at contemporary levels of energy or operational efficiency. A comprehensive condition and program assessment was completed in 2014 to develop and identify the scope of improvements and provide cost estimates for the project. The assessment evaluated both building facility improvements, such as roofing, HVAC, and electrical systems as well as filtration and treatment process improvements, including filter beds, piping and valves, process controls, data collection and reporting, etc. These improvements will provide energy savings, improve physical conditions of the plant building and infrastructure, and will update and improve water quality. In accordance with the 2014 assessment, design and construction of Phase 1 was completed in 2016. This initial work included Water Treatment Campus (Oswego) exterior security improvements and roof replacements.

Design and construction of the remaining phases of work will advance under the Onondaga County Water Authority (OCWA) as the result of the consolidation of MWB operations and lease of County-owned infrastructure, with/to OCWA effective January 1, 2017. Funds to complete the architectural and engineering design as well as for the Phase 1 construction of the project were approved December 2015. The design and construction of the next phases will continue under OCWA funding and supervision.

### **WATER ENVIRONMENT PROTECTION**

#### **Bear Trap - Ley Creek North Midler Culvert Repair Project (NEW)**

Project            On-going

This project consists of rehabilitation of a portion of the North Midler Avenue culvert that conveys storm water in the Town of Dewitt. The 130' linear foot concrete box culvert is over 60 years old and has experienced a sinkhole in the roadway. The concrete box culvert is in fair condition considering the age, however the roadway and exposed reinforcing bar needs address to continue the expected level of service. The culvert is in a unique location under a low rail crossing.

Project Attributes include the following:

- Rehabilitates aging infrastructure to maintain flood protection.
- Provides rehabilitation based on greatest need and critical areas.
- Most efficient and cost effective project for the Bear Trap Ley Creek Drainage District.

## *Special Funds*

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### **Harbor Brook Miscellaneous Culvert and Channel Improvements (NEW)**

Project            On-going

This project consists of rehabilitation of the covered portion of Harbor Brook constructed in 1905 beginning at Delaware and Amy Street ending at State Fair Boulevard. The 6600' linear foot covered portion of Harbor Brook is over 110 years old and has far exceeded the expected service life. The concrete box culvert is in very poor condition. It is proposed that the County utilize a term services contract for pneumatically applied concrete to complete the rehabilitation over a 5-10 year period.

Project Attributes include the following:

- Rehabilitates aging infrastructure to maintain flood protection.
- Provides rehabilitation based on greatest need and critical areas.
- Most efficient and cost effective project for the Harbor Brook Drainage District.

### **Hiawatha Trunk Sewer Service Area Improvement Project**

Project            On-going

The Hiawatha Trunk Sewer was installed by the City of Syracuse in the late 1920's and ownership was transferred to Onondaga County in the early 1970's. The original sewer was installed to provide service to the factories, businesses and homes located Inner Harbor area. The Hiawatha Trunk Sewer consists of approximately 4,600 linear feet of reinforced concrete sewer pipe ranging from 33 to 36 inch in diameter. This project will progress to provide adequate sewage service to the businesses and residences that are constructed as part of COR Inner Harbor Development, Destiny USA expansion and other economic development projects located in Syracuse New York. This infrastructure is a vital part of the revitalization of the Inner Harbor and north side of Syracuse.

Project was authorized on 12/02/2014 by the County Legislature. Grant funding in the amount of \$960,000 was awarded to Onondaga County by New York State Empire State Development in December of 2014. In February 2015, the County Legislature authorized acceptance of grant funds.

\$4.8 million was authorized for construction spending. Approximately \$2-3 million dollars were spent in 2015 rehabilitating the Hiawatha Trunk Sewer using trenchless technology using the contractor selected under the blanket contract for these services. The sewer lining portion of the project was completed in November of 2015. We received authorization to proceed from Empire State Development to qualify for the grant funding.

The remaining project balance will be used to construct the sanitary sewer force main over the NYS Barge.

### **Ley Creek Pump Station**

Project            On-going

This project includes upgrades to the pump and control systems at the facility. The engineering investigation evaluated the most efficient and sustainable pumping configuration for the facility. Additional items that were evaluated and identified for replacement and/or rehabilitation include:

Pumps and motors  
VFDs and pump controls  
Substation and Electrical Upgrades  
Flood Protection  
Mechanicals  
HVAC/Boiler Replacement  
Water Service  
Miscellaneous Building Repair  
Health and Safety/Security Upgrades  
Fencing and paving

Project has been bid and awarded. Notice to proceed has been issued to the 4 prime contractors:

- CO Falter - General
- Patricia Electric - Electrical
- Syracusa Mechanical - plumbing
- King and King Mechanical - HVAC

## *Special Funds*

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Project construction is roughly 50% complete. As of 4/30/2016 approximately 2.6 million dollars have been expended which is roughly 50% of the construction budget. The project may need to be extended due to the long lead time required pump rehabilitation. The pump vendor is not meeting the schedules that they provided during design. It appears that the time required to rehabilitate the pumps is twice as long as projected.

Project will be completed by August 2017.

### **Meadowbrook-Limestone WWTP Disinfection System and Collection**

Project            On-going

Bonding authorized the construction of various improvements to the Meadowbrook Limestone WWTP in order to meet new NYSDEC SPDES permit limits which are effective May 2018. Additionally, the project includes needed improvements to replace aging equipment, improve control and security systems, and maintain building infrastructure at the wastewater treatment plant. The main improvements include the following:

1. Upgrade to the clarifiers to replace the mechanisms, and concrete repair.
2. Improvements to the existing clarifier tank drains.
3. Replacement of the existing scum pumps.
4. Replacement of the existing coagulant feed system.
5. Upgrades to the polymer feed system.
6. Installation of a fiber optic network for control.
7. Supervisory control and data acquisition (SCADA) system control improvements.
8. Unit heater replacements.
9. Implementation of security improvements.
10. Building roof replacements.
11. Replacement of Influent Building make-up air unit.
12. Replacement of electrical transformers.
13. Other necessary improvements.

Bonding resolution #17018A of March 2017, issued for \$11,725,000, is for construction. The construction project was advertised in April 2017. Construction is expected to start in June of 2017 and be completed in August 2018. As of April 2017, no construction monies have been spent.

### **Metro WWTP (002) Bypass Treatment**

Project            On-going

On March 21, 2012, the Onondaga County Department of Water Environment Protection's (WEP) State Pollutant Discharge Elimination System (SPDES) Permit renewal for the Metropolitan Syracuse Wastewater Treatment Plant (Metro WWTP) took effect. The permit includes new fecal coliform bacteria and total residual chlorine limits for the plant's secondary treatment bypass discharge outfall (Outfall 002). WEP must comply with these limits commencing on April 1, 2017. In addition, a SPDES Permit revision issued on June 4, 2014 includes requirements to disinfect tertiary treatment bypasses (designated as Outfall 001A). The existing infrastructure is inadequate to meet those new limits. To that end, this project will provide for larger process tankage and chemical systems with more capacity such that the applicable NYSDEC SPDES effluent limits can be met.

Bonding of \$20,200,000 was authorized in December 2012. Final design was completed in May 2015. Additional bonding, in the amount of \$5,627,294, was approved in June 2015, due to increased anticipated construction costs (resolution #100). Construction began in September 2015. The new treatment system was put into operation by April 1, 2017. Final construction closeout, including site restoration, is expected to be completed in 2017. As of April 2017, approximately \$17.7 million has been spent on this

### **Metro WWTP Grit Handling Improvements**

Project            Completed

Project authorization allows for the construction of various improvements to Metro's Existing and New Screen & Grit buildings' grit handling equipment. The project includes installation of new screen rakes for Existing Screen & Grit Building, installation of a new divider wall for the New Screen & Grit Building, installations of turbo-type blowers, and other various associated equipment and mechanicals. This project will improve the operational efficiency and performance of grit collection and treatment.

## *Special Funds*

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Bonding of \$5,600,000 was authorized in October 2011. As of April 2017, approximately \$5.2 million of total project monies have been spent. The last project component, system optimization, was completed in March 2017.

### **Metro WWTP Phosphorus Treatment System Optimization**

Project            On-going

Bonding authorized the engineering and construction of improvements to the Metropolitan Wastewater Treatment Plant's phosphorus treatment system. This project is the result of a phosphorus treatment optimization analysis required by the Amended Consent Judgment (ACJ) to ensure the continuation of high level of phosphorus treatment at the Metro facility. The modifications included in the project will promote conditions that lead to improved treatment performance and reliability, thus meeting the regulatory goals for phosphorus loads entering Onondaga Lake. Specifically, the following improvements will be made to Metro's phosphorus treatment system:

- Addition of a polyaluminum chloride feed system.
- Replacement of the existing ferric chloride feed system.
- Installation of new baffles in high rate flocculated settling (HRFS) influent boxes.
- Replacement of slide gates.
- Replacement HRFS sludge piping.
- Installation of an isolation wall in cross channel.
- Replacement flow meters.
- Modify programmable logic controller (PLC) and supervisory control and data acquisition. (SCADA) systems.
- Replacement of ultraviolet system control weir.
- Miscellaneous structural rehabilitation.

Bond resolution #223 of December 2012, for \$2.84 million, was for engineering design of phosphorus treatment system improvements at the Metro Wastewater Treatment Plant.

Bonding resolution #BR17016A of March 2017, for \$21.355 million, was for construction.

Construction is anticipated to start circa September 2017 and be completed in April 2019. As of April 2017, approximately \$600,000 has been spent on this project.

### **Metro WWTP Primary and Thickener Pump Replacement**

Project            Completed

The purpose of this project is to replace primary sludge pumps, thickener pumps, install sludge macerators, flowmeters, and other ancillary system improvements at the Metro Wastewater Treatment Plant. Bonding of \$3,500,000 was authorized in December 2012. As of April 2017, approximately \$2.4 million of total project monies have been spent. This construction project was completed in late 2016.

### **Oak Orchard Facilities Improvement**

Project            On-going

Project authorization provides for the construction of various infrastructure improvements/rehabilitation to the Oak Orchard Wastewater Treatment Plant including: replacement of existing influent screen rakes; installation of new primary clarification equipment; HVAC replacement; grit aeration blowers; grit handling equipment; building improvements; and other asset renewal measures.

Bonding was procured in October of 2011 for \$12,405,000 for construction. The project consists of two construction components: infrastructure rehabilitation and administration building rehabilitation. Construction is largely completed for both project components; final construction closeout is scheduled to be completed circa July 2017. As of April 2017, approximately \$9.2 million has been spent on this project.

### **Oneida Lake PS**

Project            On-going

The goal of this project is to evaluate and perform rehabilitation/upgrades to the Oneida Lake Pump Stations and associated sewer force mains, including Harbor Village, Long Point, Maple Bay, Muskrat Bay, Polar Beach, Shepard Point, and South Bay. The project is near the 95% design stage and it is expected that bidding and project construction would take place in late 2016 or early 2017. In June 7, 2016 the County Legislature authorized \$8,120,000 in bonding for construction of this project.

## *Special Funds*

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Approximately \$400,000 of the \$10.12 million dollar budget has been expended. No construction dollars have been spent as of 4/28/2017. Bids were received on 2/02/2017. Bids appear to be favorable. Project construction should begin in May

### **Onondaga Lake Improvement Project**

Project            On-going

This project results from the settlement of suits brought by Atlantic States Legal Foundation (ASLF) and the State of New York. The County, ASLF and New York State signed the agreement in August and September 1997. On January 20, 1998, the District Federal Court signed the order. This court order is referred to as the Amended Consent Judgment, or ACJ. The ACJ ordered improvement to the Metro Wastewater Treatment Plant (WWTP), CSO abatement facilities, and water quality monitoring over the twenty years ACJ was estimated to cost \$695 million (in today's dollars). The fourth stipulation of the ACJ was effected in November of 2009.

The Amended Consent Judgment (ACJ) and associated stipulations include several components or categories:

- Interim capital improvement projects at Metro WWTP
- Major capital projects at the Metro WWTP
- Interim Combined Sewer Overflow (CSO) abatement projects
- Major Combined Sewer Overflow (CSO) abatement projects
- Separation of combined sewers in specified areas
- Water quality monitoring of the lake, tributaries and Seneca River (non-capital)
- Green Infrastructure projects for CSO abatement.

The following projects are complete:

- Aeration System Upgrade (7/1/98-1/15/00 for \$6.9M)
- Ammonia Removal Demolition (6/1/98-12/31/99 for \$1.3M)
- Digester Mod./Chemical Storage and Feed System Upgrade (11/9/98-10/1/00 for \$5.1M)
- Digital Systems Improvements (5/1/98-6/30/01 for \$3.5M)
- Stage III Ammonia/Stage II Phosphorus Removal (5/1/01-04/30/05 for \$129M)
- Franklin Street FCF (4/30/99-5/1/00 for \$4.9M)
- Hiawatha RTF (10/1/98-12/31/00 for \$9.4M)
- Kirkpatrick Street Pump Station and Force Main (5/15/01-6/30/02 for \$12.6M)
- Teall Brook FCF (5/1/01-4/31/02 for \$1.2M)
- Newell Street RTF/Demolition (8/3/98-3/11/02 for \$.5M)
- Onondaga Creek FCF (5/1/01-7/31/02 for \$.7M)
- West Street Sewer Separation (5/1/99-12/15/99 for \$2.7M)
- Erie Boulevard Storage (3/1/01-7/31/02 for \$2.7M)
- Biosolids Handling Improvements (1/1/04-6/30/07 for \$14.8M)
- Harbor Brook In-stream FCF (10/31/00-7/31/02 for \$.9M)
- Advanced Phosphorous Removal Pilot phase I, II & III (2/1/00 for \$4.1M)
- Clinton Storage
- Lower Harbor Brook Conveyances and Storage
- Sewer Separation 022/045
- Midland 044 Conveyances.

Projects still in progress include:

- Metro WWTP Phosphorus Optimization

Metro WWTP Phosphorus Optimization:

In accordance with the ACJ 4th Stipulation, Phosphorus Work plan and Optimization reports have been completed for the Metro WWTP. The work plan has been approved by the NYSDEC; no further capital work is projected. The NYSDEC has also approved the Metro WWTP Phosphorus Treatment Optimization report. That report identified a number of infrastructure improvements needed to ensure continued and consistent compliance with Metro's SPDES phosphorus limits. Improvements include: installation of two new isolation gates and dividing wall to isolate the north and south biological aerated filter cells; chemical addition and mixing; replacement of various gates; and other associated treatment system improvements. The final design of those improvement was approved by the New York State Department of Environmental Conservation in April 2017. Construction is anticipated to start circa September 2017 and be completed in April 2019.

## *Special Funds*

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Midland Avenue Conveyances and RTF, Storage and Green Infrastructure (5/01/00-12/31/18 for \$131.9M)

- This project was completely authorized in October 2016.
- The following CSO's have been evaluated in a facilities plan to determine how best to abate their overflows: 060/077 (West Colvin) and 052 (Hunt and Elmhurst). The remaining CSO's 076 (Brighton and Midland), and 067 (West Newell) will be abated by using green infrastructure, implementing floatable control (where warranted), monitoring and eventual closure. Green infrastructure will be implemented where appropriate throughout the Midland sewer shed to reduce the volume of storm water entering the combined sewer system.

Sewer Separation Continuous (1/1/12 for \$27.7M – Ongoing)

- This project was completely authorized in July 2010.
- In 2016, a green scope was added to this project and will continue through 12/31/18.

Clinton CSO Abatement and Green Infrastructure (5/1/04-12/31/18 for \$185.5M – Ongoing)

- This project was completely authorized in December 2013.
- Construction of a new 6.5 million gallon storage facility in the Trolley Lot located near Armory Square has been completed. The facility collects all CSO discharges from the Clinton sewer shed with the exception of 027 (West Fayette), and CSO 029 (Walton St.). The remaining CSO's were evaluated in a facilities plan to determine how best to abate their overflows. Green infrastructure will be implemented where appropriate throughout the Clinton sewer shed to reduce the volume of storm water entering the combined sewer system.

Harbor Brook CSO Abatement Storage & Green Infrastructure (11/18/01-12/31/18 for \$108.5M)

- This project was completely authorized in October 2016.

### **Suburban I/I Reduction - Green and Innovative Improvements**

Project            On-going

Green infrastructure has been recognized as a viable and cost effective alternative for abating infiltration and inflow. Individual green, innovative and other projects will be developed and subsequently authorized by the County Legislature on a per project basis. The projects will focus on municipal (public) installations of green infrastructure such as bioswales, rain gardens, and green streetscapes as well as an innovative project. Green infrastructure and innovative improvement projects will be designed to reduce infiltration and inflow into sanitary sewer systems - in compliance with the recently enacted Capacity Management and Operation and Maintenance (CMOM)/Sewer Use Ordinance (SUO) passed in January 2011.

Projects utilizing green infrastructure will be considered from the following towns and villages:

Towns: Camillus, Cicero, Clay, DeWitt, Geddes, Lysander, Manlius, Onondaga, Pompey, and Salina.

Villages: Baldwinsville, Camillus, East Syracuse, Fayetteville, Liverpool, Manlius, North Syracuse, and Solvay.

It is expected that this project will go on for several years. Project scopes will evolve over time as new green infrastructure technologies are developed and implemented. The Suburban I/I Reduction - Green and Innovative Improvements project has been very successful to date; it is expected that this success will continue for future years.

### **Westside Pumping Station Service Area**

Project            On-going

The funds for this project totaling \$18,150,000 are fully authorized by the county legislature. The goal of this project is to implement conveyance system improvements at Westside Pumping Station and tributary sewer conveyances and pumping facilities in order to reduce extraneous flows (i.e., infiltration and inflow), eliminate sanitary sewer overflows, provide for future capacity and eliminate odors.

Project was released for bid in February 2017. Project bids were received on 04/27/2017. Construction should begin by July 2017.



*Special Funds*

## SPECIAL DISTRICTS PROPOSED PROJECTS SUMMARY

**Special Funds**

Department	STATUS	PROJECT	2018 - 23 Total
<b>Sewer</b>			
WATER ENVIRONMENT PROTECTION			
		Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	26,220
		Brewerton WWTP Asset Renewal Improvements	10,122
		Camillus Force Main Replacement	9,500
		Energy Efficiency Improvements/Performance Contracting	26,000
	<b>new</b>	Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project	17,800
	<b>new</b>	Metropolitan (Metro ) Wastewater Treatment Plant - Phase II Digester Improvements (New)	16,103
		Oak Orchard WWTP Disinfection and Lagoon Cleaning	11,540
		Oak Orchard WWTP Secondary Clarifier Rehabilitation	6,200
		Wastewater Transportation System Improvements	67,844
<b>Sewer Total</b>			<b>\$ 191,329</b>
<b>Special Funds Total</b>			<b>\$ 191,329</b>

## SPECIAL DISTRICTS FUNDING SOURCES

Special Funds	2018	2019	2020	2021	2022	2023	6yr Total
<b>Sewer</b>							
Pay as You Go	6,735	6,990	5,639	5,214	5,142	5,085	<b>34,805</b>
Authorized Borrowing	9,510	5,995	688	572	155		<b>16,920</b>
Borrowing to be Authorized	10,598	18,248	32,795	36,008	22,105	19,850	<b>139,604</b>
<b>Sewer TOTALS</b>	<b>\$26,843</b>	<b>\$31,233</b>	<b>\$39,122</b>	<b>\$41,794</b>	<b>\$27,402</b>	<b>\$24,935</b>	<b>\$191,329</b>

## SPECIAL DISTRICTS ESTIMATED DEBT SERVICE

**Estimated Debt Service**

Payment Schedule (\$ in 000's)

WATER ENVIRONMENT PROTECTION	2018	2019	2020	2021	2022	2023
Ley Creek/Liverpool Force Main	0	30	105	152	176	652
Metropolitan (Metro ) Wastewater Treatment Plant -	0	0	258	773	1,280	1,419
Camillus Force Main Replacement	0	90	255	432	605	654
Oak Orchard WWTP Secondary Clarifier Rehabilitation	0	0	0	180	405	467
Oak Orchard WWTP Disinfection and Lagoon Cleaning	0	478	931	1,023	1,000	977
Brewerton WWTP Asset Renewal Improvements	0	0	304	759	901	881
Energy Efficiency Improvements/Performance Contracting	0	0	0	240	800	1,344
Baldwinsville Seneca Knolls WWTP Disinfection and	0	38	57	503	1,374	1,883
Wastewater Transportation System Improvements	0	0	139	481	1,289	2,028
<b>Department Total</b>	<b>0</b>	<b>636</b>	<b>2,049</b>	<b>4,543</b>	<b>7,830</b>	<b>10,305</b>

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment, Federal/State Mandate

**Level of Development:** Preliminary

**Project Description:**

The Baldwinsville-Seneca Knolls Wastewater Treatment Plant was issued a renewed SPDES Discharge Permit in June 2014 by the New York State Department of Environmental Conservation (NYSDEC) which included modifications to the effluent total residual chlorine (TRC) limit from 2.0 mg/L to 0.08 mg/L. The new TRC permit limits will become effective beginning May 15, 2018. The WWTP currently has no means to dechlorinate the effluent to meet this limit. Therefore, the County initiated this project to design and construct upgrades to the disinfection system which will enable the new TRC limit to be met. Additionally, the plant is over thirty-five years old. Various small and discrete improvements and repairs have been done to the facility as a means of operational enhancements and infrastructure maintenance. However, there is a contemporary need to implement a robust infrastructure renewal project for many of the treatment plant's assets so as to ensure continued satisfactory operation and extend its service life. This project is for Phase II asset renewal improvements.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	364	636		7,457	10,808	3,349		22,250	22,614
Pay as You Go	1,150							0	1,150
Authorized Borrowing	1,230	2,385	620	345	465	155		3,970	5,200
<b>TOTALS</b>	<b>2,744</b>	<b>3,021</b>	<b>620</b>	<b>7,802</b>	<b>11,273</b>	<b>3,504</b>		<b>26,220</b>	<b>28,964</b>

**Project Detail and Status:**

This project provides for an upgrade to the facility's disinfection system so as to comply with new DEC SPDES permit limits. Specifically, additional process tankage and a dechlorination system will be installed downstream of the existing chlorination system, along with ancillary improvements. Engineering design of disinfection has been completed.

Additionally, the project is for the design and construction of what is known as Phase II improvements as identified in the engineering evaluation completed in June 2014 for the facility. The majority of the improvements, largely consisting of asset renewal measures, include the following elements: grit processing equipment, chemical tanks, concrete structures, aeration systems, aerobic digesters, major mechanicals, fire alarm system, code compliance, water supply systems, energy conservation measures, noise abatement, and other necessary asset renewal measures. Asset renewal design to be completed by August 2019; construction start May 2020 and be completed in April 2022.

Legislative approval for \$3.4 million for the engineering design phase of this project was obtained in 2014; for both disinfection and asset renewal design. Bonding for the construction of disinfection improvements project was originally procured in March 2017 (\$1.8 million). Additional bonding is needed for construction costs; it is expected that additional bonding, in the amount \$1 million, will be requested in the summer of 2017. Construction of the disinfection system improvements to start circa September 2017 and be complete by the required SPDES due date.

It is expected that legislative approval will be sought in September 2019 for approximately \$21.6 million in bonding for the asset renewal (construction) portion of this project.

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Brewerton WWTP Asset Renewal Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

The Brewerton Wastewater Treatment Plant (WWTP) is over forty years old. There is a contemporary need to implement a robust infrastructure renewal project for many of the treatment plant's assets so as to ensure continued satisfactory operation and extend its service life. This project is for Phase I improvements. Phase II improvements are in the 10-yr CIP window. Final design and construction will be performed for a variety of infrastructure, energy efficiency, and life safety improvements.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0		5,061	5,061				10,122	10,122
Pay as You Go	1,500							0	1,500
<b>TOTALS</b>	<b>1,500</b>		<b>5,061</b>	<b>5,061</b>				<b>10,122</b>	<b>11,622</b>

**Project Detail and Status:**

An evaluation of the overall infrastructure condition of the Brewerton WWTP was completed in October 2014 which identified necessary repairs, replacement needs, and modifications necessary so that the WWTP maintains compliance with NYSDEC SPDES permit limits and comes into compliance with applicable building and fire codes. Various CIP (5-year) cycles and plans were included in the final report. The project described herein is for Phase I improvements. Phase II improvement recommendations shall be for the 10-year CIP window. This Phase I project will maintain the facility's asset value and reliable operation into the foreseeable future. Ancillary benefits will include energy efficiency gains via installation of modern and more efficient equipment.

The significant components of the current 5-year CIP (Phase I) project recommendations include the following: aeration blower upgrades and relocation; fine bubble aeration diffuser upgrades; electrical upgrades - including equipment controls (PLC) replacement; main distribution switchgear and associated equipment; odor control upgrades - including pump station, raw sewage building and sludge handling; rehabilitation of structural building components; rehabilitation of (MLSS) treatment tanks and channels; rehabilitation of main influent manhole; replacement of plant water piping and hydrant system; control building upgrades; site security improvements - including lighting, fire alarms, building and gate access; and grit chamber improvements.

Final design monies were previously procured for this project. Final design to be completed in early 2018; with construction starting in 2019. It is expected that legislative approval will be sought in September 2018 for approximately \$10.1 million for construction.

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Camillus Force Main Replacement

**Purpose:** Public/Employee Safety/Health, Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

Replacement of a 24 inch diameter 7 mile long wastewater pipeline.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	1,500	2,000	2,000	2,000			7,500	7,500
Authorized Borrowing	0	2,000						2,000	2,000
<b>TOTALS</b>	<b>0</b>	<b>3,500</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>			<b>9,500</b>	<b>9,500</b>

**Project Detail and Status:**

The 7 mile long 24 inch diameter Camillus force main conveys wastewater from the Town of Camillus and Village of Camillus to the Westside pump station located on the shore of Onondaga Lake. The force main has failed several times over the past 4 years releasing raw sewage to the ground and nine mile creek which is a recreational resource in Onondaga County. The length of the force main and the chemical make up of the wastewater has accelerated the degradation of this asset. An internal assessment of the pipe line using "Smart ball" technology indicated numerous pipe line anomalies that may indicate that the pipe line has a high probability of failure. It is anticipated that the pipe line would be replaced with a plastic pipe that would not be susceptible to chemical attack.

In Fall 2017 we intend to seek legislative authorization for \$1,500,000.

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Energy Efficiency Improvements/Performance Contracting

**Purpose:** Reduce Operating Costs/Efficiency, Other

**Level of Development:** Preliminary

**Project Description:**

This project entails working with an energy service company (ESCO, a commercial business providing a broad range of comprehensive energy solutions including designs and implementation of energy savings projects, energy conservation, power generation and energy supply, and risk management) to design and implement various process and infrastructure improvements for energy savings. The project serves to support of the County's effort to pursue sustainability, effect the goals of the County's Climate Action Plan, reduce energy usage, and correspondingly reduce annual operating costs.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0			4,000	4,000	4,000	4,000	16,000	16,000
Authorized Borrowing	300	4,500	5,300	200				10,000	10,300
<b>TOTALS</b>	<b>300</b>	<b>4,500</b>	<b>5,300</b>	<b>4,200</b>	<b>4,000</b>	<b>4,000</b>	<b>4,000</b>	<b>26,000</b>	<b>26,300</b>

**Project Detail and Status:**

In January of 2016, a New York State Energy Research and Development Authority (NYSERDA) Flextech evaluation was completed for WEP wastewater treatment plants. The evaluation identified several different areas of energy saving opportunities, including, improvements to treatment plant aeration systems, pumping systems, heating and ventilation systems, and other measures. After internal analysis of the evaluation results, the department has identified a number of energy conservation measures (ECMs) for implementation - which collectively have paybacks of less than 16 years. This group of ECMs has been classified as Phase I of this energy efficiency project. Bonding in the amount of \$10,300,000 was authorized in April 2016 for the Phase I component. Phase I specifically includes the replacement of aeration blowers, pumps, valves, mixers, HVAC, boiler control systems, and other equipment at select WEP wastewater treatment plants. Phase I is expected to start circa August 2017 and be completed in February 2020.

Phase II of this project, consisting of additional energy efficiency ECMs, is expected to be begin in 2020 and be completed in 2023.

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project (NEW)

**Purpose:** Maintain Existing Investment, Federal/State Mandate

**Level of Development:** Preliminary

**Project Description:**

Rehabilitation/Replacement of the Ley Creek 42-inch wastewater force main and the Liverpool 18-inch wastewater force main. Both force mains have exceeded the expected service life and have resulted in costly emergency repairs and additional regulatory scrutiny.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	0	500	1,000	300	300	7,850	7,850	17,800	17,800
<b>TOTALS</b>	<b>0</b>	<b>500</b>	<b>1,000</b>	<b>300</b>	<b>300</b>	<b>7,850</b>	<b>7,850</b>	<b>17,800</b>	<b>17,800</b>

**Project Detail and Status:**

The 42-inch diameter Ley Creek force main is approximately 11,900 feet long (approx. 2.25 miles) and was constructed in 1967. The 18-inch diameter Liverpool force main is approximately 17,500 feet long (approx. 3.30 miles) and was constructed in 1960. These pipelines serve nearly the entire eastern portion of Onondaga County and support many of the industrial and commercial entities. The expected service life of a pre-stressed concrete pipe is approximated at 50 years and these pipelines have reached or exceeded their expected service life and need to be replaced or rehabilitated. The Ley Creek force main has failed 3 times in the past 5 years and the Liverpool force main has experienced several significant failures over the past several decades releasing raw sewage into the environment.

A consulting engineer will investigate multiple options for replacement or rehabilitation. The investigation will also include evaluation of capacity for future need, land acquisition and the most robust pipe design for the longest service life.

In Fall 2017 we intend to seek legislative authorization for \$2,300,000.

## Special Funds

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Metropolitan (Metro ) Wastewater Treatment Plant - Phase II Digester Improvements (NEW)

**Purpose:** Maintain Existing Investment

**Level of Development:** Preliminary

**Project Description:**

The Metro WWTP Digester facility was constructed circa 1959 and consists of three primary digesters, one secondary digester with floating cover, and a Digester Control House. Various improvements have been implemented over the years; the most recent improvement, known as Phase I improvements, was completed in 2012. The department is now pursuing Phase II improvements.

**Project Cost Summary:**

FUNDING SOURCE:	Pre-2018	2018	2019	2020	2021	2022	2023	6yr Total	Total:
Pay as You Go	1,720							0	1,720
Borrowing to be Authorized	0		4,294	6,441	5,368			16,103	16,103
<b>TOTALS</b>	<b>1,720</b>		<b>4,294</b>	<b>6,441</b>	<b>5,368</b>			<b>16,103</b>	<b>17,823</b>

**Project Detail and Status:**

The Metro WWTP Digester facility plays a vital role in the processing of biosolids as part of the wastewater treatment process; serving to reduce the amount of biosolids that needs to be disposed of. A byproduct of anaerobic digestion is biogas (mostly methane). Biogas at the Metro WWTP is used for fueling boilers, generating electricity (cogeneration), or is flared. The Metro Digester facility includes three (3) primary anaerobic digesters, each with a volume of 1.8 million gallons, and one (1) secondary anaerobic digester with a floating cover (which stores the biogas produced in the primary digesters). The four (4) digesters are oriented around a central Digester Control House (DCH).

In an effort to maintain the digesters and ensure they are operating efficiently as possible, the four (4) digesters are currently scheduled for cleaning at five (5) to seven (7) year intervals. During the last cleaning conducted between the years 2007 through 2012, an engineering consultant prepared an infrastructure evaluation report providing recommendations for immediate improvements and phased rehabilitation. The report was based on the present condition of each asset, the relative importance of that asset in maintaining proper digester function, and its remaining useful life. Any items considered "poor" were replaced or rehabilitated during Phase I when the digesters were offline for cleaning. The engineering consultant also included a list of future Phase II improvements (items to be replaced within the next 5 to 10 years). Phase II improvements serve as asset renewal and operational efficiency measures in accordance with the department's mission, vision, and asset management program.

The main elements of Phase II improvements include the following.

- Cleaning of all four digesters.
- New fixed cover and mixing system for digester #4.
- New gas bubble(s) storage system for methane gas.
- Replacement of the three (3) sludge heat exchangers.
- Replacement of three (3) sludge recirculation pumps.
- Replacement of three (3) hot water heat exchangers along with associated insulation.
- Replacement of the three (3) digester waste gas burner systems based on new configuration of Digester No. 4 and new gas storage system.
- Replacement of the five (5) gas compressors which supply biogas for the Cannon mixer system.
- Replacement of the current sludge transfer system.
- Replacement of various valves, pumps, and piping.
- Replacement of the gas flaring system.
- Replacement of the insulation and siding on all four digesters.
- Repair of all cracked and spalled concrete pilasters and other concrete repairs.
- Replacement/repair of outside skirting.
- Recoating of the interior roof and walls of the digester.
- Other Phase II elements identified in the noted engineering report.

Design of Phase II improvements is currently underway and is expected to be completed circa May 2018. Construction is anticipated to start in early 2019.

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Oak Orchard WWTP Disinfection and Lagoon Cleaning

**Purpose:** Maintain Existing Investment, Federal/State Mandate

**Level of Development:** Advanced

**Project Description:**

The Oak Orchard Wastewater Treatment Plant was issued a New York State Pollutant Discharge Elimination System (SPDES) permit in June 2014 which contained more restrictive disinfection limits in terms of allowable chlorine residual. The existing infrastructure is inadequate to meet those new limits. Consequently, new and additional process tankage and chemical treatment systems will be installed to meet those new limits. In addition, cleaning and improvements are necessary for the onsite lagoons so as to ensure SPDES compliance and continued satisfactory plant operations.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Pay as You Go	1,300							0	1,300
Borrowing to be Authorized	0	7,962	3,578					11,540	11,540
<b>TOTALS</b>	<b>1,300</b>	<b>7,962</b>	<b>3,578</b>					<b>11,540</b>	<b>12,840</b>

**Project Detail and Status:**

The OOWWTP was issued a renewed NYS State Pollutant Discharge Elimination System (SPDES) Discharge Permit in June 2014 by the New York State Department of Environmental Conservation (NYSDEC).

The new SPDES permit for the OOWWTP included modifications to the effluent total residual chlorine (TRC) limit from 0.35 mg/L to 0.045 mg/L. The new TRC permit limit will become effective beginning November 1, 2018. Chlorination is currently used at the OO WWTP for disinfection.

The OOWWTP currently has no means to de-chlorinate the effluent to meet this new permit limit. Therefore, OCDWEP initiated this project to design and construct upgrades to the disinfection system which will enable the new TRC limit to be met. Specifically, the following improvements are planned for this project.

- Construction of a new dechlorination tank adjacent to existing chlorine contact tank (35' L x 12' W).
- Installation of new sodium bisulfite chemical storage feed systems and associated appurtenances.
- Installation of a new sodium bisulfite induction and mixing system.
- Replacement of sodium hypochlorite storage feed system and associated appurtenances.
- Installation of a new sodium hypochlorite induction and mixing system.
- Dredging of lagoons 1 and 2.
- Repair of cracks, spall of concrete on existing chlorine contact tank.
- Rehabilitation of exterior chlorine contact tank surfaces with application of liner/coating system.
- Install replacement influent chlorine contact tank sluice gates with motorized operators.
- Installation of new stainless steel weirs and weir supports.
- Install an effluent flow monitoring station with flow pacing for disinfection/dechlor chemicals.
- Replacement of all exterior doors, including overhead door of the Chlorine Building.
- Rehabilitate Lagoon Bypass Structure No. 2, addition of motor operated sluice gates.
- Improvements to dewatering pump station, replacement of valves, pumps, electrical.
- Replacement of the Chlorine Building roof.
- Provide for chemical flow pacing of sodium bisulfite and sodium hypochlorite.
- Improvements to SCADA system and replacement of existing PLC-3 panel.
- Replace both tepid eyewash and deluge shower stations.
- Other ancillary improvements.

Final design to be completed in 2017; construction to start in early 2018. It is expected that legislative approval will be sought in September 2017 for approximately \$11.54 million for construction.



## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Oak Orchard WWTP Secondary Clarifier Rehabilitation

**Purpose:** Maintain Existing Investment

**Level of Development:** Advanced

**Project Description:**

The Oak Orchard Wastewater Treatment Plant (WWTP) has been in operation since 1980. The secondary clarifiers, critical to the successful operation of the plant, are original to the plant and have been identified for replacement.

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Authorized Borrowing	0	625	75	143	107			950	950
Borrowing to be Authorized	0			2,993	2,257			5,250	5,250
<b>TOTALS</b>	<b>0</b>	<b>625</b>	<b>75</b>	<b>3,136</b>	<b>2,364</b>			<b>6,200</b>	<b>6,200</b>

**Project Detail and Status:**

This project is the continuation of asset renewal efforts being performed at the OOWWTP. The OOWWTP secondary clarifier infrastructure is original to the circa 1980 plant. This vital portion of the facility provides solids removal in compliance with NYSDEC SPDES permit requirements. Major components of the mechanical and electrical systems are at the end of their useful life and are in need of replacement. Associated improvements include concrete rehabilitation within the clarifiers and adjoining tanks. As the infrastructure continues to age it puts the facility at increasing risk of violating several permit conditions. This project will aid in continued permit compliance.

The significant project components include the following.

- New motors and drives for the longitudinal and cross collectors for all six (6) clarifiers.
- New chain and flight equipment (sludge collection system) within the six (6) clarifiers.
- Clarifier, plant waste station, and various concrete rehabilitation - including coating and repair of significantly deteriorated concrete.
- Renewal and rehabilitation of scum pit infrastructure.
- Replacement of critical isolation gates and telescoping valves.

Legislative approval was granted in March 2017 for \$950,000 for engineering design. It is anticipated that legislative approval will be sought in September 2019 for construction in the approximate amount for \$5.2 million.

## *Special Funds*

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**DEPARTMENT:** WATER ENVIRONMENT PROTECTION

**Project:** Wastewater Transportation System Improvements

**Purpose:** Public/Employee Safety/Health, Reduce Operating Costs/Efficiency, Maintain Existing Investment, Federal/State Mandate

**Level of Development:** Ongoing

**Project Description:**

This project consists of three primary or categorical elements: pump station improvements, trunk sewer improvements, and facility maintenance improvements (i.e., paving, roofing, and larger-scale maintenance activities).

**Project Cost Summary:**

<b>FUNDING SOURCE:</b>	<b>Pre-2018</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>6yr Total</b>	<b>Total:</b>
Borrowing to be Authorized	46,028	0	2,315	4,543	11,275	6,906	8,000	33,039	79,067
Cash on Hand	46,273	6,735	6,990	5,639	5,214	5,142	5,085	34,805	81,078
Authorized Borrowing	28,540							0	28,540
<b>TOTALS</b>	<b>120,841</b>	<b>6,735</b>	<b>9,305</b>	<b>10,182</b>	<b>16,489</b>	<b>12,048</b>	<b>13,085</b>	<b>67,844</b>	<b>188,685</b>

**Project Detail and Status:**

This project consists of three primary or categorical elements: pump station improvements, trunk sewer improvements, and facility maintenance improvements - including asset renewal measures/projects (i.e., paving, roofing, larger-scale maintenance activities). Detailed below is a description of the elements included in each of those categories.

**Pump Station Upgrade Program Elements:**

This project provides for ongoing pump station replacement and upgrading of components or systems and structural fixtures to preclude failures and prevent potential harm to the environment by discharge of raw sewage. Pump station sites scheduled in this project are: Camillus, Davis Road, Gaskin Road, Lakeside, Richmond Street, Sackett Street, Taylor Street and rehabilitation/upgrades to the Baldwinsville Seneca Knolls (BSK) Wastewater Pump Stations. The BSK pump stations include: Baldwinsville North, Baldwinsville South, Baldwinsville West, and Belgium. Pump station improvements will include, but not be limited to, replace/rehabilitation of pumps, valves, flow meters, variable frequency drives, heating and ventilation systems, and other mechanical and electrical systems.

Improvements to the chemical feed systems and support systems at the Hiawatha Regional Treatment Facility (RTF) are also expected, as well as re-commissioning of the Midland Ave RTF in regards to potential changes to pump sizes and operation. New for 2017 is the addition of a Force main Air Relief and Cathodic Protection project which will involve the repair and/or replacement of air relief valves and cathodic protection equipment at various county owned pump station force mains.

Rehabilitation and replacement of targeted wastewater force mains in the Consolidated Sanitary District. The Consolidated Sanitary District owns 53 miles of force main ranging in size from 42 inch diameter to 6 inches in diameter. More than 45 miles of these pipelines are over 40 years old and have exceeded the recommended service life. It is the intent of this project to strategically rehabilitate or replace this aging infrastructure. This may include force mains such as Davis Road, Clay /Cicero, Oak Orchard FM, Liverpool FM, Ley Creek FM and Manlius FM.

**Trunk Sewer Upgrade Program Elements:**

Another component of this project addresses modification, repair, and/or replacement of specified trunk sewers and pressure pipelines, of aged facilities comprising the 400 miles of trunk sewer network, and fifty-one combined sewer overflows for which the Department has responsibility. Trunk sewers identified in this project are: Portions of Tallman Trunk Sewer (circa 1898), Midland Trunk Sewer (circa 1905), Hillcrest Trunk Sewer (circa 1955),

## *Special Funds*

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Lakeland Trunk Sewer (circa 1960) and Meadowbrook Trunk Sewer (circa 1960).

A number of projects are generally combined to provide the most practical package from a constructability and economic viewpoint. The trunk sewer improvement/renewal program includes provisions for the design of improvements to a number of combined trunk sewers in the City of Syracuse in 2015-16 and other trunk sewers within the Consolidated Sanitary District, with construction starting in 2016 and continuing into 2019. This includes potential improvements to the collection system tributary to the Brewerton Waste Water Treatment Plant.

This project is also to include other sewer infrastructure improvements. A major aspect of the project will be a comprehensive manhole rehabilitation program, so as to achieve infiltration/inflow reductions. This program will first consist of a high-intensity effort to improve the most problematic manholes in targeted service areas; thereafter, the manhole repair program will be segmented and portions will be completed annually. This is expected to continue for the next several years.

Collectively, these trunk sewer rehabilitation/renewal programs, along with other ancillary support efforts, are part of the department's Capacity, Management, Operation, and Maintenance (CMOM) program.

### Facility Maintenance Improvements:

The third component of this project involves maintenance and improvement of other department facilities and wastewater treatment plants, such as repairs and capital projects to replace necessary roofing and paved areas at various facilities, lightning protection, major repairs to grit and clarifier mechanisms at several treatment facilities, geographic information system (GIS) applications and support, miscellaneous engineering support, asset management programs, maintenance management systems, chemical tank and petroleum tank replacements, crane/hoist renewal project, concrete repairs, smaller-scale infrastructure improvements, infrastructure evaluations, site security, code compliance and safety improvement measures. Replacement of inefficient mechanical equipment, including drives/energy systems, is also anticipated.

The roofing and paving, as well as the clarifier weir capital programs and lightning protection, are customarily segmented and portions are completed annually. This is expected to continue for the next several years. It is anticipated that the asset management and GIS applications within the department shall continue to expand in the next several years. Efforts have been expanded for 2017 for Digester Phase II improvements, Arcflash analysis and compliance, and site and information technology security evaluations, safety projects; motor control center and electrical substation repair; Metro WWTP thickener rehabilitation, and a comprehensive asset management evaluation of Metro's 1978 plant infrastructure addition (secondary system). Also included are design and replacement of the oxygen generation systems at the Baldwinsville and Oak Orchard Wastewater treatment plants as an asset renewal and energy efficiency measure; and Metro site improvements.

Included within the project is replacement of larger pieces of analytical equipment, various valves, HVAC improvements, pump installations, confined space improvements, various boiler systems, door replacement project, several building improvements, odor control measures and improvements, SCADA system enhancements, fire and carbon monoxide monitoring systems, and other various infrastructure repair/renewal elements and civil infrastructure.

It is expected that legislative approval will be sought in September 2017 for approximately \$7,245,000 in cash for this project.

# GLOSSARY

## Section 4

## GLOSSARY OF TERMS

**Appropriation** An authorization made by the legislative body of a government that permits officials to incur obligations against and to make expenditures of governmental resources. Appropriations are usually made for fixed amounts and are typically granted for a one-year period.

**Assets** Property owned by the County that has a monetary value.

**Attributable Revenue** The revenue generated as a direct consequence of the provision of a specific governmental activity, such as fees for service, state or federal aid for programs, and income from sales. If the government no longer provided the service, the revenue would also stop.

**Bond** A written promise to pay a sum of money on a specific date at a specified interest rate. The interest payments and the repayment of the principal are detailed in a bond ordinance. The most common types of bonds are general obligation and revenue bonds. These are most frequently used for construction of large capital projects, such as buildings, streets and bridges.

**Bond Anticipation Notes (BANs)** Short-term interest bearing security issued in anticipation of a long-term bond issuance at a later date. The notes are retired with proceeds from the later related bond issue.

**Budget** A comprehensive financial plan of operation which allocates limited revenues among competing expenditure requirements for a given time period. Onondaga County has two types of budgets, the annual operating budget and the Capital Improvement Plan.

**Budget Calendar** The schedule of key dates or milestones, which the county follows in the preparation, adoption, and administration of the budget.

**Budget Document** The official written statement prepared by the Executive Department, which presents the proposed budget to the legislative body.

**Budget Message** A general discussion of the proposed budget presented in narrative form as a supplement to the budget document. The budget message explains principal budget issues against the background of financial experience in recent years and provides a general summary of the most important aspects of the budget, changes from the current and previous fiscal years, and the views and recommendations of the County Executive.

**Capital Assets** Assets of significant value and having a useful life of several years. Capital assets are also called fixed assets.

**Capital Fund** A fund established to account for all resources, principal and proceeds, which are used for planning, acquisition, and construction phases of capital projects.

**Capital Improvement Plan (CIP)** A plan for capital expenditures to be incurred each year over a period of six future years setting forth each capital project, identifying the expected beginning and ending date for each project, the amount to be expended in each year, and the method of financing those expenditures.

**Capital Improvements** Physical assets, constructed or purchased; the acquisition of land; or improvements to land or buildings. Capital improvements typically involve physical assets such as

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buildings, streets, water and sewage systems, recreational facilities, and major pieces of equipment.

*Capital Notes* On all borrowings, except WEP and Water Fund, where the P.P.U. exceeds five years the county is required, by Finance Law, to fund five percent of the total cost in the form of cash prior to the issuance of debt. The county is allowed to borrow this amount in the form of short-term notes known as Capital Notes. Capital Notes may be issued for up to twelve months and can be renewed once (by resolution). Capital Notes are also occasionally issued for emergency sewer repairs.

*Capital Outlay* Expenditures for equipment, vehicles, or machinery that results in the acquisition of or addition to fixed assets.

*Cash Capital* See County Tax Revenues.

*Cash On Hand* Direct financing available from either surplus monies from prior years' taxation, or unused balances in existing capital accounts, or earnings on temporary investments.

*County Tax Revenues (Cash Capital)* The cash financing of general fund projects by property taxes.

*Countywide Authorized Borrowing* The financing of a project by long or short term borrowing which has been authorized by the County Legislature.

*Countywide Borrowing to be Authorized* The financing of a project by long or short term borrowing that will require authorization by the County Legislature before the project can be undertaken.

*Debt Service* The payment of principal and interest on borrowed funds, according to a pre-determined payment schedule.

*Department* The highest organizational level for the provision and delivery of a specific governmental service or closely related services. A department may be comprised of sub department, agency, etc.

*Depreciation* Expiration in the service life of capital assets attributable to wear and tear, deterioration, action of the physical elements, inadequacy or obsolescence. That portion of the cost of a capital asset that is charged as an expense during a particular period. This represents the decrease in value of physical assets due to use and the passage of time.

*Enterprise Fund* A governmental accounting fund in which the services provided are financed and operated similarly to those of a private business. The rate schedules for these services are established to insure that revenues are adequate to meet all necessary expenditures.

*Equipment* One of the major expense codes used to categorize appropriations. Equipment includes county appropriations for office, construction, plant, laboratory, grounds, motor vehicles, safety, tools and shop equipment.

*Estimated Revenues* The amount of projected revenue to be collected during the current or ensuing fiscal year. The amount of revenue estimated is the budgeted amount approved by the Legislature.

*Expenses* Charges incurred for operations, maintenance, interest, travel, equipment, rentals, utilities, professional services, contracts and other charges.

*Federal Aid* The financing of eligible projects through the use of Federal funds other than Federal Revenue Sharing.

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*Federal Revenue Sharing*     The financing of eligible projects through the use of Revenue Sharing funds.

*Fiscal Agent Fees*     These are fees charged by institutions for record keeping of registered (Serial) Bondholders and for the semi annual distribution of principal and interest payments to those bondholders. The purchaser pays Fiscal Agent Fees on Capital Notes and Bond Anticipation Notes.

*Fiscal Year (FY)*     A twelve-month period designated as the operating year for an entity. For the county, the fiscal year is the same as the calendar year - January 1 to December 31 - also called the Budget Year. The fiscal year for the State of New York is April 1 - March 31. The Federal fiscal year is October 1 to September 30.

*Fixed Assets*     Assets of long-term character, which are intended to continue to be held or used, such as land, buildings, machinery, furniture and other equipment.

*Full Faith and Credit*     A pledge of the general taxing power of a government to repay debt obligations, typically used in reference to bonds.

*Fund*     An independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities which are segregated for the purpose of carrying on specific activities or attaining certain objectives (see General Fund).

*General Fund*     The largest fund within the county, the General Fund accounts for most of the county's financial resources. General Fund revenues include property taxes, licenses and permits, local and sales taxes, service charges, and other types of revenue. This fund usually includes most of the basic operating services, such as public safety, finance, data processing, parks and recreation, highway, long term care, community college, library and other direct operating support.

*General Obligation Bonds*     When a government pledges its full faith and credit to the repayment of the bonds it issues, then those bonds are general obligation (GO) bonds. Sometimes the term is also used to refer to bonds that are to be repaid from taxes and other general revenues.

*Grant*     A contribution of assets (usually cash) by one governmental unit or other organization to another. Typically, these contributions are made to local governments from the state and federal governments. Grants are usually made for specified purposes.

*Interest*     The price paid for the use of money, or the return on investment obtained from investing or lending money.

*Liability*     Debt or other legal obligations arising out of transactions in the past that must be liquidated renewed or refunded at some future date. The term does not include encumbrances.

*Local Dollars*     The difference between appropriations and revenues which must be raised through the property tax levy.

*Long Term Debt*     Debt with a maturity of more than one year after the date of issuance.

*Mandate*     Any responsibility, action or procedure that is imposed by one sphere of government on another through constitutional, legislative, administrative, executive, or judicial action as a direct order or that is required as a condition for reimbursement of expenditures.

## *Glossary*

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*Maturity Date* The date at which full and/or final payment of principal and interest is due on debt obligations.

*Onondaga County Legislature* The County Legislature consists of seventeen elected members and constitutes the legislative, appropriating, policy determining, and governing body of the County of Onondaga.

*Operating Budget* The portion of the budget that pertains to daily operations and provides basic governmental services. The operating budget contains appropriations for such expenditures as personnel, supplies, utilities, materials, travel, and fuel.

*Other Sources* The financing of projects from sources other than tax supported, Federal and/or State Aid (i.e. private funds, fees).

*Pay-As-You-Go* The strategic use of tax revenues to finance projects in an effort to reduce the issuance of debt and the related interest costs, i.e. use of tax revenues to finance annually recurring projects.

*Period of Probable Usefulness (PPU)* The maximum period of time available, by law, to repay indebtedness. PPU's for various types of projects are mandated by Local Finance Law, and range between 3 and 40 years.

*Principal* The par value or face value of a bond, note, or other fixed amount security, excluding accrued interest.

*Renewals* Bond Anticipation Notes (BANs) and Capital Notes are short-term borrowings, one year or less, that have to be renewed or paid off at maturity. A renewal is the reborrowing of the debt, less any scheduled principal payment.

*Reserve* An account used to indicate that a portion of a fund's balance is legally restricted for a specific purpose and is, therefore, not available for general appropriation.

*Revenue* Funds that the government receives as income. It includes such items as tax payments, fees from specific services, receipts from other governments (state and federal aid), fines, forfeitures, grants, shared revenues and interest income.

*Revenue Anticipation Notes (RANs)* RANs are issued in anticipation of the receipt of specific revenues, generally non-tax revenues. RANs are typically used for cash flow borrowings. The specific revenues are set-aside on receipt, for payment of the RAN and interest upon its maturity. The debt cannot extend beyond twelve months and must be paid in full at maturity.

*Revenue Estimate* A formal estimate of how much revenue will be earned from a specific revenue source for a current or future period; typically, a future fiscal year.

*Revenue Source* A category of revenue, such as local source, state aid, or federal aid.

*Serial Bond* A written promise to pay a specified sum of money (principal face value) at a specified future date (maturity date[s]) along with periodic interest paid at a specified percentage of the principal (interest rate). Serial bonds are typically used for long-term debt.

*Special Districts Authorized Borrowing* The financing of a project by long or short term borrowing which has been authorized by the County Legislature for special districts such as Drainage Districts.



## *Glossary*

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*Special Districts Borrowing To Be Authorized* The financing of a project by long or short-term borrowing that will require authorization by the County Legislature before the project can be undertaken.

*State Aid* The financing of eligible projects through the use of state funds.

*Tax Levy* The total amount to be raised by property taxes for the purpose stated in the county's financial plan for various funds.

*User Fees* The payment of a fee for direct receipt of a public service by the party benefiting from the service.