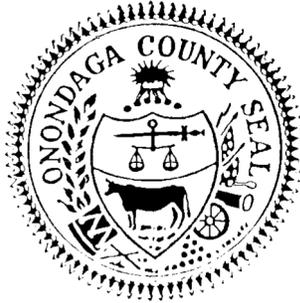


ONONDAGA COUNTY
NEW YORK



2023 – 2028
EXECUTIVE
CAPITAL IMPROVEMENT PLAN

J. Ryan McMahon II
County Executive

Brian J. Donnelly
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)

J. Ryan McMahon, II
County Executive, Chair, CPC

James J. Rowley
Chairman, County Legislature

Brian J. May
Chair, Ways & Means Committee

Brian J. May
*Floor Leader, Onondaga County
Legislature*

Mary Beth Primo
*Deputy County Executive for
Physical Services*

Steven P. Morgan
Chief Fiscal Officer, Secretary, CPC

Robert A. Durr
County Attorney

Daniel Kwasnowski
Director of Planning

ONONDAGA COUNTY PLANNING BOARD

Martin Voss
Chairperson (Ex Officio)

James Stelter

Michael LaFlair (Vice Chair Person)

David Skeval

Marty Masterpole (ex officio)

Jim Stelter

STAFF TO THE PLANNING COMMITTEES

Rustan Petrela
Coordinator

Kristi Smiley
Finance

Don M. Jordan
Planning

TO BE UPDATED



J. Ryan McMahon, II
COUNTY EXECUTIVE

Onondaga County Planning Board

Onondaga County Planning Board Resolution Concerning the 2022 to 2027 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 2022 – 2027 Tentative Capital Improvement Plan; and

WHEREAS, debt management remains a high priority in the 2022 – 2027 Tentative Capital Improvement Plan; and

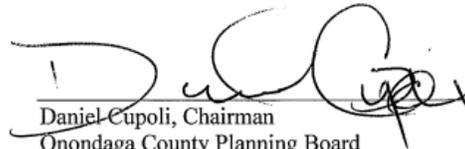
WHEREAS, the projects proposed in the 2022 – 2027 Tentative Capital Improvement Plan emphasize the maintenance of existing county facilities and transportation assets, stewardship of the natural environment, and sound fiscal management; and

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 2022 – 2027 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 2022 – 2027 Tentative Capital Improvement Plan.


Daniel Cupoli, Chairman
Onondaga County Planning Board
October 27, 2021

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202
Phone: (315) 435-2611, Fax (315) 435-2439
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 CIP book 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. The proposals are analyzed by the 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 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 the 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 revised as necessary.

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 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

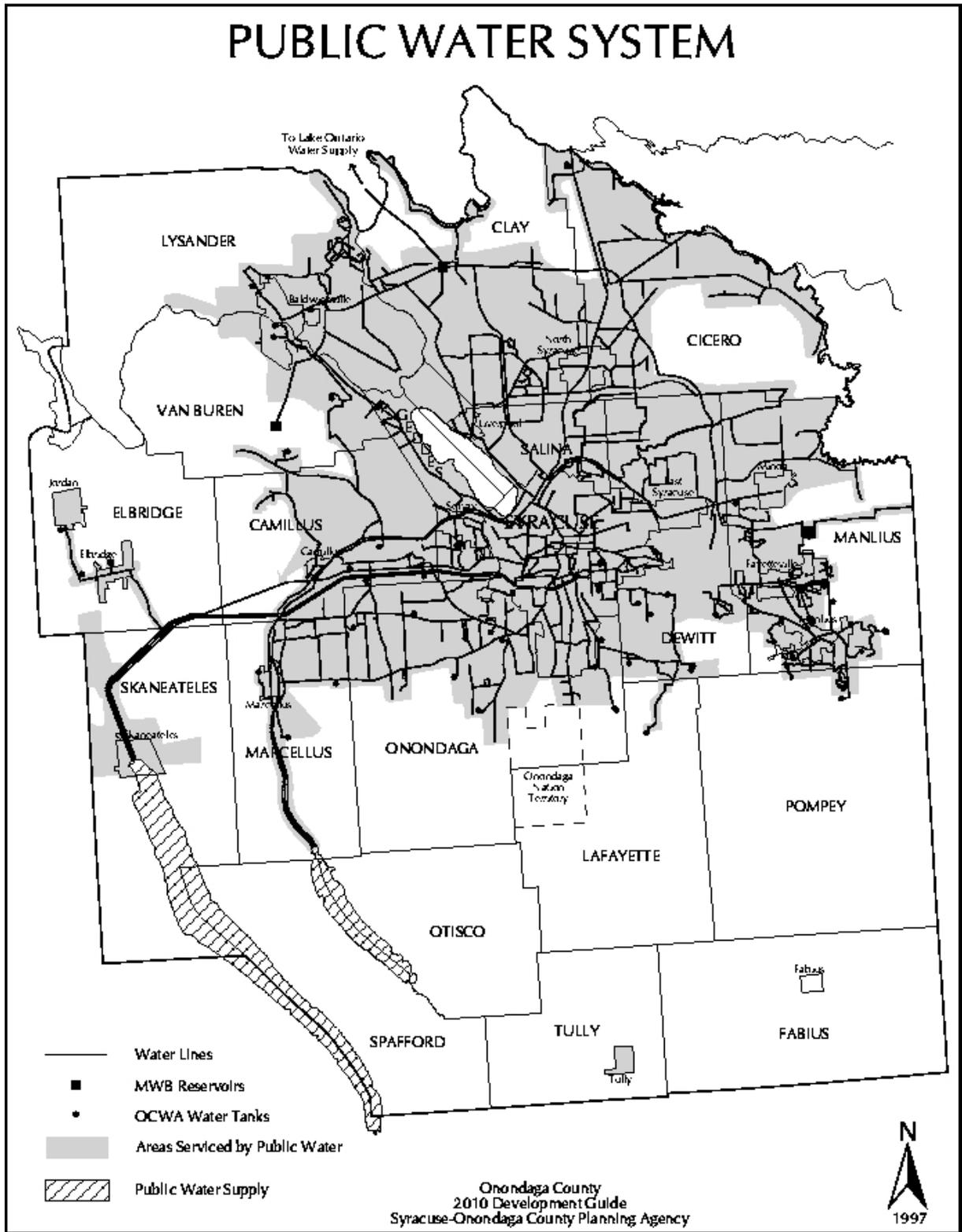
Effective January 1, 2017, Onondaga County entered into a Public Water Supply Cooperation Agreement with the Onondaga County Water Authority (OCWA), under which OCWA agreed to lease and operate the assets of the Onondaga County Water District.

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. 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.

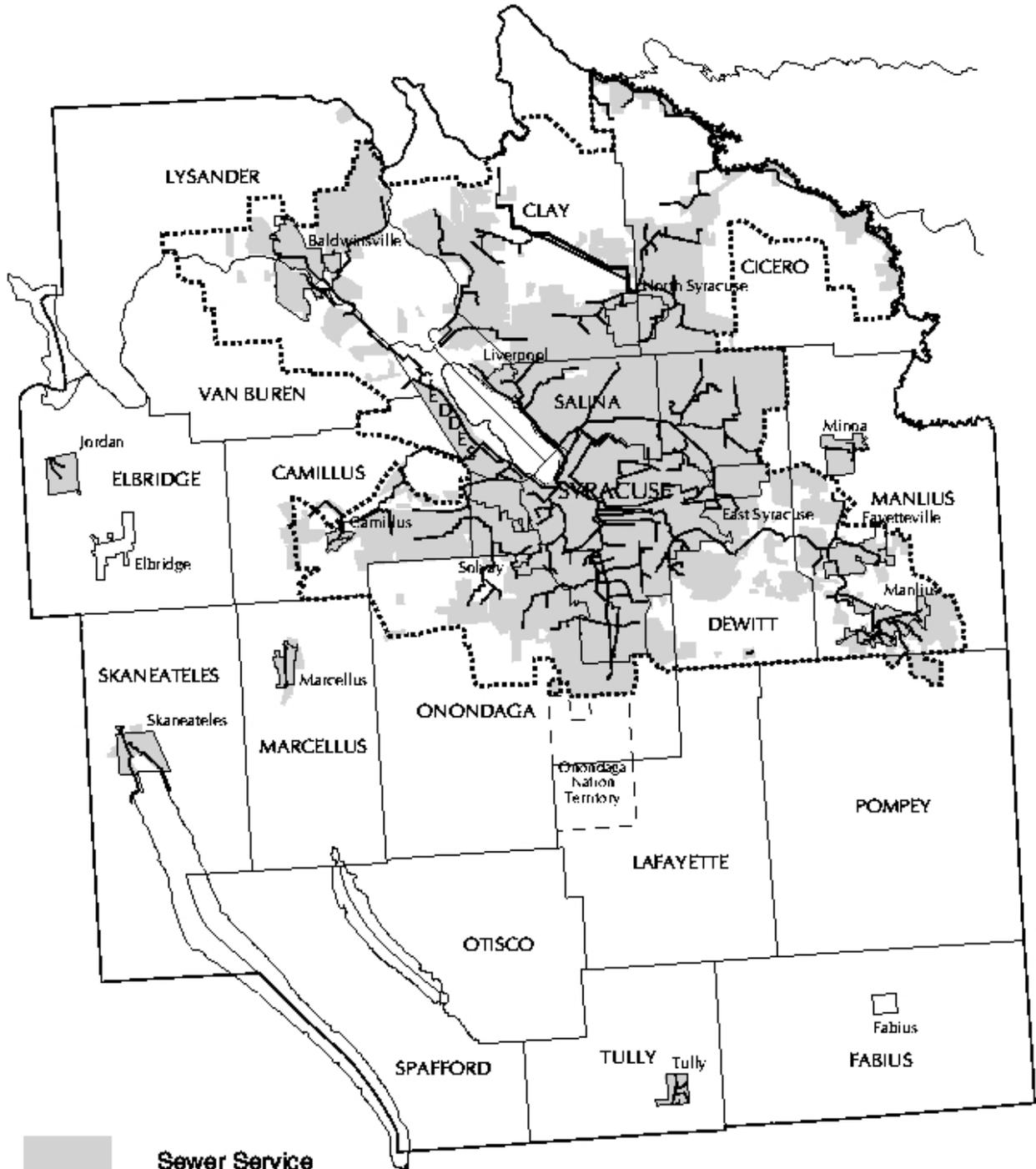


Sewers

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 as well as 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 residential and commercial/industrial service wastewater treatment and conveyance based on a unit volume equivalent. 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 wastewater treatment plants: Baldwinsville-Seneca Knolls, Brewerton, Meadowbrook-Limestone, Oak Orchard, Metropolitan Syracuse 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 contains more than one thousand five hundred miles of pipe (six inches to twelve feet in diameter), fifty-three CSD owned wastewater 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 two hundred thirty 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 inter-municipal 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. Recently, the CSD took responsibility by way of long-term lease, more than one hundred ninety miles of municipally owned sewers, previously under the responsibility of towns and villages.

PUBLIC WASTEWATER SYSTEM



-  Sewer Service
-  Trunk Sewers
-  Sanitary District

Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency



Transportation

The Onondaga County Department of Transportation (OCDOT) owns and maintains 800 miles or 25.4% of the combined public highway system within Onondaga County, which is comprised of arterials, collectors and local roads (see map p.8). Of these, thirty-nine miles are four or five lane highways, some of which are divided by medians. Additionally, the OCDOT is responsible for the inspection, maintenance, and rehabilitation of 240 bridges, numerous culverts and drainage systems, as well as operating and maintaining 122 traffic signals and beacons throughout the County.

The OCDOT performs routine maintenance functions and limited repaving and rehabilitation with County forces. Four Highway Maintenance Facilities, Camillus, Marcellus, Jamesville, and North Area are each strategically located to deploy labor and equipment for weather related events and reoccurring maintenance needs. Fleet maintenance and material storage are also managed at these locations. The Administrative and Engineering staff are located on the 11th floor of the John H. Mulroy Civic Center.

The OCDOT continually evaluates assets to determine capital investment needs. For highways, a pavement management system is employed and updated annually to determine priorities for pavement maintenance, rehabilitation, and reconstruction. The goal of this system is to minimize the need for major reconstruction by performing timely maintenance and extending pavement life. The County's bridges are also inspected on a biennial basis to determine maintenance and capital investment needs. Bridges are considered for routine maintenance and repair and evaluated as larger rehabilitation or replacement projects when conditions warrant.

The OCDOT is responsible for project planning, detailed project design, right-of-way acquisitions, construction layout and inspection of major highway and bridge reconstruction projects. These projects are often funded through various fund sources, including Federal, State, and local dollars. The Department is currently administering several federally funded projects. Private contractors are primarily used for major construction projects and to repave hot mix and cold mix bituminous highways; the work is competitively bid as mandated by state law.

PATTERN OF COUNTY ROAD JURISDICTION



— County Roads

Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency



ONONDAGA COUNTY PLANNING & DEVELOPMENT

The Onondaga County 2010 Development Guide was adopted by the County Legislature as the official Onondaga County comprehensive plan. It outlines county policy with respect to infrastructure, land development, the environment, and fiscal capacity. The Guide has been updated with current demographic and economic data, better graphics, and a more concise, understandable format. Last updated in 1998, Onondaga County is currently updating the plan with a new PLAN Onondaga project, anticipated to be completed and adopted in 2023.

New water lines, sewers, and roads have the effect of creating more developable land. The 2010 Guide, and its impending update, 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 regulate growth. Many urban counties, however, have large investments in infrastructure; the timing of highway, wastewater treatment, and water facility improvements directly influence growth patterns.

Onondaga County constructs and maintains many public works facilities, and therefore has the ability to affect land development patterns. The County Plan defines 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 during the 2010-2019 period. The Covid-19 pandemic has affected labor statistics for the 2020 and 2021 reporting periods. The number of firms increased slightly from 12,544 to 12,644 over the 2010-2020 timeframe, with wages experiencing steady modest increases from \$43,199 in 2010 to \$57,595 in 2020 and seeing a \$3,000+ one-year rise into 2021 (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 217,800 in 2010 to 206,300 in 2020, although 2021 numbers indicate a significant rebound. The annual unemployment rate decreased from 8.2% in 2010 to 4.9% in 2021.

Labor Statistics in Onondaga County

	2010	2015	2020	2021
Annual Average Employment (by Place of Work in Onondaga County)	239,697	241,806	227,351	230,568
Annual Average Establishments (# of Firms)	12,544	12,802	12,644	12,589
Average Annual Wages	\$43,199	\$48,025	\$57,595	\$61,240
Employment (by Place of Residency in Onondaga County)	217,800	211,100	206,300	209,100
Annual Unemployment Rate	8.2%	5.0%	8.0%	4.9%
<i>Source: NYS Dept. of Labor QCEW (2021 data is preliminary) and LAUS Programs</i>				

Demographic Trends

Population in Onondaga County has remained relatively unchanged over the past 50 years, currently totaling 476,516 according to the 2020 Census. In general, between 1970 and 2020, population within the towns has increased, villages have remained unchanged, and the City of Syracuse has seen a decrease in population. According to the 2010 and 2020 Census' and more recent ACS data, however, these relatively dramatic population shifts from city to suburb may be slowing – likely a result of several factors including urban revitalization, immigration, the earlier national housing market slump, and changes in household makeup. Since 2000 the City of Syracuse has seen a rebound and increase in population, as certain demographic segments are returning to highly urban areas across the US and new investments are made to revitalize the downtown and university areas and neighborhoods throughout the city.

Demographic Statistics in Onondaga County

	2000 Census	2010 Census	2020 Census	2016-2020 ACS est.
Onondaga County Population	458,336	467,026	476,516	461,591
Town Population	311,030	321,856	327,896	319,038
City Population	147,306	145,170	148,620	142,553
Housing Units	196,633	202,357	211,343	209,068
Households	181,153	187,686	not yet released	187,349
<i>Source: 2000, 2010 and 2020 US Decennial Census, American Community Survey 5-Year Estimate (2016-2020)</i>				

Urban sprawl, available infrastructure capacity, and a trend toward smaller families have resulted in an increase of more than 57,000 new housing units in Onondaga County since the County's population stabilized in 1970, despite the stable 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 for 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 100-year-old sewers in Syracuse and suburban roads built to farm-to-market standards. All these factors have necessitated the planning 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

County land use and development plans allow this community to anticipate the extent and location of growth over the coming decades. These plans consider 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.

Urban and regional planning provides a means for coordinating land use decisions by thirty-five municipalities with county plans for infrastructure and fiscal stability. The county's land use plan outlines the implications of

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.

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 and development policies in general. 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 its 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.

2023 - 2028 Capital Plan Priorities

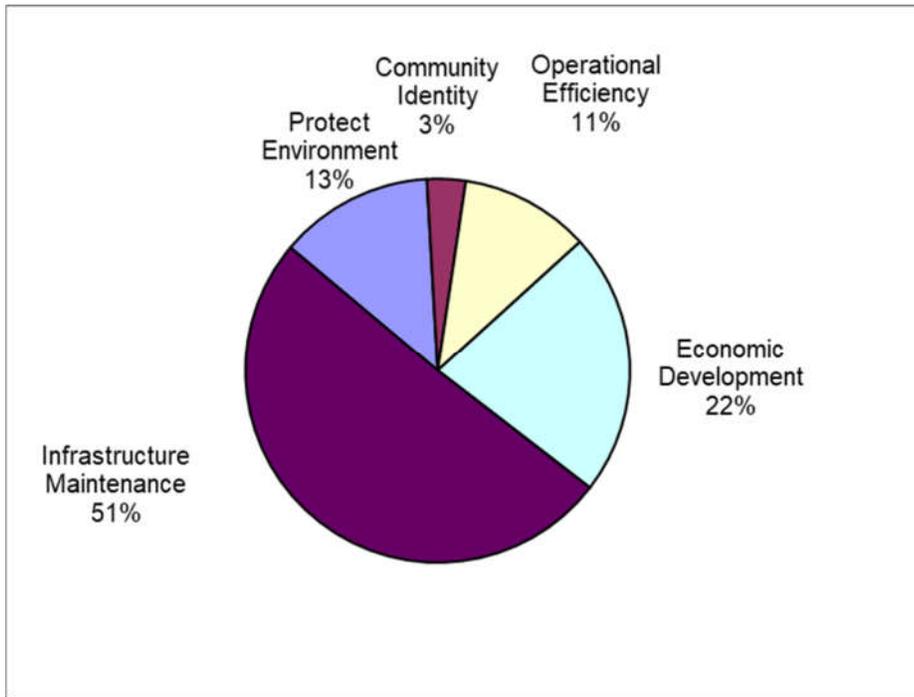
The 2023-2028 Capital Plan places high priority on projects that are consistent with the county's current Development Guide. Most of our investments will be in the areas of infrastructure maintenance, environmental protection, and operational efficiency. Wastewater treatment projects account for 62.6% of the Capital Program. Mandated projects drive 25% of the proposed projects in this plan.

New wastewater treatment facilities and technologies will result in improved water quality in Onondaga Lake and the Seneca River system. The lake cleanup has spurred robust private and public investment around and in close proximity to Onondaga Lake. St Joseph's Health Amphitheater at Lakeview, the county's Loop the Lake Trail, the multi-million-dollar NBT stadium renovations, and continued private redevelopment in the Inner Harbor area take advantage of the Lake's improved water quality while offering greater recreational opportunities for our residents and attracting more visitors to Onondaga County.

The highway program includes 10 capital construction projects through 2028 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.

The graph that follows illustrates the percentage breakdown of these Capital Plan priorities.

**2023-2028
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)

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 Revenue (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, service 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. The county no longer covers this operation, and the fund exists only to keep paying some scheduled debt that will be paid off by 2023.
3. **Water Fund:** The Water Fund was established to service the operations of the Metropolitan Water Board (MWB). 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 MWB. 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.
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 general fund 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 17.75% 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 AA+, S&P AA, Moody's Aa2.

Debt Management - Department of Water Environment Protection

For 2023, 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 of Water Environment Protection'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 debt. 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.

The County has been proactive in making debt management a priority. The County actively monitors its outstanding debt, reviewing candidates for refunding. Within the past five years the County has refunded \$36 million in October 2017 saving \$3.39 million through 2033, \$24.39 million in June 2019 saving an additional \$1.93 million through 2030, \$24.75 million in February 2020 saving an additional \$2.86 million through 2037, \$18.1M in April 2022 saving an additional \$718,110 through 2034.

The county actively monitors its outstanding debt, reviewing the refunding opportunities, which will provide a target NPV of 3% savings.

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 in this plan, 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 3.5% 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 rating 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 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 7% 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 August 24, 2022, the county has utilized 17.23% of its Statutory Debt Limit.

Should all Authorized and Unissued debt be issued this would represent 4.13% of the debt limit.

If the entirety of the projects proposed in the 2023 CIP advance and the corresponding debt is issued by the county in 2023 to fund said projects, this debt would represent 1.09% of the debt limit but combined with the debt that will retire in 2023 the net effect is a -0.2% 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	\$29,144,633,559
Debt Limit (7% of 5-year average) (1)	\$2,040,124,349

Outstanding Indebtedness	Scheduled Debt as of August 24, 2022	Authorized and Unissued Debt	Proposed Debt for 2023	Total Debt as of Dec 31, 2023
Bonds	\$ 704,453,022			
Bond Anticipation Notes	\$4,921,744			
Outstanding Gross Indebtedness	\$709,374,766	\$169,322,371	\$61,759,000	\$940,456,137
Less Exclusions (Sewer, Water, Defeased Debt)	(\$357,776,908)	(\$84,995,123)	\$ (39,494,000)	(\$482,266,031)
Less Retired Debt			(\$26,363,905)	(\$26,363,905)
Total Net Indebtedness	\$351,597,858	\$84,327,248	(\$4,098,905)	\$431,826,201
Debt Limit Margin	\$1,688,526,491			\$1,608,298,148
Percentage of Debt Limit Exhausted	17.23%	4.13%	-0.20%	21.17%

(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	Proposed Projects	Fund
COUNTY CLERK (RECORDS)	1	1	0	General Fund
DEPARTMENT OF CORRECTIONS	5	0	1	General Fund
ELECTIONS BOARD	1	0	1	General Fund
EMERGENCY COMMUNICATIONS	20	5	2	General Fund
FACILITIES MANAGEMENT	17	4	5	General Fund
FINANCE DEPT	0	2	0	General Fund
HILLBROOK DETENTION HOME	2	0	1	General Fund
INFORMATION TECHNOLOGY	1	2	0	General Fund
METROPOLITAN WATER BOARD	4	0	0	Water
OFFICE OF ENVIRONMENT	1	0	1	General Fund
ONONDAGA COMMUNITY COLLEGE	32	1	11	Community College
ONONDAGA COUNTY PUBLIC LIBRARY	3	1	1	Library
PARKS & RECREATION DEPT.	13	6	8	General Fund
SHERIFF CUSTODY	1	0	1	General Fund
SHERIFF POLICE/CIVIL	1	2	0	General Fund
TRANSPORTATION	0	2	10	County Road
TRANSPORTATION	3	0	0	General Fund
VAN DUYN EXTENDED CARE	6	0	0	Van Duyn
WATER ENVIRONMENT PROTECTION	28	15	24	Drain & San
Total	139	41	66	

PROPOSED CAPITAL PROJECT SUMMARY (2022-2027)

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	2023 - 28 Total
General Fund			
DEPARTMENT OF CORRECTIONS			
		Physical Plant Improvements and Security Upgrades	592
		Subtotal	\$ 592
ELECTIONS BOARD	new	Voting Equipment Replacement (NEW)	3,350
		Subtotal	\$ 3,350
EMERGENCY COMMUNICATIONS			
		E911 Center Facility Rehabilitation	11,000
		Tower Site Shelter Rehabilitation	1,091
		Subtotal	\$ 12,091
FACILITIES MANAGEMENT			
		Center for Forensic Sciences Building Rehab./Renovations	2,615
		Community Plaza Garage	1,790
		Courthouse - HVAC Renovations	9,000
		Facilities Various Capital Improvements	4,115
		Oncenter Rehabilitations	3,000
		Subtotal	\$ 20,520
HILLBROOK DETENTION HOME			
		Education, recreation and vocational center at Hillbrook detention center	8,225
		Subtotal	\$ 8,225
OFFICE OF ENVIRONMENT			
		Ash Tree Management	3,750
		Subtotal	\$ 3,750
PARKS & RECREATION DEPT.			
		Build an African Savannah Exhibit	6,550
		Carpenters Brook Fish Hatchery Building Replacement	1,020
		County Multi Sports Complex	25,000
		Lights on the Lake Storage Facility	500
		Oneida Shores Facility Upgrade	1,020
		Oneida Shores Park Shoreline Rehabilitation	240
		Parks Various Infrastructure Rehabilitation and Improvement	18,266
		Zoo Mechanical Systems and Roofs Replacement	2,000
		Subtotal	\$ 54,596
SHERIFF CUSTODY			
	new	Upgrades of Security Operation and Inmate information systems in Justice Center (NEW)	7,513
		Subtotal	\$ 7,513
		General Fund Total	\$ 110,637
Library			
ONONDAGA COUNTY PUBLIC LIBRARY			
		Mobile Library Outreach	260
		Library Total	\$ 260

Financial Summaries

County Wide

Department	STATUS	PROJECT	2023 - 28 Total
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Community College

ONONDAGA COMMUNITY COLLEGE

new	Building Envelope Package (NEW)		5,000
new	Coyne Hall Deep Energy Retrofit (NEW)		5,000
new	Digital Newsroom/Broadcasting and Sound Recording (NEW)		1,000
new	Gordon Student Center – Student Service and Student Union Environment (NEW)		18,000
new	HVAC Package (NEW)		7,300
new	Information Technology Package (NEW)		9,000
new	Interior Finish Package (NEW)		1,750
new	Learning Environment Upgrades (NEW)		13,000
new	School of Health Expansion Project (NEW)		30,000
new	Site Improvement Package (NEW)		7,200
new	Workforce Career Lab (NEW)		5,500

Subtotal \$ 102,750

Community College Total \$ 102,750

County Road

TRANSPORTATION

	Bituminous Surface Treatment		16,850
	Bridges		10,485
	Capital Highway Construction		69,797
	Caughdenoy Road / NYS Route 31 Road Improvements		10,500
	Cold Mix Bituminous Paving		29,620
	Guide Rail		3,980
new	Marcellus Maintenance Facility Sewer Connection (NEW)		500
	Repaving Program (Hot Mix Bituminous)		78,307
	Testing, Drainage and Facilities Repair		4,710
	Traffic Systems Management		2,415

County Road Total \$ 227,164

County Wide Total \$ 440,811

Special Funds

Department	STATUS	PROJECT	2023 - 28 Total
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Sewer Fund

WATER ENVIRONMENT PROTECTION

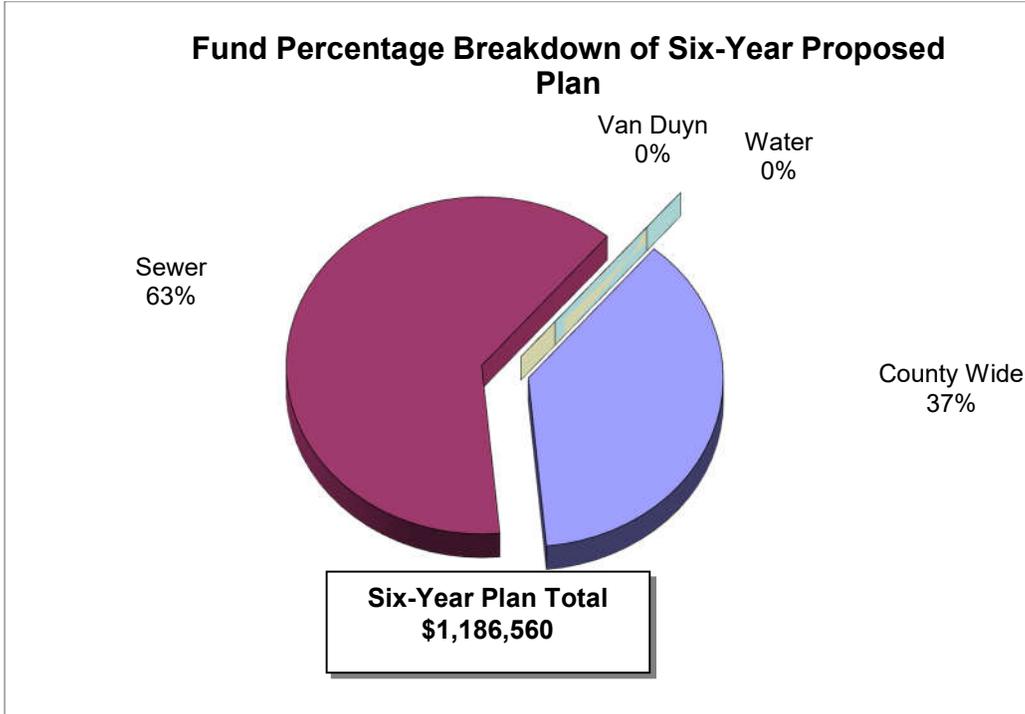
	Baldwinsville Seneca Knolls and Oak Orchard WWTP Oxygen System Replacement (NEW)		10,000
	Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements		21,220
	Camillus Force Main Replacement		26,270
	Comprehensive Asset Renewal at Baldwinsville WWTP		4,986
	Comprehensive Asset Renewal at Brewerton WWTP		7,288
	Comprehensive Asset Renewal at Meadowbrook Limestone WWTP		16,777
	Comprehensive Asset Renewal at Metro WWTP		3,925
	Comprehensive Asset Renewal at Oak Orchard WWTP		10,525
	Comprehensive Asset Renewal at Wetzel Rd. WWTP		4,975
	Davis Rd Pump Station and Forcemain Improvements		26,080
	Department Wide Building and Site improvements		17,969
	Department Wide Mechanical, Electrical and Process Improvements		21,726
	Harbor Brook Miscellaneous Culvert and Channel Improvements		1,700
	Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project		70,374
	Meadowbrook Limestone & Brewerton WWTP - Drum Replacement		5,000
	Meadowbrook-Limestone WWTP Large Scale Upgrade		4,600
	Metro WWTP 1978 Plant Annex Asset Renewal - Phase I		78,528
	Oak Orchard Wastewater Treatment Plant Major Upgrade Project		220,000
	Oak Orchard WWTP Secondary Clarifier Rehabilitation		9,850
	Route 81, Sanitary Sewer Betterments		16,020
	Sewer Consolidation		101,750
new	Storm hazard mitigation in various affected facilities (NEW)		400
new	Velasko Road Dam Repairs & Improvements (NEW)		1,056
	Wastewater Transportation System Improvements		64,730

Sewer Total \$ 745,749

Grand Total \$ 1,186,560

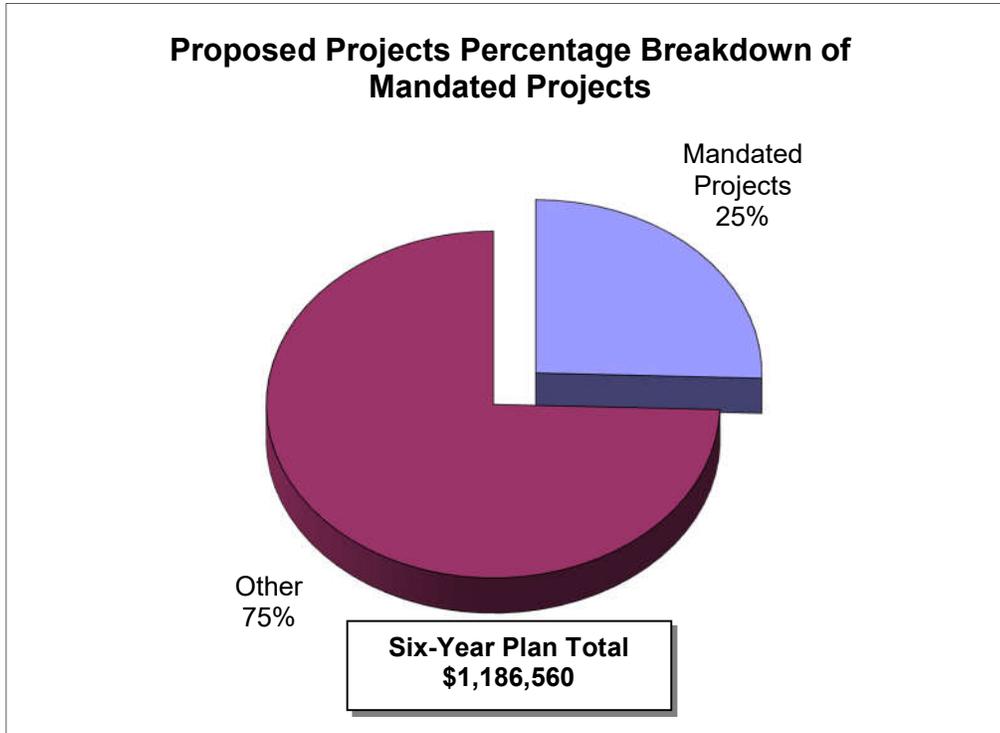
Financial Summaries

Out of the 66 projects proposed in this plan, 42 are in the Countywide Funds, and they account for 37% of the costs, as illustrated by the graph below.



MANDATES

Of the \$1,186,560 in proposed projects, 25% are the result of 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, 75% 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

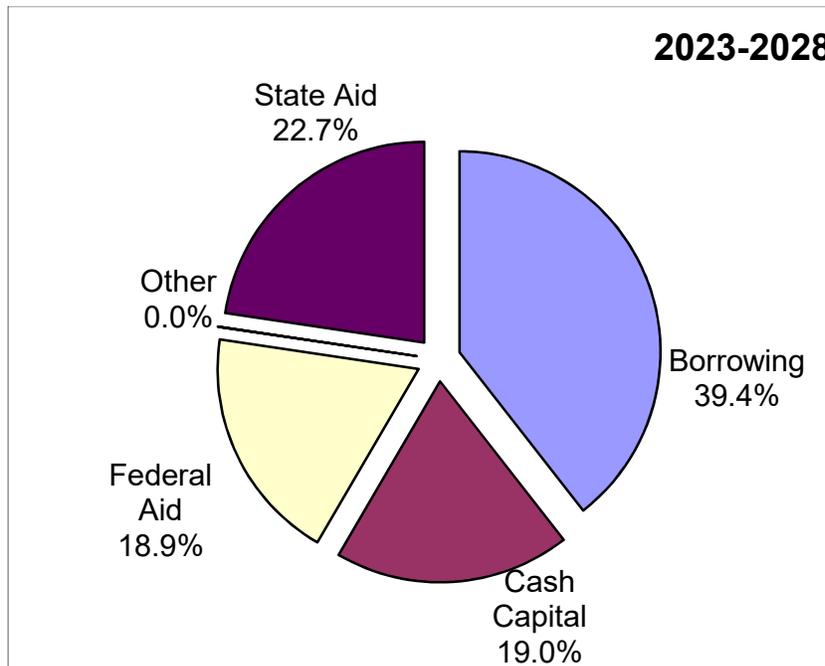
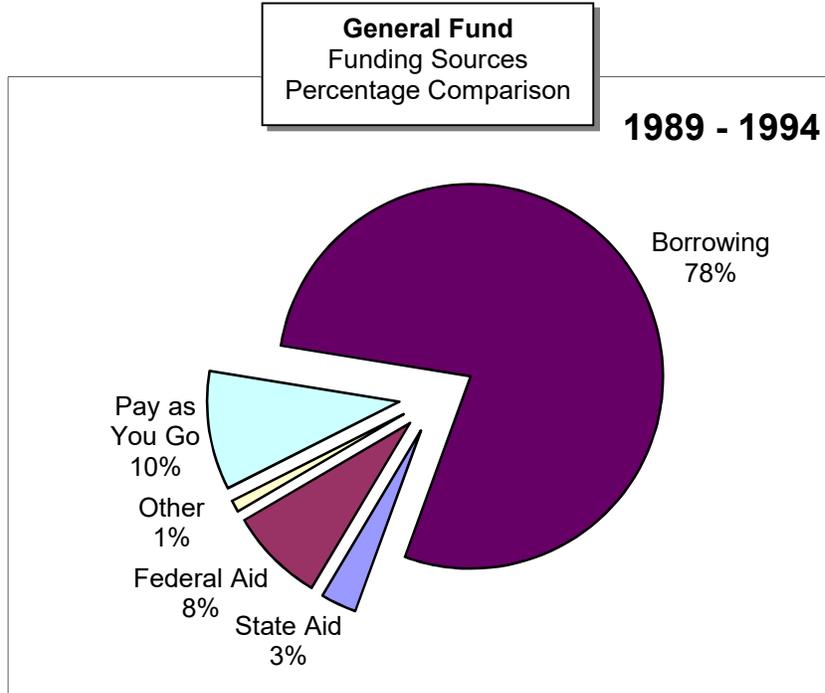
To achieve a balanced program that effectively serves the community's needs, careful attention must be given to the methods or sources of funding for capital projects. Customarily, projects are funded through the issuance of debt, cash capital, federal and state aid, and to a lesser degree other sources 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

County Wide	2023	2024	2025	2026	2027	2028	6yr Total
General Fund							
Borrowing to be Authorized	22,265	25,880	17,062	7,255	3,250	1,250	76,962
Federal Aid	25,000						25,000
State Aid	8,675						8,675
SUB TOTALS	\$55,940	\$25,880	\$17,062	\$7,255	\$3,250	\$1,250	\$110,637
County Road							
County Tax Revenues	11,000	9,750	12,864	15,831	18,721	21,022	89,188
Borrowing to be Authorized	0	8,535	10,936	9,730	3,808	3,538	36,547
Federal Aid	8,520	8,556	13,080	16,400	11,825	1,000	59,381
State Aid	7,612	6,740	7,515	8,177	6,177	5,827	42,048
SUB TOTALS	\$27,132	\$33,581	\$44,395	\$50,138	\$40,531	\$31,387	\$227,164
Library							
Borrowing to be Authorized		260					260
SUB TOTALS		\$260					\$260
Community College							
Borrowing to be Authorized		9,100	10,030	8,100	10,800	13,345	51,375
State Aid		9,100	10,030	8,100	10,800	13,345	51,375
SUB TOTALS		\$18,200	\$20,060	\$16,200	\$21,600	\$26,690	\$102,750
County WideTOTALS	\$83,072	\$77,921	\$81,517	\$73,593	\$65,381	\$59,327	\$440,811
Special Funds							
Drain & San							
Special District Tax		8,586	7,811	7,701	7,305	7,139	38,542
Authorized Borrowing	12,078	5,700	275				18,053
Borrowing to be Authorized	56,614	200,332	230,137	122,888	47,083	31,700	688,754
State Aid	400						400
Sewer SUB TOTALS	\$69,092	\$214,618	\$238,223	\$130,589	\$54,388	\$38,839	\$745,749
GRAND TOTAL	\$152,164	\$292,539	\$319,740	\$204,182	\$119,769	\$98,166	\$1,186,560

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 48% funding through borrowing.



Financial Summaries

FACILITIES MANAGEMENT

1. Carnegie Library Rehabilitation
2. Community Plaza and Walks Renovations
3. Community Plaza Garage
4. Court House - HVAC Renovations
5. Facilities Various Capital Improvements
6. Oncenter Rehabilitation

DEPARTMENT OF CORRECTIONS

7. Physical Plant Improvements and Security Upgrades

EMERGENCY COMMUNICATIONS (E-911)

8. OCICS Radio Fleet Template Refresh
9. Tower Site Shelter Rehabilitation

PARKS AND RECREATION

10. Build an African Savannah Exhibit
11. Carpenters Brook Fish Hatchery Building Replacement
12. Lights on the Lake Storage Facility
13. Long Branch Park Improvements
14. Oneida Shores Park Facility Upgrade
15. Oneida Shores Park Shoreline Rehabilitation
16. Parks Various Infrastructure Rehabilitation and Improvements
17. Veteran's Cemetery Lawn Crypts
18. Zoo Mechanical Systems and Roof Replacements

SHERIFF POLICE/CIVIL

19. Radio Replacement

ONONDAGA COUNTY PUBLIC LIBRARY

20. Pettit Branch Library Additions and Improvements

ONONDAGA COMMUNITY COLLEGE

21. Allyn Hall Upgrades and Improvements
21. Elevator Replacement and Upgrades/Protection of the Campus E-mail and Phones
21. Infrastructure - Campus Wide
21. Site Improvements

TRANSPORTATION

22. Bridges
23. Capital Highway Construction
24. Caughdenoy Road/NYS Route 31 Road Improvements
25. Testing, Drainage and Facilities Repair

WATER ENVIRONMENT PROTECTION

26. Brewerton WWTP Asset Renewal Improvements
27. Combined Sewer Overflow 029 Walton Street Abatement Project
28. Combined Sewer Overflow 067 Abatement Project
29. Hiawatha Trunk Sewer Service Area Improvement Project
30. Meadowbrook-Limestone WWTP Inflow & Infiltration Abatement
31. Metro WWTP Phosphorus Treatment System Optimization
32. Metropolitan (METRO) Wastewater Treatment Plant - Thickener
33. Metropolitan (METRO) Wastewater Treatment Plant - Phase II Digester
34. Metropolitan WWTP Biosolids Drying System
35. Onondaga Lake Improvement Project
36. Route 481/298 Industrial Corridor Sewer Improvements
37. Baldwinsville-Seneca Knolls and Oak Orchard WWTP Oxygen System Replacement
38. Baldwinsville-Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements
39. Camillus Force Main Replacement
40. Comprehensive Asset Renewal at Baldwinsville WWTP
41. Comprehensive Asset Renewal at Brewerton WWTP
42. Comprehensive Asset Renewal at Meadowbrook-Limestone WWTP
43. Comprehensive Asset Renewal at METRO WWTP
44. Comprehensive Asset Renewal at Oak Orchard WWTP
45. Comprehensive Asset Renewal at Wetzel Road WWTP
46. Davis Road Pump Station and Force Main Improvements
47. Harbor Brook Miscellaneous Culvert and Channel Improvements
48. Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project
49. Meadowbrook-Limestone & Brewerton WWTP's - Drum Replacement
50. Meadowbrook-Limestone WWTP Large-Scale Upgrade
51. METRO WWTP 1978 Plant Annex Asset Renewal-Phase I
52. Oak Orchard WWTP Major Upgrade Project
53. Oak Orchard WWTP Secondary Clarifier Rehabilitation
54. Route 81 Sanitary Sewer Betterments
55. Wastewater Transportation System Improvements
56. White Pine Industrial Park Conveyances

CAPITAL PROJECTS

Section 3

COUNTYWIDE FUNDS

GENERAL

COMMUNITY COLLEGE

COUNTY ROADS

SPECIAL FUNDS

WATER DISTRICT

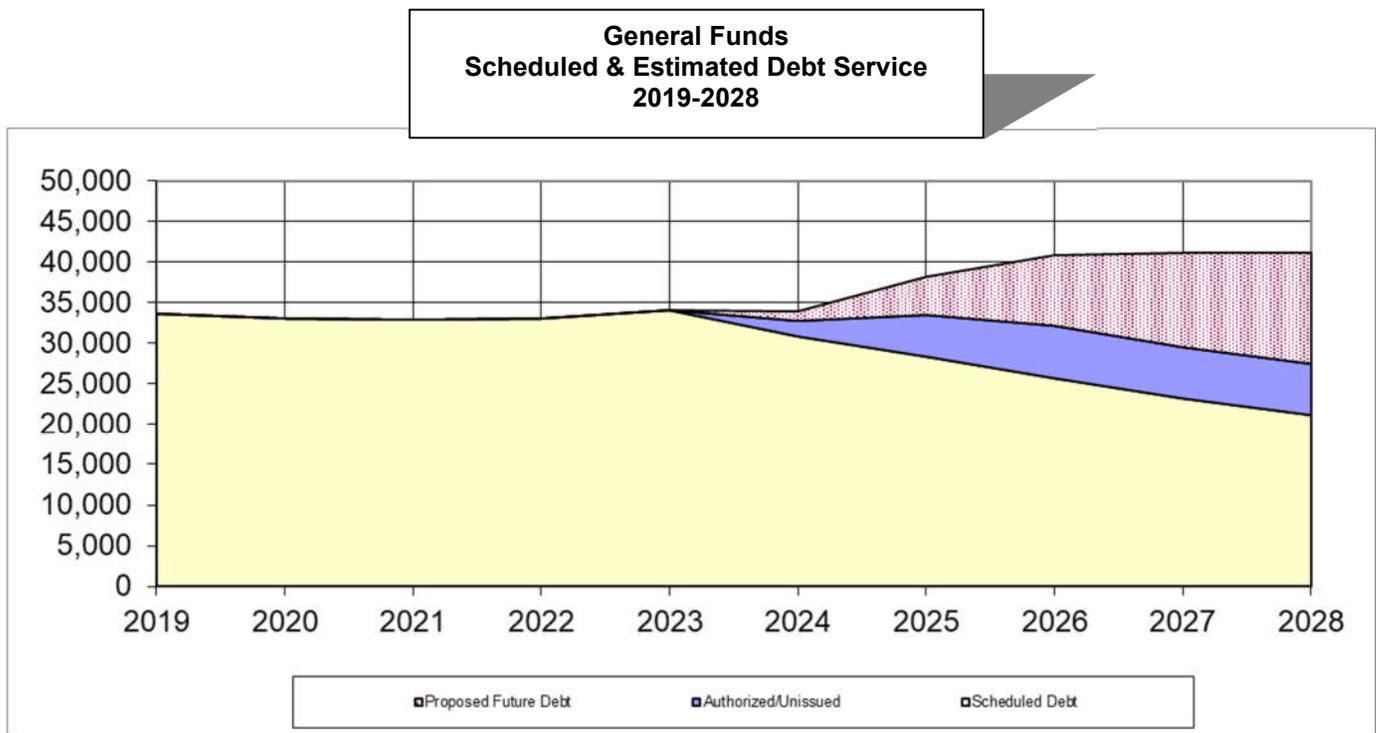
SEWER DISTRICT

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.



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**

<i>Payments in (\$000's)</i>	2018	2019	2020	2021	2022	2023	2024	2025
Principal & Interest								
<u>Scheduled Debt</u>	35,528	33,676	32,985	32,905	33,106	34,120	30,902	28,281
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	1,852	5,184
<i>Proposed Future Debt</i>	0	0	0	0	0	0	1,167	4,777
Total	35,528	33,676	32,985	32,905	33,106	34,120	33,921	38,242
	2026	2027	2028	2029	2030	2031	2032	2033
Principal & Interest								
<u>Scheduled Debt</u>	25,751	23,171	21,083	19,976	19,097	17,234	16,276	14,498
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	6,410	6,410	6,410	6,170	6,170	6,170	6,170	6,170
<i>Proposed Future Debt</i>	8,642	11,564	13,574	15,006	15,401	14,873	14,357	13,842
Total	40,803	41,145	41,067	41,152	40,668	38,277	36,803	34,510
	2034	2035	2036	2037	2038	2039	2040	2041
Principal & Interest								
<u>Scheduled Debt</u>	13,509	12,201	11,302	9,776	8,352	6,851	5,859	5,830
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	6,170	6,170	6,170	6,170	6,170	5,946	5,946	5,946
<i>Proposed Future Debt</i>	13,334	11,865	11,276	10,623	9,879	9,547	8,850	7,573
Total	33,013	30,236	28,748	26,569	24,401	22,344	20,655	19,349
	2042	2043	2044	2045	2046	2047	2048	TOTAL
Principal & Interest								
<u>Scheduled Debt</u>	2,899	2,554	2,520	0				
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	5,946	5,946	2,395	0				
<i>Proposed Future Debt</i>	6,402	5,591	5,173	4,571	3,174	2,094	1,495	224,650
Total	15,247	14,091	10,088	4,571	3,174	2,094	1,495	676,783

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 2022. A brief summary of most of them follows.

COUNTY CLERK (RECORDS DEPT)

Records Digitalization

Project On-going

The goal of this project is to digitize the remaining mortgages (paper documents for years 1794-1950) recorded in our office as well as our numerical indexes for deeds and mortgages (hardcover, loose-leaf books for years 1799-1986) into our e-commerce system.

In 2017 under a capital project, our office launched a new records/financial management program that includes online documents for purchase (e-commerce) along with electronic recording. The capital project amount was \$600,000 and the total amount was spent on the implementation of this new system to include hardware and the digitization of deed and mortgage documents for our e-commerce system. During the pandemic, we identified the most requested documents that were not yet available in our e-commerce. Those documents are the remainder of our mortgages and numerical indexes for both mortgage and deeds for our stakeholders to be able to complete their title searches. After the initial capital project money was used, we have utilized our records management fund (money we receive by statute for recording specific legal documents) to finance our projects as well as utilizing our staff (on a daily basis) who manually index and scan older documents into our system.

We received two proposals for the mortgage project and for the deed and mortgage numerical index book project for a total of \$356,000. E-commerce and in-office copies are considered a combined/comparable service for revenue estimates. Since the new system implementation in 2017, revenue from these services has had an average increase of \$55,000 yearly. The COVID year 2020 substantiated that revenues would have been lost without this search engine. The more documents we make available in our e-commerce, the greater potential for revenues.

In February 2022 we received legislative authorization to use \$360,000. The project is scheduled to begin by the vendor in September of 2022 and be completed by December of 2022.

EMERGENCY COMMUNICATIONS

Auxiliary Power Systems Replacement

Project On-going

The purpose of this project is to replace end of life auxiliary power systems at the E911 Main Center. This includes the building generator, auxiliary generator control panel, transfer switch, and the uninterruptable power supply.

On December 17, 2019 the County Legislature approved the bond resolution #199 authorizing \$688,000. With these funds we will accomplish the replacement of the 125 kVA uninterruptable power supply (UPS) system and update and install a new primary 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 started in 2020 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.

As of April 2022, this project is 95% complete. There are small outstanding items to complete before the end of 2022. The project cost was covered predominantly by the 2018 State SICG grant. E911 has only spent \$6K of the CIP funds.

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

Project On-going

On February 2, 2021 the County Legislature approved bond resolution #21 authorizing \$2,350,000 to implement 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). This project will also replace the NICE recording system which was installed in 2014 and reached the end of their useful service life for 24/7 critical public safety system use.

On December 17, 2019 the County Legislature approved bond resolution #200 authorizing \$212,000 for consultation, engineering and bid specification work.

The project was put out for RFP (RFP 21-3400-001) and awarded to Motorola Vesta in April 2021.

Work on this project began in late summer/early fall 2021 and will be complete by the end of 2022.

Public Safety Radio Tower Replacement

Project On-going

The goal of this project is to 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.

Part I Rose Hill radio tower replacement was approved by the Legislature on 12/19/2017 (Resolution 2017-225 for \$339,000).

In the summer of 2018, the existing 325' Rose Hill (ROS) radio tower, located at 2724 Rose Hill Road in the Town of Marcellus, was replaced with a new 325' SSV type radio tower meeting TIA-222 public safety communications tower standards. Once the new tower was constructed adjacent to the old tower, and antennas and feed line were installed, the old radio tower was decommissioned and removed from the site. The Rose Hill tower was constructed in the early 1960's.

On December 3, 2019 the County Legislature approved part II, the resolution #169 for \$265,000 to will be used for the Makyes Radio Tower.

This project was intended to begin in summer of 2020 but was significantly delayed due to the COVID-19 pandemic. The construction began in earnest in the spring of 2021 and work is at the 75% complete mark with the only remaining work being the actual erection of the new tower which has been delivered to the site by the manufacturer. 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. This project should be complete by the end of 2022.

Repave E911 Center Parking Lot

Project On-going

On February 2, 2021 the county legislature approved the resolution #22 authorizing the use of \$344,000 cash (reserve) to repave, restripe, and add new conduit underneath 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 30 years old in 2021 and is used 24/7 by E911 employees and visitors. E911 will use the county's pavement vendor to execute the work during the spring or fall of 2021. The county's fence vendor will be used to replace the in-ground security gate sensors following completion of the paving. During the time the parking lot is being milled E911 would like to add a second conduit from the telephone pole near the entrance to a vault on the opposite side of the parking lot to have space for future fiber coming into the 911 center. The majority of this project was successfully completed in June of 2021. All that remains is troubleshooting a few spots, sealing it and restriping which will happen in 2022/2023.

Replacement of Mobile Data Communications Network (MDCN)

Project On-going

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 E911 Center's Mobile Data Communications Network (MDCN) Infrastructure reached its predicted end-of-life at the end of 2017.

On December 17, 2019 the County Legislature adopted resolution #201 for \$3,600,000 to be used for replacement of the MDCN infrastructure. 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.

Installation of the modems began in 2021 and is moving along smoothly. The modems still need to have

FACILITIES MANAGEMENT

Carnegie Library Rehabilitation

Project On-going

OCFM plans to rehabilitate the Carnegie Library and occupy it with relocated departments. The Carnegie Building has been vacant since the SCSD returned the property to Onondaga County. This building is registered as a historical place and the unique property is an irreplaceable asset. The timing of this is perfect as it allows for the future planning in consolidation of departments and the reorganization of our public services at the Civic Center. THOCFM performed performed all the program studies and

architectural design to minimize cost. We will rehabilitate and restore conditions rather than replace. We will promote open floor planning, sustainable environments and current technologies. We will enhance efficiency, safety and security that the relocated departments don't have options for in their present locations as well as provide the connection to the public and the potential for intermunicipal endeavors. The project design was completed, the public bids for construction awarded and the construction began April 11, 2022. Expected completion is early 2023

Community Plaza and Walks Renovations

Project On-going

The County Legislature has authorized \$1,657,000 (the last authorization was Resolution #16 on February 1, 2022 for \$300,000) to fund this project. 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 completed. This will mitigate the leaks through the plaza into the museum spaces. Surrounding concrete sections are partially replaced and will continue to 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.

DH&C Plant Upgrades

Project On-going

This project will address a variety of replacements, repairs, upgrades and improvements in the downtown steam plant. These capital improvements will increase efficiencies, reduce operating cost, maintain and extend the life of the existing assets and increase the level of safety.

On December 3, 2019 the County Legislature approved resolution #178 authorizing the borrowing of \$700,000 to fund this project. The following are the scope elements of this project. We have already started implementing some parts of this project:

1. Boiler control replacements: These controls are over 10 years old and it is hard to find replacement parts for them when they malfunction, which happens frequently. In addition the control system is proprietary and the only service provider is in West Virginia. Every time we need their service it takes weeks to receive it and it is expensive. We intend to replace these controls with modern ones that will provide an improved service and will be much easier and less expensive to be serviced and maintained.
2. Cooling tower drain pan repair/replacements: Most of the drain pans are over 15 years old and they are corroded and leaking which means they are not performing their function. This causes excessive water and chemical use as well as efficiency loss. We intend to engage specialized services in order to repair or replace these parts so that they can last as long as the chillers will.
3. Chiller support equipment repair and maintenance: Our chillers have electrical control panels which regulate the work load of the chillers. These control panels have coolers that maintain the required temperature within them. In the last 10 years these coolers presented a variety of problems which led to overheating control panels causing the shutdown of the chillers when we need them the most. We intend to replace the control panel coolers with higher capacity and more modern ones which avoid the problems we have been facing.
4. Conversion from power generation to utility grid for the chillers: Our steam plant has six chillers out of which four are connected to the power grid and two are connected to generators. These generators are now decommissioned and this has put the two respective chillers out of service. We can bring these chillers back to service by connecting them to the power grid, which is what we intend to do. By doing so, we will have the very much needed chilling capacity.
5. Other miscellaneous controls upgrades and replacements: In the steam plant we have several standalone computers that monitor and control various HVAC equipment in the downtown campus. We intend to replace them with a central server with the latest software and replace the outdated equipment that the server controls.

We have spent about \$4000,000 so far and will continue through this summer and fall of 2022 with an

LED lighting upgrade in various buildings in downtown campus

Project On-going

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.

On December 3, 2019 the County Legislature approved resolution #218 authorizing the borrowing of \$440,000 to fund this project. In addition we anticipate receiving \$91,000 from NYSERDA, which will bring the total funds for this project to \$535,000. 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, and 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. We paused this project during the pandemic as costs accelerated and material acquisitions suffered severe delays. We expect to proceed in the fall of 2021 with a completion of spring 2022.

It is calculated that the cost 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

FINANCE DEPT

Build a Science, Technology, Engineering, Arts and Mathematics School

Project On-going

On May 5, 2020 the County Legislature approved resolution # 60 authorizing the issuance of \$74 million in bonds to rehabilitate the Central High School in downtown Syracuse and transform it into a Science, Technology, Engineering, Arts, and Mathematics (STEAM) high school. The STEAM High School will be focused on performing arts and related sciences and technologies. This school will anchor an area of the City beginning to experience redevelopment and will serve as a focal point and catalyst for future private development and collaboration, as well as foster synergy with professional arts organizations in the region. One of the important goals of this initiative is to encourage high school graduation and college attainment addressing at the same time conditions associated with persistent poverty.

This innovative project is a joint initiative of the Syracuse City School District and Onondaga-Cortland-Madison Board of Cooperative Educational Services, in partnership with Onondaga Community College (OCC), Le Moyne College, other higher education institutions, various school districts and businesses.

The Syracuse STEAM project will provide curricula to 800-1000 students passionate about Science, Technology, Engineering, Math and the Arts. The programs will include: Remotely Piloted Aircraft Systems, Computer Technology, Electrical and Mechanical Technology, Business and Financial Services as well as a diverse program in the Arts including dance, theatre, visual arts, music, media arts and writing. The curriculum also will offer intensive training, internships, and eventually apprenticeships in arts-related sciences and technologies, including kinesiology, music technology and audio engineering, arts finance and curating, film production, and similar fields. In partnership with higher education institutions and business partnerships with employers in the programs listed above, students will be positioned for a career or college upon completion of high school, in the Science, Technology, Engineering, Arts and Math disciplines.

The Design phase of this project will start by fall 2021. It is anticipated that it will take 32 months to complete this project.

INFORMATION TECHNOLOGY

Evidence Management System Upgrade

Project On-going

The goal of this project is to upgrade the software and hardware of the existing evidence management system that is used by Onondaga County's law enforcement and forensic agencies. These upgrades will allow all 30 sites including the Center for Forensic Sciences, the County District Attorney, the County Sheriff and all law enforcement agencies in the County to take advantage of updated technology to increase the effectiveness and efficiency of their work.

On December 3rd, 2019 the County Legislature approved resolution #174 which authorized borrowing \$630,000 in order to implement this project.

In 2009, Onondaga County embarked on a one of a kind property and evidence management system that combines property and evidence tracking within all law enforcement agencies within the County (BEAST Evidence Management System or EMS) with a fully functioning laboratory and medical examiner information system (BEAST Laboratory Information Management System or LIMS) at the Forensic Science Center. While this system has offered tremendous benefits to the law enforcement and forensic agencies throughout the county, it runs on older technology and requires an upgrade in hardware and software to take advantage of updated features and to be fully effective. We are proposing to upgrade both the EMS and LIMS system from a client-server based system to a web-based system.

The web-based system offers the following advantages:

- No longer requires the use of Citrix, which leads to the following benefits:
 - Improved performance speed. Current system has significant delays due to slow connections
 - Some USB hardware and printers are not supported with Citrix
 - Cost savings due to significant licensing costs with Citrix
- Runs on SQL rather than an Oracle database. Licensing and maintenance costs are less with SQL
- Web-based server rather than client based server requires less IT support for set up and maintenance/updates
- Upgraded system ensures compatibility into the future with newer operating systems as well as interfacing with external systems.
 - Allows for future enhancements as vendor is phasing out current client/server making upgrades and enhancements unavailable with current system.
- Current benefits of the BEAST database system that will continue as part of the upgraded system are:
 - The system allows all Town and Village Police Departments, the Sheriff's Office, the Syracuse Police Department, the District Attorney's Office, the Forensic Laboratories and the Medical Examiner's office to share critical information on cases and eliminate duplicative entry system.
 - The system makes use of barcoded labels to transfer and track evidence throughout its lifetime from collection at the crime scene to storage at property and transfers that may occur to the Forensic Center and/or District Attorney's offices.
 - The system contains listing reports that allow agencies to make specific queries regarding different types of evidence such as firearms or controlled substances for destruction and auto-generation of return-to-owner letters for property dispositions.
 - The system allows for police agencies and the DA's office to make and view all requests for laboratory analysis within the system and provides Medical Examiner and Laboratory reports to requesting agencies contemporaneously as they are released without any downtime relating to distribution or mailing of hard copies of reports.
 - The system serves as a comprehensive laboratory information system to include chain of custody, sampling, electronic note taking, item attributes, and reporting for both the Forensic Laboratories and the Medical

The BEAST upgrade project started earlier this year (2021). The database conversion are complete, the Web App is up ready to start testing. Additionally, we have started to work with the medical examiners on their new processes. We are projecting to incur about 80% of the project costs this year (2021).

Technology Refresh

Project On-going

This project consists of a technology refresh for Voice, Network, Internet and Data Backup / Restore Services.

The current technology stack that supports Voice, Network, Internet and Data Backup / Restore Services is at the end of its support life. The support for the above components will discontinue by 2020.

In April 2, 2019 the County Legislature approved the bond resolution #052 authorizing \$1,581,000 for this project.

Under this project we intend to upgrade/replace the following:

VOIP Call Manager (phone system), Unity (voice mail system), & Contact Center (call center) software license upgrade. Status: we purchased the upgrade licenses in 2020 and are performed the phone system upgrade on July, 2021.

Ongov Web Site Redesign – the RFP was awarded to Modern Tribe. The project has started and we are in the requirements phase.

Tivoli Server Manager (data backup services) Server Replacement – this server replacement has been deemed unnecessary due to the fact that we decided to go with IBM's Spectrum Plus backup solution which does not require Tivoli.

2 Cisco Nexus 7000 Core Network Switches – we purchased the 2 Cisco Nexus Switches in 2020 and have started the project to configure this.

Replacement of network equipment – firewalls, routers, network switches, wireless access points, software modules and licenses. We have purchased a number of firewalls, network switches and wireless access points and are targeting more hardware to procure to update our environments.

OFFICE OF ENVIRONMENT

Beach Development at Onondaga Lake Park

Project Completed

The goal of this project is to conduct a feasibility study regarding a beach at Onondaga Lake Park. This study is supported by a state grant, which the County Legislature accepted in Spring 2018.

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 study is fully funded by a New York State Department of State Local Waterfront Revitalization (LWRP) grant. The grant calls on \$110,000 in local match which the County Office of Environment, Parks Department and Water Environment Protection are providing in form of in-kind services.

At this point the contracted architects have produced a feasibility study which is available on the County website

ONONDAGA COMMUNITY COLLEGE

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 plan 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 Hall renovations are substantially complete. The College library, a critical component of the learning landscape on campus, occupies a good portion of Coulter Hall. This structure had 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 who excel. 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 Hall, the home of Onondaga's Nursing and other key science programs is one of the final components of this project. This project includes 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 was developed focusing on the disciplines housed within Ferrante Hall. The Spring 2019 semester was the first semester the innovative classroom in Ferrante was scheduled for classes. Other classrooms and components of Ferrante Hall are now being evaluated for further renovations to close out the project. The overall project is anticipated to be complete by December 2022.

ONONDAGA COUNTY PUBLIC LIBRARY

Petit Branch Library addition and improvements

Project On-going

On February 1, 2022 the County Legislature authorized \$950,000 in debt and \$594,229 state aid funds to build a community room as an addition to Petit Library. In addition this project will include various interior and exterior upgrades.

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

PARKS & RECREATION DEPT.

Beaver Lake Nature Center Boardwalk Replacement (NEW)

Project On-going

On December 17, 2019 Bond Resolution 219 authorized the Parks Department to spend \$1,835,000 to replace the boardwalk at Beaver Lake Nature Center.

Getting started with this work has been delayed by COVID-19.

In the Spring of 2022 a contract was awarded to RSA to engineer this project. Construction of this project is slated for late Summer of 2022.

Build an Animal Health Care Center

Project On-going

The Rosamond Gifford Zoo presently has an animal medical clinic which does not meet the requirements specified by the Association of Zoos & Aquariums (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, creating at the same time 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 at the same time. This will be done in an environment that is medically and surgically compliant with the standards.

On December 5, 2017 the Legislature approved BR-190 authorizing \$500,000 to fund the engineering design of the first phase of this project.

Engineering and design began in early 2018.

On December 18, 2018 the Legislature approved BR-172 authorizing \$7,200,000 to fund the construction of the Animal Health Center. Construction began in fall 2020. The Friends of Rosamond Gifford Zoo will begin a capital campaign to help defray the expenses of this project.

In the Fall of 2020 ground was broken on the Animal Health Center Project. Construction began in Fall of 2020 and construction will be completed in Fall of 2022

Hopkins Road Softball Park Rehabilitation

Project On-going

Hopkins Road Softball Park is a six diamond complex that features five tournament-quality softball fields and a fenced baseball field. Summer and fall leagues for men, women, coed and senior teams dominate weeknights from April through early November with regional and national tournaments showcasing slow-pitch and fast pitch action on several weekends and contributing to the economy of the County. Operation of Hopkins Road Park is contracted to a third party that is responsible for booking field usage, tournaments and concessions.

On December 17, 2019 Bond Resolution 219 authorized the Parks Department to spend \$1,400,000 to complete the following 2020 projects:

- Replacement of playfield turf (\$376,000)
- Replacement of all field fences (\$120,000)
- Repair or replace the failed lights. (\$168,000)
- Replace the scoreboard which is very old, malfunctioning and beyond repair (\$20,000)
- Replacement/expansion of concession stand that was damaged by fire in 2018 (\$60,000)
- Replace Dugout Canopies (\$40,000)
- Garage/storage/repair building (\$16,000)
- Parking lot repaving (\$600,000)
- Total \$1,400,000

Work on the project has been delayed by COVID-19 issues and the potential construction of a multisport complex at Hopkins Park.

Long Branch Park Improvements

Project On-going

Long Branch Park is located within Onondaga Lake Park and host to dozens of events each year. Due to the age and the heavy use of Long Branch Park it has been determined that a number of facilities are in deteriorating conditions and in need of replacement in order to better serve the public. These facilities include office space for parks management, storage space, and bathrooms,

Countywide Funds

shelters, and parking lot, which needs expansion, as well as related pathways and roads.

On 2/2/2016 the County Legislature authorized \$350,000 BR -009 which will be used for Long Branch Park improvements.

On December 17, 2019 Bond Resolution 219 authorized the Parks Department to spend \$1,000,000 for the construction of the maintenance building and restrooms.

On February 1, 2022 Bond Resolution #19 authorized the Parks Department to spend \$1,000,000 for the construction of a parking lot.

In Spring of 2022 project construction has begun

Loop the Lake Trail

Project On-going

In December 5, 2017 the County Legislature authorized \$500,000 in pay-as-you-go funds and \$1,000,000 in debt by resolutions #183 and #185 (respectively) for a total of \$1,500,000 to construct 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. 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. In 2021 we completed the whole west shore trail system 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 supported the feasibility of the Loop the Lake Trail and indicated 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 Creek walk 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.

New York State Department of Environmental Conservation (NYSDEC) and United States Army Corps of Engineers (USACE) permits have been issued for the project and construction is expected to begin in 2021.

Veterans Cemetery Lawn Crypts

Project On-going

In February of 2022 by Resolution #19, the County Legislature approved the following:

The use of lawn crypts at the Veterans Cemetery will allow new graves to be placed closer together, therefore increasing the capacity in the remaining portions of the cemetery property.

In addition, installing crypts would allow for reduced labor for burials by reducing the amount of digging required.

In 2021 we will perform engineering and survey work needed to determine the number and locations of the new crypts and estimated costs for the project.

In February 2021 we received authorization to use \$100,000 in cash for the above purpose.

In 2022 we will implement the first phase of this project, installing a portion of crypts that need to be installed.

In February 2022, bond resolution #19 authorized the Parks department to spend \$1,000,000 to complete this project.

In Spring 2022, EDR delivered a Final Report to determine the long range plan for the Veterans Cemetery and Loomis Hill. It was determined that due to proximity to a flood plain and cost that the construction of crypts was not practical. What the study did provide is a road map for solving drainage issues and a plan to ready the vacant land for in ground and cremated burials for the next 50 years.

SHERIFF POLICE/CIVIL

Radio Replacement

Project On-going

On February 1, 2022, the County Legislature authorized \$4,665,000 to replace portable and mobile two-way trunked land mobile radios that were originally purchased in 2009 as part of the Onondaga County Interoperable Communications System (OCICS) Project. Those radios will be approximately 13 years old in 2022 and the manufacturer has issued service bulletins for both the portable and mobile (includes control station) radios advising that some repair parts are no longer available and radios sent for repair are increasingly being returned as not serviceable.

In 2020 the Sheriff's Office conducted a survey of the numbers of radios in use by each department in Sheriff's office and the justified need for those radios. The Sheriff's Office determined the need to replace 702 portables, 208 mobiles, nine control stations, and two P25 base station repeaters for the jail facilities along with ancillary accessories (e.g., individual and multi-unit charges, carrying cases, belt loops, speaker/microphones). It is proposed that the radios be purchased over two years with the portables and related accessories to be replaced in 2022 (\$3,510,000) and mobiles, control stations and repeaters replaced in 2023 (\$1,155,000). The total cost for replacement is estimated at \$4,665,000.

TRANSPORTATION

DOT Facilities Improvements

Project On-going

Onondaga County DOT currently has 4 maintenance facilities within the County. Two of these facilities are in need of repair, including the Marcellus and Jamesville shops. Several repairs are required in order to keep these facilities safe and operational. On December 3, 2019 the County Legislature approved resolution #176 authorizing \$1,000,000 to do the work described in the summary below:

Marcellus DOT Maintenance Facility

- Replace Gutters & Install Heat Tape.
- Repair Siding; Repair Roof.
- Replace Fuel Pumps.
- Replace Damaged Entrance Man Doors & Frames.
- Replace Overhead Doors.
- Floor Drain Repairs.
- HVAC system repairs.
- Replace Damaged Concrete Aprons.
- Update Card Reader & Camera System.
- Replace Ceiling Tiles.
- Repair Parking Lot Pavement.

Jamesville DOT Maintenance Facility

- Replace Gutters.
- Repair Block Walls.
- Replace Overhead Doors.
- Replace Man Doors and Frames.
- Repair Deteriorated Concrete Floor Drains.
- Repair Wash Bay Heaters.
- Replace Card Readers.

The proposed work is scheduled to be completed by both County forces and contract forces in 2023 and 2024.

Rehabilitation of North Area and Camillus Highway Maintenance

Project On-going

The Department of Transportation's North Area and Camillus highway maintenance facilities were both built in the early 1960s. Neither site was designed or intended to function as a highway operations/maintenance facility. The North Area shop was originally a United Parcel Service distribution center. The Camillus facility was built to serve as a small private airport. The layout and condition of these buildings and property result in significant operating inefficiencies and costs, leading to a critical need for major structural renovations to both facilities. In addition, building systems in both facilities need complete rehabilitation (HVAC, electrical, plumbing).

Funding for replacement of the Camillus facility was approved on 12/20/2016. Design was completed in 2017 with construction beginning at the end of winter operations that year. The new facility was completed in the spring of 2018.

Funding for renovation of the North Area Maintenance facility was approved on 12/5/2017. Construction is ongoing to optimize the existing building footprint for the current and future needs of the department. Major rehabilitation to the building envelope, life safety features and utilities are underway. Renovations are expected to be completed in 2024.

Countywide Funds

PROPOSED CAPITAL PROJECT SUMMARY

County Wide

Department	STATUS	PROJECT	2023 - 28 Total
General Fund			
DEPARTMENT OF CORRECTIONS			
		Physical Plant Improvements and Security Upgrades	592
		Subtotal	\$ 592
ELECTIONS BOARD			
	new	Voting Equipment Replacement (NEW)	3,350
		Subtotal	\$ 3,350
EMERGENCY COMMUNICATIONS			
		E911 Center Facility Rehabilitation	11,000
		Tower Site Shelter Rehabilitation	1,091
		Subtotal	\$ 12,091
FACILITIES MANAGEMENT			
		Center for Forensic Sciences Building Rehab./Renovations	2,615
		Community Plaza Garage	1,790
		Courthouse - HVAC Renovations	9,000
		Facilities Various Capital Improvements	4,115
		Oncenter Rehabilitations	3,000
		Subtotal	\$ 20,520
HILLBROOK DETENTION HOME			
		Education, recreation and vocational center at Hillbrook detention center	8,225
		Subtotal	\$ 8,225
OFFICE OF ENVIRONMENT			
		Ash Tree Management	3,750
		Subtotal	\$ 3,750
PARKS & RECREATION DEPT.			
		Build an African Savannah Exhibit	6,550
		Carpenters Brook Fish Hatchery Building Replacement	1,020
		County Multi Sports Complex	25,000
		Lights on the Lake Storage Facility	500
		Oneida Shores Facility Upgrade	1,020
		Oneida Shores Park Shoreline Rehabilitation	240
		Parks Various Infrastructure Rehabilitation and Improvement	18,266
		Zoo Mechanical Systems and Roofs Replacement	2,000
		Subtotal	\$ 54,596
SHERIFF CUSTODY			
	new	Upgrades of Security Operation and Inmate information systems in Justice Center (NEW)	7,513
		Subtotal	\$ 7,513
		General Fund Total	\$ 110,637
Library			
ONONDAGA COUNTY PUBLIC LIBRARY			
		Mobile Library Outreach	260
		Library Total	\$ 260

Countywide Funds

County Wide

Department	STATUS	PROJECT	2023 - 28 Total
Community College			
ONONDAGA COMMUNITY COLLEGE			
	new	Building Envelope Package (NEW)	5,000
	new	Coyne Hall Deep Energy Retrofit (NEW)	5,000
	new	Digital Newsroom/Broadcasting and Sound Recording (NEW)	1,000
	new	Gordon Student Center – Student Service and Student Union Environment (NEW)	18,000
	new	HVAC Package (NEW)	7,300
	new	Information Technology Package (NEW)	9,000
	new	Interior Finish Package (NEW)	1,750
	new	Learning Environment Upgrades (NEW)	13,000
	new	School of Health Expansion Project (NEW)	30,000
	new	Site Improvement Package (NEW)	7,200
	new	Workforce Career Lab (NEW)	5,500
		Subtotal	\$ 102,750
		Community College Total	\$ 102,750
County Road			
TRANSPORTATION			
		Bituminous Surface Treatment	16,850
		Bridges	10,485
		Capital Highway Construction	69,797
		Caughdenoy Road / NYS Route 31 Road Improvements	10,500
		Cold Mix Bituminous Paving	29,620
		Guide Rail	3,980
	new	Marcellus Maintenance Facility Sewer Connection (NEW)	500
		Repaving Program (Hot Mix Bituminous)	78,307
		Testing, Drainage and Facilities Repair	4,710
		Traffic Systems Management	2,415
		County Road Total	\$ 227,164
		County Wide Total	\$ 440,811

Countywide Funds

Estimated Debt Service

Payment Schedule (\$ in 000's)

County Road

TRANSPORTATION

	2023	2024	2025	2026	2027	2028
Bridges	0	0	74	196	321	449
Guide Rail	0	0	0	0	0	0
Capital Highway Construction	0	0	42	102	141	179
Testing, Drainage and Facilities Repair	0	0	0	0	0	0
Traffic Systems Management	0	0	20	59	99	140
Bituminous Surface Treatment	0	0	0	0	0	0
Cold Mix Bituminous Paving	0	0	26	87	140	178
Repaving Program (Hot Mix Bituminous)	0	0	236	615	857	990
Caughdenoy Road / NYS Route 31 Road Improvements	0	0	26	313	821	1,054
Marcellus Maintenance Facility Sewer Connection	0	0	24	38	37	37
Department Total	0	0	448	1,410	2,416	3,027

Library

ONONDAGA COUNTY PUBLIC LIBRARY

	2023	2024	2025	2026	2027	2028
Mobile Library Outreach	0	0	14	35	34	33
Department Total	0	0	14	35	34	33

Community College

ONONDAGA COMMUNITY COLLEGE

	2023	2024	2025	2026	2027	2028
Learning Environment Upgrades (NEW)	0	0	0	26	200	454
Information Technology Package (NEW)	0	0	0	0	0	105
Workforce Career Lab (NEW)	0	0	53	177	232	227
School of Health Expansion Project (NEW)	0	0	210	603	916	1,050
Gordon Student Center – Student Service and Student	0	0	0	0	0	158
HVAC Package (NEW)	0	0	34	71	116	177
Building Envelope Package (NEW)	0	0	37	133	190	195
Site Improvement Package (NEW)	0	0	26	60	130	179
Interior Finish Package (NEW)	0	0	0	0	0	42
Coyne Hall Deep Energy Retrofit (NEW)	0	0	92	188	209	205
Digital Newsroom/Broadcasting and Sound Recording	0	0	26	43	42	41
Department Total	0	0	478	1,301	2,035	2,833

County Wide Total	0	1,167	4,777	8,642	11,564	13,574
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Countywide Funds

DEPARTMENT: DEPARTMENT OF CORRECTIONS

Project: Physical Plant Improvements and Security Upgrades

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

Level of Development: Advanced

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 Housing Units 1, 2, 3, 4, and the replacement of inmate housing unit entry and cell doors. The kitchen dishwasher 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-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		592					592	592
Authorized Borrowing	1,233							0	1,233
TOTALS	1,233		592					592	1,825

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.

On December 19, 2017 the County Legislature authorized \$325,000 (Resolution # 224) to accomplish the following scope elements (1 to 5) of this project:

- 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. This subproject has been completed in 2018 for \$60,000.
- 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. This subproject has been completed in 2018 for \$115,000.
- 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. This subproject has been completed in 2018 for \$27,000.
- 4) Kitchen Dishwasher – Current dishwasher 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. This subproject has been completed in 2018 for \$83,000.
- 5) 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 to potential of ceiling failure. The quote we have received for this work is \$32,000, which is what we had estimated.

On March 5, 2019 the County Legislature authorized \$368,000 (Resolution # 34) to accomplish the following scope elements (6 and part of 7) of this project.

6) New Entry/Egress - 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. Our cost estimate for this subproject is \$115,000. A vendor was engaged to build the new entry/egress and the work started at the end of June 2019 and was completed in November 2019 at a cost of \$99,445..

7) Air Conditioning in Housing 4 – This unit has no air conditioning system. As a result the heat & moisture builds up and ruins metal fixtures, causes peeling paint, buildup of floor humidity and mold, which presents health hazard for Staff and inmates in extremely hot weather. In addition the humidity causes metal rust and fatigue of the floors as the units have multiple floor levels. In order to correct this situation we are adding five split system AC units. After engineering work was completed in the Summer of 2019, installation began in late Fall 2019 and was completed during the early winter of 2020. Final testing and adjustment were done during the warmer months of 2020. Although the estimated cost was \$250,000, final costs were \$278,851 due to increased costs of materials (alternate funds were used to offset the difference).

On December 17, 2019 the Legislature approved \$442,000 in bonding (Resolution 2019-198) to accomplish the following:

8) Repairs to Roadways - 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. A bid has been received and repaving was scheduled to begin in April 2020 but was postponed due to non-essential work being discontinued during the COVID-19 pandemic. Repairs were completed during the summer of 2020 after construction restrictions were lifted. (\$182,000)

9) Air Conditioning in Housing 3 – This unit has no air conditioning systems and the problems that occur in unit 4 are present here as well. The project was delayed until late Spring while waiting for Purchasing to approve an engineer; however final approval on moving forward with the design and construction is awaiting approval from the County Executive's Office. (\$260,000)

On February 2, 2021 the Legislature approved \$98,000 in bonding (Resolution 2021-020) to accomplish the following:

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

11) 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. 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)

In fall 2023 we will seek legislative authorization for \$592,000 to accomplish the following:

12) Air Conditioning in Housing 2 – This unit has no air conditioning systems and the problems that occur in unit 4 are present here as well. (\$270,000)

13) Replacement of hot water on demand in the housing units 8 and 9. The new system 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 (\$42,000)

14) Air Conditioning in Housing 1 – This unit has no air conditioning systems and the problems that occur in unit 4 are present here as well. (\$280,000)

Countywide Funds

DEPARTMENT: ELECTIONS BOARD

Project: Voting Equipment Replacement

Purpose: Maintain Existing Investment, Federal/State Mandate

Level of Development: Advanced

Project Description:

Under this project we plan to replace our fleet of voting machines. Both hardware and software were installed in 2008 and are outdated, since their expected life is 10 years as defined by NYS State Board of Elections standards. The software updates are provided to Onondaga County Board of Elections by Dominion, which is one of the vendors that supplies hardware and software updates to Counties in NYS. Dominion has indicated that our existing hardware (voting machines) will not be able to handle the required software updates for 2023 and going forward. We will also look to invest in our ballot-on demand ability that will save long term on ballot costs and provide greater accuracy and speed at polling places. The investment in this technology may allow us to reduce the number of polling places and inspectors' costs over time.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
State Aid	0	450						450	450
Borrowing to be Authorized	0	2,900						2,900	2,900
TOTALS	0	3,350						3,350	3,350

Project Detail and Status:

The Onondaga County Board of Elections has been advised by Dominion Voting Systems that the operation, support, and maintenance of existing voting machines has become difficult and increasingly expensive. Most importantly, the expansion and development of this product has been ceased due to obsolescence. For these reasons, this product will not be supported in the next certified version 5.16 of Democracy Suite system, which is currently being tested by the New York State Board of Elections. The Image Cast voting machines were originally certified in 2007. New York State was mandated to replace our lever voting machines to comply with new federal standards. We have not updated our voting system since that time. We are now looking to upgrade our fleet of machines to the newest most up to date machines being certified at the NYS Board of Elections. This upgrade will last for an additional 10 years as we are skipping the Dominion ICE machines that were certified 5 years ago and moving to newer technology. Currently, there are multiple vendors to choose from. In 2008, only Dominion and ES&S were certified and now the above vendors along with new vendors, Hart and Clear Ballot, are currently undergoing certification for new machines at the NYS Board of Elections. This wider selection should result in a more competitive bidding market and save Onondaga County money.

Our upgrade to Electronic Poll Books in 2019, as well as continued upgrades to on-demand printing, has proven to be a valuable resource for our county. We currently service 1/3 of our polling places with on-demand printers on Election Day. This saves us on nearly 100 thousand ballots printed each election. Investing in full on-demand printing will increase the savings, allow us to service larger polling sites, reduce our election personnel and save Onondaga County printing costs as well as storage costs.

Onondaga County has a voting population of over 303 thousand voters and rising. Our current fleet of 275 Imagecast voting systems serves our 160 polling places throughout Onondaga County. We believe that with new voting technology we can reduce our fleet of voting machines significantly while upgrading their capability to handle reforms such as Early Voting and Vote Center models that are being implemented in NYS. This will save us personnel hours in programming and training as the new technology will be easier to use and program for each election.

We intend to purchase and replace machines in January of 2023 to allow for training sessions and installment of new Election Management software before the June 2023 primaries.

The on-demand ballot printing technology is available currently and we would look to purchase and receive equipment in January of 2023.

The replacement and upgrade of our voting machines and technology will be in three different categories.

Countywide Funds

1. Voting Machine and Ballot Marking Devices: These are required at every Early Voting Centers as well as Election Day Polling Places. We estimate a need of 200 machines at an estimated cost of \$12,000.00 per unit.
2. Election Management System: Any new voting machine will need to be accompanied by a replacement of the Election management system used to prepare and program voting machines for use by the public. This is estimated to be approximately \$50,000.00.
3. To finish our ballot-on demand upgrades we need approximately 100 more units at an estimated \$4,000.00 per unit.

In Fall 2022 we intend to seek legislative authorization for \$2,900,000 in bonds and \$450,000 in State Aid to fund this project.

Countywide Funds

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: E911 Center Facility Rehabilitation

Purpose: Public/Employee Safety/Health

Level of Development: Preliminary

Project Description:

The E911 Center was built in 1991 and has not undergone any significant improvements since then, despite a growth in staff size and specialization, call taking and dispatch activity, and technology systems. The first phase of the project involves engaging the services of an architectural firm to make recommendations and provide cost estimates for replacements/repairs, improvements, and adjustments required to accommodate advancements in technology. This study will also include the former Hillbrook/Fire Control/OCSO South Station building which is currently used for storage and is in failing condition. Phase 2 is the actual demolition of the former Hillbrook facility and Phase 3 is the expansion and renovation of the current 911 Center.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Authorized Borrowing	100							0	100
Borrowing to be Authorized	0		5,000	6,000				11,000	11,000
TOTALS	100		5,000	6,000				11,000	11,100

Project Detail and Status:

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

This study was partially completed in 2018 but due to some re-evaluations of needs was temporarily suspended and will be completed in fall 2022.

We anticipate that the demolition of the former Hillbrook/Fire Control/OCSO South Station building will happen in 2024. In addition, in the same year we will start construction work which will be completed in 2025.

In fall 2023 we will ask for legislative authorization for \$11,000,000 in bonds.

Countywide Funds

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: Tower Site Shelter Rehabilitation

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 were 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:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	1,091						1,091	1,091
TOTALS	0	1,091						1,091	1,091

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 hilltop 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.

Legislative authorization will be sought in Fall 2022 for \$1,091,000 in debt, to implement this project

Countywide Funds

DEPARTMENT: FACILITIES MANAGEMENT

Project: Center for Forensic Sciences Building Rehab./Renovations

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

Level of Development: Advanced

Project Description:

This project will accomplish a number of improvements of various nature in the interior and exterior of the Center for Forensic Sciences Building. Various components of this building are in need of repair or renovations. Several repairs will provide a safer and more functional workspace. In addition, the staffing levels and technological processes have changed, requiring reconfiguration of the floor plan.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Cash on Hand	66							0	66
Authorized Borrowing	335							0	335
Borrowing to be Authorized	0	2,615						2,615	2,615
TOTALS	401	2,615						2,615	3,016

Project Detail and Status:

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. This work is already done.
2. Retrofitting showers and eyewash stations for tempered water through the installation of tempering valves. We have received quotes and the work is complete.
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. This work is done.
4. Replacement of the old remote entry intercom system. This work is already done.
5. Replacement of old morgue cooler door mechanisms. This work is already done.
6. Replacement of Medical Examiner overhead garage doors. This work is already done.
7. Sidewalk and Parking Lot Repair. We have performed some of these repairs and intend to continue as needed.
8. Replacement of water heaters. We have received the units and the work will be completed in 2021

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

An architectural and engineering design was completed for improvements that are considered the phase 2 of this project. These improvements will happen primarily on the 3rd floor and will include ballistics, identification/ fingerprinting and other digital forensic processes. This phase will also include some improvements to the electronics forensic area, and some other laboratory improvements. We will also provide an emergency generator replacement as the original one is now undersized for the amount of technology and equipment that has been added since the building was built.

In fall 2022 we intend to ask \$2,615,000 in debt to be used in 2023 to accomplish this work.

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-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Authorized Borrowing	250							0	250
Borrowing to be Authorized	0		1,790					1,790	1,790
TOTALS	250		1,790					1,790	2,040

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 2024 cost of \$1.79 million.

We intend to seek legislative approval for \$1,790,000 in debt for construction funds in Fall 2023.

Countywide Funds

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

Project Description:

This project is designed to address the aging, 50+ year old HVAC systems in this important 106-year-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:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		2,000	3,000	4,000			9,000	9,000
Authorized Borrowing	1,400							0	1,400
TOTALS	1,400		2,000	3,000	4,000			9,000	10,400

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. On December 17, 2019 the County Legislature approved \$1,000,000 (Resolution #217) to begin construction phase of this project.

We plan to seek legislative approval for \$2,000,000 in debt for construction funds in Fall 2023.

Countywide Funds

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. This will also include provisions for improvements designed to reduce the chance of pandemic spread by modifying work environments, creating biologic barriers, implementing additional disinfectant systems, introducing technologies of sensors and screening as well as strengthening the security and surveillance of our properties.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	2,115	500	500	500	500		4,115	4,115
County Tax Revenues	850							0	850
Authorized Borrowing	12,900							0	12,900
Federal Aid	1,000							0	1,000
TOTALS	14,750	2,115	500	500	500	500		4,115	18,865

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

Countywide Funds

rehabilitation project.

In December 2012 the County Legislature authorized \$1,000,000 in our 2013 budget to continue the improvements.

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.

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.

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 is in 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. We are in the process of researching different asset management systems.

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.

With these funds we have accomplished abatement at the PSB, the restoration of the PSB façade, continued with subgrade vault restoration, replaced the Justice Center hot water systems, repaired the Everson plaza and foundations from water infiltration, renovated portions of Civic Center 7th floor, and the Sheriff Building subgrade vaults. We have also repaired the compactor platform in the CC loading dock and replaced the roof and the fence at the Board of Elections.

On December 3, 2019 the County Legislature authorized another \$1,500,000 (Resolution #177)

With these funds we have performed renovations to the ceremonial courtrooms in the Court House, replaced insufficient security doors at Hillbrook, performed abatement and renovations for the PSB Crime analysis Center, replaced sidewalk

areas, and repaired deteriorated brickwork at the Civic Center. We intend to use some of these funds to create protective barriers and reconfigure public approach areas to mitigate potential for contagion spread.

The following is a list of projects that we intend to address with the remainder of the 2019 funds as well as with the funds that we will request in the future.

VARIOUS IMPROVEMENTS IN CIVIC CENTER

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. We will continue with designing the reconfigurations and modifications required to reduce the potential for contagion spread.

Renovations on the east side of the 8th floor of the Civic Center needed to accommodate additional personnel in Children and Family Services. The objects of these renovations will be floors, walls, ceiling, lighting, HVAC, workspace furniture and break area (\$1,175,000 in debt in 2022)

Renovations in floors 3, 4, 5 and 13 of Civic Center, which will be used by social services. The 3rd floor will undergo a full renovation while the other floors will undergo partial renovations. (\$1,820,000 in debt and \$235,000 in cash in 2022 and \$1,000,000 in debt in 2023)

Space renovations in CC basement to create a BDC office space. (\$235,000 in cash in 2022)

MULTIPLE BUILDINGS/EXTERIOR COMPLEX:

This sub-project will address the following objects:

- Asbestos removals. We will continue removals and cleanups in various buildings and tunnels.
- Sidewalk panel replacement - miscellaneous areas
- Replace and enhance public address systems in compliance with PESH, Codes and Emergency Management reports
- Surveillance system enhancement in various buildings in the downtown complex: This project will consist in some additions and improvements in hardware and software to the existing surveillance system, which will enhance the actual performance of this system as well as expand on the existing camera locations to include street views.

ARMY RESERVE CENTER RENOVATIONS:

This project will consist in renovation of the physical space, and major technological upgrades to transition a County owned, former Army Reserve Center into a state-of-the-art Emergency Operations Center (EOC). The new facility would increase the County's ability to respond to incidents by improving workspace and providing a facility that is remote from one of the highest risk areas within the County. The option of moving the EOC out of the primary county office building will help to mitigate the impacts to public safety operations if the primary facility were to become unavailable. The new location would also allow emergency management staff to co-locate with the EOC and all of its response assets. Enhancements to the site would include facility renovations, such as re-configuring the current facility layout, enhance security and intrusion protection systems, the addition of redundant power and internet capabilities and improved HVAC systems. The cost of this project will be \$2.1M which will be spent in 2022. We intend to seek legislative authorization for \$1.1M in debt in fall 2021 and we have applied for \$1M in federal aid which we expect to receive in 2022.

On February 1, 2022 we received authorization for \$3,495,000 in bonds and \$470,000 in cash as well as \$1,000,000 in Federal Aid, to fund the work at the army reserve center, on 8th floor at Civic Center and to start the work for social services and BBC clinic. As of summer, 2022 the work in all these objects has started and is in various phases of design and construction.

We intend to seek legislative authorization for \$2,115,000 in bonds to complete the rest of the construction in fall 2022. In this amount we include \$500,000 for other annual maintenance projects.

Countywide Funds

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:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Authorized Borrowing	4,500							0	4,500
Borrowing to be Authorized	1,000	500	500	500	500	500	500	3,000	4,000
State Aid	100							0	100
Federal Aid	5,000							0	5,000
TOTALS	10,600	500	500	500	500	500	500	3,000	13,600

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 (Bond Resolution #97) which was spent on the following:

- Replacement of outdated center hung scoreboard in War Memorial and replacement of the old box office marquees with new digital LED graphics marquees.
- Replacement of the last old section of Convention Center roof.

In December 2018 the County Legislature authorized \$1,500,000 (Bond Resolution # 169), which will be spent during 2019-2020 on the following:

- Replacement of the inefficient high wattage lighting and controlling systems.
- Insulation repairs, Convention Center.
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.
- Replacement of Crouse Hinds Theater pit elevator, which is at the end of its useful life.
- The Crouse Hinds and Carrier Theater dressing rooms will be renovated because their current conditions are not up to standards.
- Replacement of the War Memorial Marquee roofs.
We will replace the leaking built up roofs with new membrane roofs, which will have at least 20 year warranty.
- Replacement of light fixtures and controls in the Gallagher Hall and Atrium of the Convention Center. In the actual conditions the old high wattage systems have failed or are about to fail. We will replace them with new LED technologies which not only have a longer life and a lower cost of maintenance but they consume much less electricity.
- Miscellaneous concrete repairs at the War Memorial and Convention Center Loading docks. Existing condition have areas of spalling and failure. This investment will prolong the life of the loading docks and increase the safety level.
- Sitting replacement and ADA configuration at the Crouse Hinds Theater. In the actual conditions we do not have the ability to offer the required seating opportunities to patrons with special needs.
- Modify the War Memorial stage load indoors on Harrison St. by adding an extendable docking platform. Currently the existing doors do not offer the required loading truck docking to book and promote larger shows. This will reduce labor and improve revenues.

In 2022 we plan to use federal funds (\$5,000,000) to accomplish the following:

Construction of additional meeting room space:
Currently have 10 meeting rooms which limits our ability to compete for larger conventions Improvement will create five (5) additional meeting rooms.
Will involve construction of a structural deck over the current Atrium area adjacent to lower level ball room

Will also allow for additional square footage for pre event activities in Gallagher Hall

Technology Infrastructure Improvements

Events currently being solicited for the Convention Center (large attendee conventions, e-Sport events, etc) have tremendous need for high speed internet and the availability of superior wireless technology. The IT backbone infrastructure in the building needs a significant overhaul to include:

New switching (Core and Edge)
All new Ethernet and fiber cabling

Meeting Room Technology

All meeting rooms in the building are in need to smart boards, large screen monitors, state of the art sound systems and video conferencing technology

In fall 2022 we will seek legislative authorization for \$500,000 in bonds for a continuation of yearly improvements required to maintain the marketability and operations.

Countywide Funds

DEPARTMENT: HILLBROOK DETENTION HOME

Project: Education, recreation and vocational center at Hillbrook detention center

Purpose: Addition Capacity

Level of Development: Intermediate

Project Description:

We are proposing the creation of a dedicated vocational/recreation center, upgrades to the video monitoring/door release security system, a redesign of the former medical department, and an increase to the parking lot. In addition to several multi-use programmatic rooms that could be used for a variety of purposes, we also sought input from residents who stated that they would greatly benefit from dedicated areas where they could learn a variety of skills/trades as well as a dog shelter. In addition to necessary improvements that will focus on improving facility safety/security, the additional space would allow for a much more enriching experience and would have a profound impact on all residents and staff.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
State Aid	0	8,225						8,225	8,225
TOTALS	0	8,225						8,225	8,225

Project Detail and Status:

When the most recent Hillbrook expansion project was implemented, Onondaga County/Hillbrook was very strategic in understanding its role as a regional partner while consciously not wanting to over build. Based off of historical data, detention trends, and projections we settled on increasing the facility capacity from thirty-two beds to fifty beds. While this appropriate and necessary increase was intended to meet the detention needs within Central New York, we did not appropriately make the necessary expansions for programmatic space. Specifically, two of our existing units were increased from eight beds to thirteen beds without making an incremental increase to programmatic, recreational, or educational space.

In addition to a lack of additional space and an increase to the average length of stay, we have determined that groups of seven to eight youth are too large and present a risk to safety. Groups that are composed of five to six residents function at a much higher level and yield far fewer critical incidents. On average Hillbrook is currently operating with up to seven groups on a daily basis. Due to the fact that the existing facility only has four dormitory lounges, we have been forced to have groups program in unconventional areas such as the cafeteria, training room, multi-purpose room, or classrooms. Utilizing these areas restricts the programmatic opportunities for all residents. Furthermore, these spaces were not designed or intended for the ways in which they are currently being utilized which presents significant issues to safety.

Under this project will also replace the existing radios and purchase some additional ones as necessary.

An application for specialized secure detention capital construction will be submitted to both New York State Commission of Corrections and Office of Children & Family Services by 6/1/22.

We are anticipating starting construction in 2023. The construction will be funded by state aid funds and will start only if the state funds are approved.

Countywide Funds

DEPARTMENT: OFFICE OF ENVIRONMENT

Project: Ash Tree Management

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

Level of Development: Advanced

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:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized			750	750	750	750	750	3,750	5,025
Cash on Hand	250							0	250
Authorized Borrowing	4,050							0	3,525
TOTALS	4,300		750	750	750	750	750	3,750	8,800

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 and 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 12 years (a little over 44,000 trees).
- 2) Replacement of approximately 10% of removed trees, phased over 12 years, primarily in the County's parks, with non-invasive, non-host tree species (a little over 4,400 replacement trees).

Countywide Funds

3) Preservation of approximately 5% of inventoried ash trees. These will be carefully chosen, high value ash 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 \$100,000/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.

When this project started the projected cost to carry out the County's ash tree management strategy over 25 years was \$15.8 million. At this point, due to more competitive bidding as well as saving due to the fact that we are not hiring outside contractors for inoculating the trees, we have reduced the total cost of the project to about \$8 million.

Estimated tree removal costs (over 12 years):	\$4.65 million
Estimated tree replacement costs (over 12 years):	\$0.75 million
Estimated tree inoculation costs (over 25 years):	\$1.6 million
Estimated administrative/oversight costs (over 12 years):	\$1 million
Estimated total cost (over 25 years):	\$8 million

We intend to seek legislative authorization for \$750,000 in Fall 2023

Countywide Funds

DEPARTMENT: ONONDAGA COUNTY PUBLIC LIBRARY

Project: Mobile Library Outreach

Purpose: Community/Economic Development

Level of Development: Advanced

Project Description:

Mobile outreach through bookmobile service would allow us to provide equal access to library resources, instruction and vital technology support to ensure a complete census count of all individuals across our county. Beyond the census, bookmobile service would continue as an integral part of library outreach to daycare centers, nursing homes, housing units, senior centers, and other neighborhood stops in the city, suburbs and rural locations.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		260					260	260
TOTALS	0		260					260	260

Project Detail and Status:

Onondaga County Public Library is seeking funding support for the purchase of a bookmobile. With national attention focused on the 2020 census, our libraries recognize the need for deliberate and intentional efforts to reach hard-to-count communities, to ensure secure internet access and data privacy and to provide digital literacy support for seniors and other households. The bookmobile will also provide ongoing outreach and programming opportunities to a variety of community-based organizations located in city, suburban and rural areas within Onondaga County.

With the requested funds we intend to purchase a 27 - 35-foot-long vehicle well equipped with the following:

- Seating, cabinetry, shelving for library resources including laptops
- Wifi system
- Public Address system
- Air conditioning
- Electric Awning
- Rust proof aluminum body construction
- Desk
- File Drawers
- Commercial grade carpet
- LED lighting
- Safety Rails
- ADA compliant

We intend to seek legislative authorization for \$260,000 in the fall of 2023.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Building Envelope Package

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Repair and replace building envelope items.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		700	1,400	250		150	2,500	2,500
State Aid	0		700	1,400	250		150	2,500	2,500
TOTALS	0		1,400	2,800	500		300	5,000	5,000

Project Detail and Status:

The beautiful brick buildings on campus are in need of improvements and repair. This project will replace building roofs on campus, repoint masonry, and install and update safety equipment.

In Summer 2022 we intend to seek legislative authorization for \$2,500,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Coyne Hall Deep Energy Retrofit

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Deep energy upgrades and retrofit.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		1,750	750				2,500	2,500
State Aid	0		1,750	750				2,500	2,500
TOTALS	0		3,500	1,500				5,000	5,000

Project Detail and Status:

J. Stanley Coyne Hall is a two-story office/classroom building that was constructed in 1973 and has seen minimal building improvements over the last 47 years. The building's HVAC system is at the end of its useful life and is very inefficient based on today's standards. This project aims to capture all critical maintenance upgrades for the building, while minimizing overall energy consumption and contributing to SUNY and New York State clean energy goals.

In Summer 2022 we intend to seek legislative authorization for \$2,500,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Digital Newsroom/Broadcasting and Sound Recording

Purpose: Community/Economic Development, Additional Capacity

Level of Development: Intermediate

Project Description:

Create a digital newsroom, focusing on broadcasting and sound recording technologies.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		500					500	500
State Aid	0		500					500	500
TOTALS	0		1,000					1,000	1,000

Project Detail and Status:

This project will create a state-of-the-art digital newsroom, focusing on broadcasting and sound recording technologies. This space will assist in the further development and creation of current industry standards and future-facing media program while also bringing together a number of academic disciplines to simulate a modern broadcast environment both on and off camera. A simulation broadcast studio with all associated equipment would be created as well as broadcast control rooms to manage on-air simulations. In addition, OCC's new Sound Recording program needs updated sound booths, and a recording environment that will allow the program to complete students with industry specific technology and equipment.

In Summer 2022 we intend to seek legislative authorization for \$500,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Gordon Student Center – Student Service and Student Union Environment

Purpose: Maintain Existing Investment, Additional Capacity

Level of Development: Intermediate

Project Description:

Creation of a true Student Center with an engaging and transparent focus on Student Support

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0					3,000	6,000	9,000	9,000
State Aid	0					3,000	6,000	9,000	9,000
TOTALS	0					6,000	12,000	18,000	18,000

Project Detail and Status:

Renovations to the Gordon Student Center are needed to create a strong student service environment that meet the needs of today's college students and align with OCC's enrollment and retention strategies. Opportunities for alterations within the existing space would change Gordon's character from a more formalized service building into a true student center with an engaging and transparent focus on student service, support, and engagement.

In Summer 2025 we intend to seek legislative authorization for \$9,000,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: HVAC Package

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Upgrade building systems (chillers, boilers, condensers, humification and cooling, etc.).

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		650	300	700	750	1,250	3,650	3,650
State Aid	0		650	300	700	750	1,250	3,650	3,650
TOTALS	0		1,300	600	1,400	1,500	2,500	7,300	7,300

Project Detail and Status:

Due to aging buildings and mechanical systems, there is a need to upgrade many of the building systems that are beyond their useful life. This funding would assist the College in updating chillers, boilers, condensers, humidification and cooling, etc. in many of the buildings on campus. This project will not only update aged systems for better efficiency, it will also bring energy and cost savings to the College.

In Summer 2022 we intend to seek legislative authorization for \$3,650,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Information Technology Package

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Upgrade campus-wide network and technology standards.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0					2,000	2,500	4,500	4,500
State Aid	0					2,000	2,500	4,500	4,500
TOTALS	0					4,000	5,000	9,000	9,000

Project Detail and Status:

With technology playing an increasing role in everything we do, and teach, this project will focus on upgrading campus-wide network and overall technology standards. This will help ensure we are able to have the infrastructure in place to bring academic programs to industry standard and to secure the network and reduce the risk of security issues with data, ect.

In Summer 2025 we intend to seek legislative authorization for \$4,500,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Interior Finish Package

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Various building upgrades campus wide.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0					800	75	875	875
State Aid	0					800	75	875	875
TOTALS	0					1,600	150	1,750	1,750

Project Detail and Status:

Buildings on campus range from 10-50 plus years old. Many of them are in need of refurbishment and upgrade of their interior finishes. We will make improvements to building entrance doors, stair treads, carpeting, window treatments, etc. throughout several buildings on campus.

In Summer 2025 we intend to seek legislative authorization for \$875,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Learning Environment Upgrades

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Updating classrooms and learning lab areas on campus to best meet the needs of students.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0			500	3,000	3,000		6,500	6,500
State Aid	0			500	3,000	3,000		6,500	6,500
TOTALS	0			1,000	6,000	6,000		13,000	13,000

Project Detail and Status:

This project is aimed at updating the classroom spaces on campus to best meet the needs of students. OCC has been engaged in Universal Design for Learning which is a teaching approach designed to meet the needs of every student in the classroom. With this approach to design, flexibility and a variety of options for sharing both content and demonstrated knowledge is key to success. We would focus on upgrading classrooms to include flexible furniture, wall finishes, ceiling, flooring, and AV upgrades. Some rooms would get additional upgrades to the AV technology that would include lecture capture capabilities and some program specific technology that would enhance the teaching and learning environment.

In Summer 2023 we intend to seek legislative authorization for \$6,500,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: School of Health Expansion Project

Purpose: Additional Capacity

Level of Development: Intermediate

Project Description:

Renovation and expansion of the Healthcare Facilities for teaching and learning.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		4,000	5,000	3,000	1,000	2,000	15,000	15,000
State Aid	0		4,000	5,000	3,000	1,000	2,000	15,000	15,000
TOTALS	0		8,000	10,000	6,000	2,000	4,000	30,000	30,000

Project Detail and Status:

NYS has set a goal of increasing its health care workforce by 20% over the next 5 years (Per Governor Hochul, 2022) to respond to critical demand for health and elder care workers. OCC has responded by adding eight (8) new credit and non-credit programs in its School of Health, including an evening cohort of Nursing students. Additional program development is anticipated over the next 1-2 years. These programs require expansion and equipping of instructional spaces to accommodate planned growth and changes in technology, as well as co-location of programs so that students may benefit from shared laboratories and team-based instruction.

Examples of proposed improvements include:

- Renovate spaces formerly occupied by other disciplines and associated relocation costs
- Outfit space to accommodate instruction in Certified Nurse Assistant, which requires a laboratory that replicates a long-term care facility setting, including patient beds, mannequins, ceiling-mounted lifts and Hoyer lifts, patient bathroom with shower, access to Physical Therapy Assistant lab and equipment.
- Outfit space to accommodate instruction in Home Health Aide, which requires a laboratory that replicates a residential home, including kitchen, bathroom, laundry, and bedroom spaces.
- Upgrade deteriorated equipment and expand laboratory space for the Medical Assistant and Phlebotomy programs.
- Expand Nursing classrooms and equipment to accommodate program expansion. Introduce virtual reality lab to expand the range of training that can be offered in preparation for clinical settings.
- Expand Surgical Technology classroom with contemporary equipment and to allow for the planned doubling of enrollment.
- Upgrade Physical Therapy Assistant classroom with access to shared Certified Nurse Assistant and Nursing lab space.
- Install two computer classrooms with dual monitors and dedicated lab space with anatomical models and human skeletons to support expansion of the Health Information Technology A.A.S. to an online/hybrid format.

In Summer 2022 we intend to seek legislative authorization for \$15,000,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Site Improvement Package

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

Various campus site improvements and projects.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		500	330	1,150	250	1,370	3,600	3,600
State Aid	0		500	330	1,150	250	1,370	3,600	3,600
TOTALS	0		1,000	660	2,300	500	2,740	7,200	7,200

Project Detail and Status:

Enhance sustainable and accessible campus site conditions while replacing underground utilities and other work that will help secure imperative infrastructure on campus. This project will focus on replacing gas lines on campus, campus signage to assist in the navigation of campus, and make necessary repairs to the Pedestrian Bridge on campus.

In Summer 2022 we intend to seek legislative authorization for \$3,600,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Workforce Career Lab

Purpose: Additional Capacity

Level of Development: Intermediate

Project Description:

Creation of a space focused on workforce training and greater access to applied engineering and technology education.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		1,000	1,750				2,750	2,750
State Aid	0		1,000	1,750				2,750	2,750
TOTALS	0		2,000	3,500				5,500	5,500

Project Detail and Status:

OCC has identified a significant need in the community for workforce training and greater access to applied engineering and technology education. In an effort to address this growing need, OCC is prepared to make strategic expansions to both its programs and needs the facilities to support these expansions. This project will provide an open warehouse space for use in applied engineering, technical and workforce education. This space would provide general equipment for the desired programs and a flexible learning environment to allow for growth and account for future needs of the community.

In Summer 2022 we intend to seek legislative authorization for \$2,750,000 in debt to cover this project. County authorization is necessary to obtain State match for funds. The above chart indicates when we anticipate payments being made to vendors/contractors for the project.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Build an African Savannah Exhibit

Purpose: Maintain Existing Investment, Community/Economic Development, Addition Capacity

Level of Development: Intermediate

Project Description:

This project seeks to design and construct a large hoof-stock African Savannah exhibit that would be located within the existing Zoo property.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		6,550					7,150	7,150
TOTALS	0		6,550					7,150	7,150

Project Detail and Status:

This project will construct 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 2024 and begin construction in late 2024

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

We intend to seek legislative authorization for \$6,550,000 in fall 2023. These funds will be used for Engineering and construction.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Carpenters Brook Fish Hatchery Building Replacement

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development

Level of Development: Preliminary ©

Project Description:

This project provides for replacement of the carpenters' brook hatchery, diet, oil storage, and office buildings, with a single more efficient building. The project also includes necessary repairs and upgrades to related fish rearing facilities.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0		120	900				1,020	1,020
TOTALS	0		120	900				1,020	1,020

Project Detail and Status:

In 2024 we will hire an Architect/Engineering firm to design the new hatchery building. The building will contain the necessary tanks for rearing eggs to fingerlings as well as additional educational resources. (\$120,000)

In 2025 we will construct the new hatchery building (\$900,000).

In Fall 2023 we intend to seek legislative authorization for \$120,000. These funds will be used for Engineering.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: County Multi Sports Complex

Purpose: Community/Economic Development

Level of Development: Intermediate

Project Description:

The goal of a new multi sports complex (lacrosse & soccer) in Onondaga County would be to meet the needs of county residents and also the needs of tournaments that draw out-of-town (non-local) visitors to the area and generate economic impacts to Onondaga County. Research suggests that market opportunities exist in Onondaga County for a quality outdoor-focused amateur sports facility complex that is optimized to compete for sports tourism activity.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Federal Aid	0	25,000						25,000	25,000
TOTALS	0	25,000						25,000	25,000

Project Detail and Status:

In 2023 we plan to complete design and engineering and begin construction. The project will involve construction of multiple synthetic turf fields, including a championship field, together with lighting, restrooms, concessions and other supporting infrastructure.

We intend to seek legislative authorization to use the above federal funds in fall 2022.

Countywide Funds

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:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0				500			500	500
TOTALS	0				500			500	500

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 proposed building is expected to have a useful life of at least thirty years.

In fall 2025 we intend to seek legislative authorization for the above funds.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Oneida Shores Facility Upgrade

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment, Community/Economic Development

Level of Development: Preliminary

Project Description:

Many of the Oneida Shores facilities are old and in need of upgrading and improvement. Portions of the shoreline are eroding.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	330	90	600				1,020	1,020
TOTALS	0	330	90	600				1,020	1,020

Project Detail and Status:

In 2023 we will install a sewer system in the RV campground to replace the outdated holding tanks that must be periodically emptied by WEP throughout the season. This will also improve the desirability of the campgrounds allowing for increased rental rates (\$90,000)

In 2023 we will perform a shoreline stabilization project at Muskrat Bay to eliminate the loss of land and shoreline due to erosion. (\$240,000)

In 2024 we will hire an Architect/Engineering firm to design a new combination restroom/changing room/office building similar to the one at Jamesville Beach (\$90,000)

In 2025 we will build the new combination restroom/changing room/office building (\$600,000)

In Fall 2022 we intend to seek legislative authorization for \$330,000 for construction of the 2023 scope as indicated above.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Oneida Shores Park Shoreline Rehabilitation

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

Level of Development: Intermediate

Project Description:

Replace the degraded portion of the Oneida Shores boat launch and retaining wall. Also add a weigh station to support the professional fishing tournaments held at Oneida Shores park.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	240						240	240
Authorized Borrowing	420							0	420
Cash on Hand	300							0	300
TOTALS	720	240						240	960

Project Detail and Status:

Portions of the existing Oneida Shores boat launch are degraded primarily due to “power loading” of boats on to their trailers. The boats causing this problem are longer than those anticipated when the original boat launch was designed and constructed. In “power loading” the powerful engines on these boats are used to push the boats onto their trailers. This “power loading” scours and erodes the lake bottom causing displacement of the precast concrete panels of the ramp rendering these portions of the ramps unusable.

On December 17, 2019 Bond Resolution 219 authorized the Parks Department to spend \$320,000. With these funds and an additional \$300,000, which was authorized as cash in February 2021, we plan to remove the existing precast concrete panels and install a cast-in-place concrete slab-on-grade ramp. Engineering and permitting have been completed. This work is scheduled to be completed in spring of 2022.

On February 1, 2022 Bond Resolution 19 authorized the Parks Department to spend \$100,000. We used these funds to repair the retaining wall at boat launch.

In 2023 we plan to install a new pay gate for users of the boat launch. (\$120,000). We also plan to install a fish weigh station that will be used for the many fishing tournaments that are held at Oneida Lake (\$120,000).

In fall 2022 we intend to seek legislative authorization for \$240,000 intended to fund the scope of 2023 described above.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Parks Various Infrastructure Rehabilitation and Improvement

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

Level of Development: Advanced

Project Description:

Much of the Parks Infrastructure is decades old and is need of replacement. Some equipment is obsolete and spare parts are unavailable. Buildings are in need of renovations and updates to meet current standards. Playgrounds are aging and need new equipment and resurfacing. Park roads, parking areas and trails need continuing repair and repaving. This project will take a systematic approach to replacing old and obsolete equipment, systems and surfaces at various facilities in the Parks Department.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	2,961	7,988	4,812	1,005	1,500		18,266	18,266
Authorized Borrowing	6,640							0	6,640
TOTALS	6,640	2,961	7,988	4,812	1,005	1,500		18,266	24,906

Project Detail and Status:

On December 17, 2019 Bond Resolution 219 authorized the Parks Department to spend \$1,795,000 to complete the following projects.

- Loomis Cemetery has areas that flood occasionally in the spring and during heavy rains. To eliminate flooding, a ditch that runs through the property will be deepened and rerouted. In addition, a new ditch and flood retention ponds will be constructed - (\$210,000)
- Replace aged water main and add hydrant to Marina and Yacht Club at Onondaga Lake Park which previously failed in 2016. (\$90,000)
- Replace aging mechanical systems and components at various parks including Highland Forest and Pratts Falls outdated gasoline and diesel fuel tanks with new double walled tanks with electric fuel pumps with usage monitoring, replace a 20 year old hot water heater at Jamesville Beach, replace a failing cooling tower at the zoo. (\$134,000)
- Retrofit or replace outdated lighting and install additional lighting for safety and security purposes including retrofitting outdoor lights at the Zoo around the main pond and replacement of outdated lights in the primate wing with LEDs (\$20,000) as well as adding solar powered lighting at the Beaver Lake "Overflow" lot for safety and security. (\$25,000)
- Zoo: Perform study, evaluation and analysis to determine potential water leaks and determine if repairs are necessary. Water consumption has increased in recent years. (\$25,000)

Repair, replace, upgrade and add the following small buildings:

- Onondaga Lake Park: replace siding on Children’s Landing Sewer Pump Building (\$5,000),
- Beaver Lake: replace North Maintenance storage building which is failing (\$60,000)
- Beaver Lake: replace high priority windows in Visitors center and maintenance building, (\$25,000),
- Zoo: replace leaking roof on the Contact Barn (\$200,000)

Remove and replace the following fences or barriers:

- Rosamond Gifford Zoo: Butterfly Garden Split Rail Fence, Penguin Exhibit, White Lipped Dear Exhibit, Tiger Exhibit, Miscellaneous Other Fences (\$111,000)
- Onondaga Lake Park Wegmans Good Dog Park: remove and replace fence (\$65,000)
- Highland Forest, Pratts Falls and Ska nonh: replace and add access control and barrier gates (\$25,000)

- Pave or repair roads or trails at various parks including several miscellaneous “tripping hazards” and flexi-pave at the Zoo (\$300,000)

- Replace Fibar surfacing and replace structures that are non-compliant and/or are in need of maintenance or repair per state regulation inspections (\$100,000)

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- Replace Sawmill Creek restroom, which was destroyed in a fire in June 2019. (\$400,000)
- The above projects are underway.

In February 2021, bond resolution #15 authorized Parks department to spend \$2,160,000 to complete the following projects in 2021:

Beaver Lake Nature Center

- Replace windows not done in 2020 and sliding doors which are leaking (\$30,000)
- Replace paneling which is outdated and floor tile in the Beaver Lake Community Room which is cracked. (\$50,000)
- Replace Beaver Lake well and chlorine pumps (\$15,000)
- Hire an Architect/Engineer to provide a conceptual design for Beaver Lake Nature Center Lake House (\$30,000)

Highland Forest

- Repair various buildings at Highland Forest which are decaying and have missing windows. (\$200,000)
- Replace propane boilers at Highland Forest that are nearly 20 years old (\$100,000)

Onondaga Lake Park

- Replace decaying windows and doors and renovate outdated restrooms at Griffin Visitors Center (\$200,000)
- Perform an engineering assessment of the docks, electricity, lighting, retaining wall to determine need for repairs/upgrades (engineering design only) (\$50,000)
- Replace various electrical panel boxes for OLP buildings that are corroded (\$20,000)

Veterans Cemeteries

- Build a flag monument consisting of 6 flags (one for each branch of the military service and one US flag) (\$60,000)
- Put stone dust on Loomis Cemetery interior roads (\$15,000)

Zoo

- Make necessary repairs to Zoo water system as determined by engineering study and inspection (\$125,000 est.)
- Replace Zoo Mechanical, Electrical and HVAC equipment which is old and failing and has resulted in emergency repairs. This equipment and systems are vital to maintaining environmental conditions for unique species. (\$150,000)
- Make repairs to concrete in Penguin Exhibit Pool and Beach to reduce water leakage and improve public safety and animal welfare. (\$50,000)
- Eliminate safety hazards in existing Elephant Overlook Railing/Fence that do not limit access to the 10'-15' drop-offs that overlook the elephant exhibit (\$10,000)
- Replace the existing alarm system that covers critical zoo functions (fire alarms, chillers, various animal life support systems, etc.). The current system has zones that aren't listed on the alarm, work intermittently, generate faulty messages, and requires extensive servicing to keep it functional. (\$100,000)
- Replace Window Panels in aviary in Diversity with UV Glass to allow additional UV light to penetrate. UV light is necessary for the health of the animals and the appearance of the plants in the exhibit. This project would include the windows next to the airlock on the main building side. (\$100,000)
- Repair main building flat roof and skylights which are a patchwork of repairs which are leaking and need a comprehensive inspection and general repair. (\$80,000)
- A-Building existing roof leaks in various locations damaging ceiling tiles, various utilities hidden by ceiling tiles, and creating unsafe situations in both animal and public areas. This project would include a thorough inspection and repair to A-Building roof (\$50,000)
- Repair the perimeter fence near the tiger exhibit. The current fence has some damaged sections including tree damage that would increase the chance of an animal escape if they were to reach the perimeter fence in the exhibit. (\$25,000)
- Install safety and security lighting at all Perimeter Gates: Currently there is no lighting at any of the perimeter access points to the zoo, which are the easiest access for illegal entry at night. The zoo suffers countless break-ins that could potentially lead to property damage, injury or loss of life. (\$50,000)
- Takin/Markhor/Camel/Grey Wolf Exhibit Fencing: The fencing on the exhibit side of the core exhibits is in disrepair. This fencing needs to be reinforced and in some cases replaced including overhangs to meet AZA standards for containment (\$175,000)
- Snow Leopard Exhibit Improvements: This project would encompass renovations to the existing snow leopard exhibit built in 1984 and create an interactive experience for zoo guests. The original timbers and exhibit "furniture" are rotting and becoming a safety issue. Items included in this project would be an expanded footprint with elevated walkway for the leopards to cross over the public path, replacement of the existing

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outdated mesh that does not meet safety requirements for cubs, and replacement of off exhibit holdings. This project would allow for us to be in compliance with the AZA snow leopard SSP which requires that you have space for holding offspring for up to three years. This could be a multi-year project (\$250,000)

- Tropical River Exhibit: The existing pool filtration does not function well and needs to be completely overhauled to allow for better filtration, circulation, and less frequent “drop and fill” cleaning, which would ultimately save the county money on water usage. (\$25,000)

- Zoo Security: Currently there is no security or ability to monitor activities inside the zoo, outside of constant staff watching of visitors during on and off hours. The addition of cameras throughout the property would allow staff to monitor access during all hours and allow documentation of events as and after they occur. This project would include wifi throughout the zoo to allow the camera system to operate mostly wirelessly. Zoo staff has found increased evidence of people accessing the zoo at night via fence damage and has physically caught three people on grounds after hours in the past year (\$200,000)

In February 2022, bond resolution #19 authorized the Parks department to spend \$2,685,000 to complete the following projects in 2022:

Beaver Lake:

- Replace Beaver Lake Air Conditioning System (50,000)

Oneida Shores:

- Replace Fence at Oneida Shores Playground (\$75,000)

- Add solar powered lighting on roads and trails near Arrowhead lodge. For safety and security for evening events (55,000)

Onondaga Lake Park:

- Repair, replace and upgrade docks, electrical system, lighting and retaining wall at Onondaga Lake Park marina as determined by the engineering study and analysis conducted in 2021.(\$1,000,000)

- Parks Administration Building – Replace office windows. The windows in the Parks Building have significant air leakage and infiltration resulting in high energy costs. This project will replace the windows with ones that are more energy efficient. (\$360,000)

- Mill and repave OLP shoreline walking trail (approx. 1.9 mi.)(\$440,000)

Playgrounds:

- Replace playground structures and surfaces at Oneida Shores (\$250,000)

Zoo:

- Lighting of the Main Parking Lot: Currently there is limited lighting in the zoo’s parking lot. For specific events throughout the year, the zoo rents lighting to provide visitor safety and security. The addition of efficient permanent lights would reduce the need for renting temporary solutions (\$200,000)

- Expand Zoo PA System to reach all areas of the zoo: The existing zoo PA system is limited to the main building and courtyard areas restricting the reach of important zoo announcements and safety messages to the public in other areas of the Zoo. (\$50,000)

- Crane Yard Fencing Improvements: The existing invisimesh fence currently is not tall enough for containment of the exhibits inhabitants on windy days. This project would increase the height and strength of the current fence to reduce the possibility of animal escapes and to protect against fence damage caused by visitors leaning on the existing fence (\$50,000).

- Enclose Otter Holdings: This project would provide for improvements for both animal and staff safety. During winter months servicing these exhibits becomes very dangerous due to the fact that otters are obviously an aquatic species, thus causing huge amounts of water to accumulate in both keeper and animal areas which in turn creates thick layers of ice causing hazardous conditions for both keeper and animal. This would also include enclosing the holdings and repair to the concrete floor and drains (\$75,000).

- Floor in Cave/Adaptation: The current tile and linoleum flooring is outdated and failing, causing potential trip hazards and allowing water into the building. Replacement of flooring would increase visual appeal and reduce the risk of injury to visitors (\$30,000).

- Mesh in Primate Holdings: Includes vertical mesh and the angled mesh in the Siamang, GLT, Komodo, Colobus, Patas, and Amur holdings and exhibits (\$50,000).

2022 Subtotal (\$2,685,000)

Countywide Funds

In Fall of 2022 we intend to seek legislative authorization for \$2,961,000. These funds will be used in 2023 to complete the following:

Pratts Falls:

- Pratts Falls - Engineering/Design Camp Brockway Area. (\$100,000)

Beaver Lake:

- Evaluate relocating Beaver Lake Concession Building and provide water, drainage and electric (\$12,000)
- Security Camera and new alarm system in building - (\$50,000)

Highland Forest:

- Replace chlorination systems at Pratts Falls and Highland Forest with UV disinfectant system (\$24,000)

Skyline Lodge

- New Composite Decking - (\$75,000)
- 13 Gates - (\$75,000)
- Community Shelter Roof - (\$75,000)

Onondaga Lake Park:

- Perform Comprehensive tree risk assessment - (\$100,000)

Paving:

- Pave the parking lot at the Griffin visitor center (\$810,000)

Oneida Shores:

- Pave Oneida Shores office and maintenance compound - (\$120,000)

Playgrounds:

- Add playground at Highland Forest and continue to replace and add playground structures and surfaces to various parks (\$300,000)

Mini Bid for Architecture/Engineering for garage design at Veterans Cemetery, Highland and the Zoo. - (\$100,000)

Zoo:

- Bear Exhibit Improvements: The current bear exhibit will be converted into an eagle exhibit in the future. The design will be much like Primate Park with the current viewing windows being kept, footers being placed inside the exhibit, steel poles erected, and the entire exhibit meshed over. Ideally, the height of the mesh covering would be high enough to allow the birds ample space to fly. This is also due to the fact that this exhibit is now outdated for bears in the modern zoo setting. (\$60,000)
- Takin Exhibit Improvements: This project would provide for improvements to the existing Takin exhibit for both human and animal welfare and safety. This project would provide for a new chute and weighing system that is capable of holding a male Takin. (\$60,000)
- Markhor Exhibit Improvements: This project would provide improvements to the existing markhor exhibit for animal containment and a viewing window in the fence for the public. Rocks and debris are piling at the bottom of the exhibit, putting pressure on the fence as a whole. Re-landscaping the project would reduce the risk of containment issues, provide a better habitat for the markhor, and a more viewing friendly exhibit for the public. (\$60,000)
- Breeding Panda Building: This project would provide for the design and construction of a new breeding panda facility that is isolated from public view and noise. The old facility is no longer in use and the current animals do not have an adequate space for birthing. Pandas require isolated quiet spaces for the best chance of success for reproduction. This project would include the construction of a small building and outdoor holding space (\$240,000)
- Perimeter Fencing - Current perimeter fencing does not meet AZA standards. - (\$700,000)

2023 Subtotal \$2,961,000

Countywide Funds

In Fall of 2023 we intend to seek legislative authorization for \$7,988,000. These funds will be used in 2024 to complete the following:

Beaver Lake:

- Replace Beaver Lake Septic Tank (\$120,000)
- Restore "Lake House" at Beaver Lake for use in Parks Department Programs (\$100,000)
- Replace Parking Lot Lights in paved lots and around building – (\$50,000)

Highland Forest:

- Skyline Lodge Expansion/Bridal Room - (\$100,000)

Jamesville Beach:

- Build a new reserve shelter to mitigate capacity constraints (\$150,000)
- Replace Sandpiper Shelter and Overlook deck at Jamesville Beach which are decaying (\$260,000)
- Installation of two pickle ball courts. - (\$150,000)
- Relocation of Volleyball Courts - (\$60,000)
- Repave Jamesville Beach parking lot and driveways (\$540,000)
- Install colored concrete pads to accommodate a single or double picnic area with tables and grills. (\$110,000)

Paving:

- Pave the parking lots at Highland Forest Sledding Hill and maintenance area at Beaver Lake (\$480,000)
- Pave Oneida Shores office and maintenance compound (\$84,000)

Oneida Shores:

- Replace Maple Tent with a permanent structure. - (\$250,000)
- Repave McKinley Shelter Parking area and entry road. - (\$150,000)
- Repave Oneida Shores McKinley Shelter Parking Area and entry road and main entry road (\$330,000)
- Oneida Shores Floor Resurfacing - (\$40,000)

Onondaga Lake Park:

- Convert former Onondaga Lake Park Concession building that is now empty to a reserved shelter space (\$900,000)
- Mill and repave OLP East Shore trail from Griffin Visitor Center to Old Concession building (approx. 2.6 mi.) - (\$1,200,000)
- Upgrade archery range (\$350,000).
- Renovate Hiawatha Point Comfort Station which is outdated (\$200,000)

Carpenter's Brook:

- Carpenter's Brook - Renovate Public Restrooms. The public restrooms at Carpenter's Brook are old and have equipment for which spare parts can no longer be purchased. This project will update the restrooms. (\$100,000)

Playgrounds:

- Continue to replace and add playground structures and surfaces to various parks (\$900,000)

Park wide Lock Improvements (CyberLocks) - (\$500,000)

Zoo:

- Elephant Barn Acoustic Sound Baffles: The current acoustics in the elephant barn make it a loud and difficult place to work. The addition of acoustic sound baffles would both increase staff safety and animal welfare by reducing echo and ambient noise. This would allow staff to be able to train elephants more efficiently and hear each other when speaking in the needed calm quiet tones (\$24,000).
- Addition of Heating and Weather Proofing of Hoof-Stock Buildings: This project would include the addition of weatherproofing to the existing barns. There is currently no form of weatherproofing or heat source at any of the existing hoof-stock buildings. This is not adequate for when we have neonates, geriatric or sick animals that require additional heating during inclement weather (\$120,000).
- Elephant Barn Lighting: The current lighting in the elephant barn is inefficient and difficult to manage. New sealed LED lighting in the barn will be easier to keep clean and will also provide proper UV exposure that the elephants need in the

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winter months. These lights will provide a cost savings over the life of the fixtures due to their energy efficiency and elimination of bulb replacement and interior fixture cleaning (\$60,000).

- Elephant Barn Windows: The addition of clerestory windows would increase the level of natural light in the barn and provide the elephants with natural health benefits. Some of the windows would be operational to assist with ventilation and airflow and reduce the strain on the existing airflow system. This would also reduce the amount of dust build up within the barn, save money on filter replacement, and reduce the current energy usage due to running air exchange systems on an almost constant basis (\$240,000).

- Core Management Containment: This project would include replacement of the existing core management containment fences. The current chain link is in need of replacement with proper height and strength for animal containment. This would also include the construction of a new small ungulate chute system. The current chute system made of wood is rotten and several doors are falling off. This has the potential to be a containment issue (\$180,000).

- Neonate barn: This project includes the design and construction of a new neonate hoof stock barn. The current barn is in disrepair and is rotting in several areas. The outdoor pen does not meet height requirements for hoof stock. The new facility would include a small barn that is weatherproof. The outdoor yard would be fully enclosed to prevent predators from harming neonates (\$120,000).

Lakeview Point Park:

- Capital Maintenance of various infrastructure components (\$120,000)

2024 Subtotal \$7,988,000

In Fall of 2024 we intend to seek legislative authorization for \$4,812,000. These funds will be used in 2025 to complete the following:

Construct Storage Garages at Highland, Veterans Cemetery and the Zoo. - (\$1,800,000)

Jamesville Beach:

- Installation of three new shelters - (\$727,000)

Onondaga Lake Park:

- Paving and drainage of Long Branch Park parking lot. - (\$1,250,000)

Playgrounds:

- Continue to replace and add playground structures and surfaces to various parks (\$600,000)

Oneida Shores:

- Add solar powered lights near Arrowhead Lodge - (\$75,000)

Zoo:

- Move the bear exhibit and support building to trails location. In order to bring our bear exhibit up to modern zoological standards. (\$240,000)

Lakeview Point Park:

- Capital Maintenance of various infrastructure components (\$120,000)

2025 Subtotal \$4,812,000

In Fall of 2025 we intend to seek legislative authorization for \$1,005,000. These funds will be used in 2026 to complete the following:

Jamesville Beach:

- Installation of Splash Pad. - (\$325,000)

Oneida Shores:

- Resurface Campground roadways with Oil and Stone - (\$60,000)

Countywide Funds

Playgrounds:

- Continue to replace and add playground structures and surfaces to various parks (\$500,000)

Lakeview Point Park:

- Capital Maintenance of various infrastructure components (\$120,000)

2026 Subtotal \$1,005,000

In Fall of 2026 we intend to seek legislative authorization for \$1,500,000. These funds will be used in 2027 to complete the following:

Jamesville Beach:

- Installation of fence around the perimeter of the off-leash dog park. - (\$750,000)

Onondaga Lake Park:

- Mill/Repave 1.9 miles of Shoreline Walking Trail at OLP - (\$750,000)

2027 Subtotal \$1,500,000

In Fall of 2022 we intend to seek legislative authorization for \$2,961,000 to fund the projects planned for 2023.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Zoo Mechanical Systems and Roofs Replacement

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

Level of Development: Intermediate

Project Description:

This project seeks to update outdated specialized mechanical systems and roof structures at the Rosamond Gifford Zoo.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	2,000						2,000	2,000
Authorized Borrowing	2,000							0	2,000
TOTALS	2,000	2,000						2,000	4,000

Project Detail and Status:

The Rosamond Gifford Zoo is home to many buildings and structures throughout the property.

The roofing component of this project will replace the roofs on the following buildings: The main building, A-Building, wildlife trails restrooms, bear building, snow leopard, penguin husbandry, penguin life support, penguin freezer, penguin pavilion, tiger building, and heat tape at the front entrance.

This project also seeks to update outdated mechanical systems at the Rosamond Gifford Zoo. This component of the project will replace existing boilers and controls, in addition will improve and repair various chillers, HVAC systems, and other mechanical systems that relate to the life support of the animal population of the zoo.

The combination of the new roofing structures and the ability to better control energy consumption throughout the Zoo will reduce the energy needs and result in monthly cost savings.

In 2021 we will start and complete the engineering design for the roofing component of this project.

In Fall of 2021 Legislative authorization was approved for the use of \$2,000,000. These funds will be used for roof replacement and a part of these funds will be used to pay for the engineering of mechanical systems component of this project. Future years cost related to mechanical systems updates will be revised once the engineering is complete

The work for roof replacement has started in summer 2022.

In Fall of 2022 we intend to seek legislative authorization for \$2,000,000. These funds will be used in 2022 to complete the mechanical project.

Countywide Funds

DEPARTMENT: SHERIFF CUSTODY

Project: Upgrades of Security Operation and Inmate information systems in Justice Center (NEW)

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

Level of Development: Intermediate

Project Description:

The goal of this project is to update outdated hardware and upgrade software needed to support the Justice Center's existing security operation system. Additionally, this project provides the ability to replace the current Inmate Information System with SallyPort; an intra-state linked jail management system, approved by the NYS Commission of Correction, which seamlessly interfaces with the Security Operation System.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	7,513						7,513	7,513
TOTALS	0	7,513						7,513	7,513

Project Detail and Status:

The Justice Center's complex security system relies on four critical components; BlackCreek's Windows based Security Operating System(SOS), the software responsible for controlling all cell, interior and exterior doors, video and voice recording in housing units, booking, interior hallways and exterior entrances, the intercom and paging system, elevators, water valves and fire detection; the programmed logic controllers (PLC), responsible for providing communication between the SOS and the electronic door lock mechanisms; the video & audio monitor/recording system, which monitors and records multiple areas of the facility and lastly; the electronic door locking systems, which secure the building.

In 2019, the Sheriff's Office spent over \$400,000 to upgrade the Justice Center's 25 year old programmed logic controllers (PLC) which had surpassed their life of serviceability. As 75% of the remaining security system components continues to age and reach the end of their operational cycle, the next crucial update needed is to our 18 year old BlackCreek SOS that is running on a 13 year old Windows 7 platform.

With both the BlackCreek SOS and Windows 7 operating system having reached the end of their useful life, they no longer can be supported. Failure of either the BlackCreek SOS or Windows 7 operating systems would result in partial or complete loss of the facility's door control, video/audio and other related security systems that serve the inmates, criminal justice partners, staff and various government or community oversight organizations.

Coupled with the BlackCreek SOS upgrade will be the RTL5 Detainee Well Being Monitoring system. This monitoring system will provide wrist mounted, tamper-resistant transmitting units to monitor the health and well-being of high risk incarcerated individuals are who have underlying health conditions, suicidal ideations, detoxing from substance abuse or other behavioral conditions of concern.

The existing Inmate Information System contains current and historical information of individuals incarcerated in our correctional facilities. The current County Inmate Information System, designed by the County, is over 20 years old and cannot keep pace with the growing information demands and necessary functionality. Support for our aged system is also approaching the end of its cycle and cannot interface with the current or proposed Security Operating System.

The much needed upgrade of the BlackCreek Security Operating System and upgrade to Windows 11 includes the replacement and enhancement of the Justice Center's current video and audio recording technologies, which is antiquated and unreliable. The facility would transition from analog recording to digital recording technology with the replacement of outdated analog cameras and the associated recording software. Such advancements will provide the highest quality of coverage and drastically improve staff, inmate and civilian safety.

We intend to implement the scope of this project in the following order:

Countywide Funds

1. Upgrade the BlackCreek SOS and Windows 11 operating system, which Includes installation and upgrade to video/audio recording system.
2. Install and integrate RTLS Detainee Well-Being Monitoring system.
3. Replace the existing CNYIIS with SallyPort Jail Management System.

The implementation will commence in early 2023 and will require up to 12 months to complete.

We intend to seek legislative authorization om Fall of 2022 for the \$7,513,000 in debt.

Countywide Funds

DEPARTMENT: TRANSPORTATION

Project: Bituminous Surface Treatment

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

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:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
County Tax Revenues		2,400	2,650	2,900	3,100	3,300	3,600	17,950	17,950
Borrowing to be Authorized	1,927							0	1,927
TOTALS	1,927	2,400	2,650	2,900	3,100	3,300	3,600	17,950	19,877

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

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:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	1300	1,352	1,406	1,462	1,521	1,582	1,645	8,968	10,268
County Tax Revenues	220	229	238	247	257	268	278	1,517	1,737
TOTALS	1,520	1,581	1,644	1,709	1,778	1,850	1,923	10,485	12,005

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

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:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	1911	1,305	800	400	400	400	50	3,355	5,266
State Aid	855	825	1,100	1,875	2,537	537	187	7,061	7,916
Federal Aid	10364	8,520	8,556	13,080	16,400	11,825	1,000	59,381	69,745
TOTALS	13,130	10,650	10,456	15,355	19,337	12,762	1,237	69,797	82,927

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.

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 projects are the following:

Locally Administered, Federally Aided Highway and Bridge Construction projects have been funded as part of this plan. Projects include Onondaga Lake Canalways Trail Salina Extension, Old Liverpool Road Paving, and the Bear Road Paving projects.

Countywide Funds

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:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Authorized Borrowing	530							0	530
Borrowing to be Authorized	500		500	5,000	5,000			10,500	11,000
TOTALS	1,030		500	5,000	5,000			10,500	11,530

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 Mud Mill Road 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 #165/2012. Right of way is anticipated as part of the project. The construction, by contract forces, is anticipated to start in 2024 and be completed in 2025.

Countywide Funds

DEPARTMENT: TRANSPORTATION

Project: Cold Mix Bituminous Paving

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

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:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	764	1,150	500	680	400	400	400	3,530	4,294
County Tax Revenues	55	900	2,000	2,300	3,000	3,500	4,100	15,800	15,855
State Aid	2141	2,140	2,140	2,140	2,140	2,140	2,140	12,840	14,981
TOTALS	2,960	4,190	4,640	5,120	5,540	6,040	6,640	32,170	35,130

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

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:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
County Tax Revenues	115	600	624	649	675	702	730	3,980	4,095
Borrowing to be Authorized	405							0	405
TOTALS	520	600	624	649	675	702	730	3,980	4,500

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.

DEPARTMENT: TRANSPORTATION

Project: Marcellus Maintenance Facility Sewer Connection (NEW)

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

Level of Development: Intermediate

Project Description:

The project consists of installing a new sanitary sewer system extending approximately 650-feet, connecting to the Town of Marcellus public sewer system. Excavation, backfill, structures and pipe, and pavement repairs will be required to complete the work. Easements will also be required to acquire the necessary property rights for the sewer system.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	50	450					500	500
TOTALS	0	50	450					500	500

Project Detail and Status:

The Department of Transportation’s Marcellus Maintenance Facility is supported by a private sanitary septic system for sewer collection and discharge. Due to septic system limitations, DOT is unable to wash the DOT fleet with the necessary chemicals needed to maximize their useful life. In addition, reoccurring fees for septic tank cleanout are required. The goal of this project is to connect this DOT facility to the Town of Marcellus public sewer system. This will simplify daily operations, reduce fees, and result in a better maintained fleet of vehicles.

The project consists of design and construction phases. The work includes a new sanitary sewer system extending approximately 650-feet, connecting to the Town of Marcellus public sewer system. Excavation, backfill, new structures and pipe, and pavement repairs will be required in order to complete the work. Easements will also be required to acquire the necessary property rights for the sewer improvements.

The design will be completed in 2023, and bids will be received for construction to begin in 2024. To accomplish this project, \$50,000 is estimated for the design phase and \$450,000 for the construction and inspection phase.

In fall 2022 we intend to seek legislative authorization for \$500,000 in debt.

Countywide Funds

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:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
State Aid	4640	3,500	3,500	3,500	3,500	3,500	3,500	21,000	25,640
County Tax Revenues	170	1,500	3,500	6,000	8,000	10,120	11,450	40,570	40,740
Borrowing to be Authorized	3917	5,100	4,500	3,000	2,000	1,000	1,000	16,600	20,517
TOTALS	8,727	10,100	11,500	12,500	13,500	14,620	15,950	78,170	86,897

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

DEPARTMENT: TRANSPORTATION

Project: Testing, Drainage and Facilities Repair

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

Level of Development: Ongoing

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
County Tax Revenues	440	710	738	768	799	831	864	4,710	5,150
TOTALS	440	710	738	768	799	831	864	4,710	5,150

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

DEPARTMENT: TRANSPORTATION

Project: Traffic Systems Management

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

Level of Development: Ongoing

Project Description:

This program addresses Traffic System improvements on County highways.

Project Cost Summary:

FUNDING SOURCE:	2022	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	350	364	379	394	409	426	443	2,415	2,765
TOTALS	350	364	379	394	409	426	443	2,415	2,765

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 and shoulders, paving, striping, roadside hazard elimination, etc.

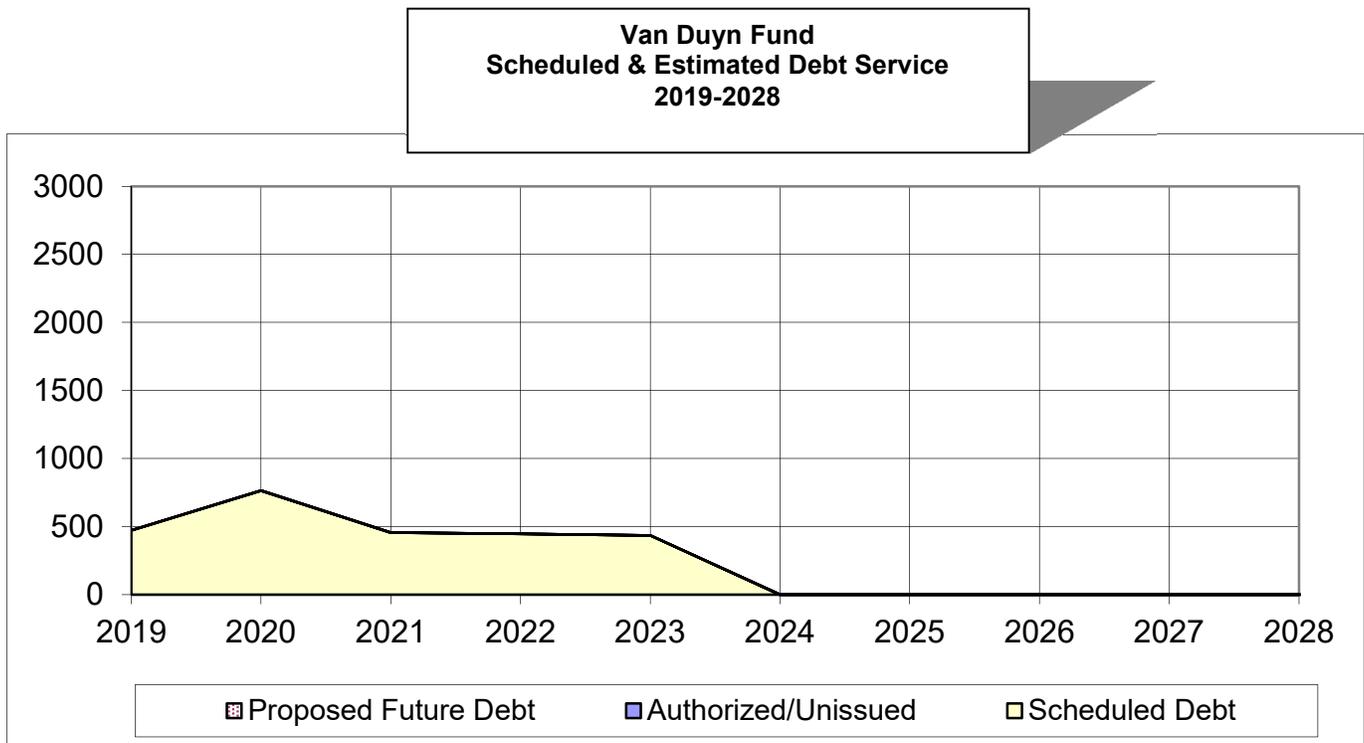
The Department is constantly working to acquire Federal and State funds to supplement this program.

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. 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 2023-2028 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

**Van Duyn Fund
Debt Service Summary**

<i>Payments in (\$000's)</i>	2018	2019	2020	2021	2022	2023	2024	2025
Principal & Interest								
<u>Scheduled Debt</u>	481	473	764	456	446	435	0	0
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	481	473	764	456	446	435	0	0
	2026	2027	2028	2029	2030	2031	2032	2033
Principal & Interest								
<u>Scheduled Debt</u>	0	0	0	0	0	0	0	0
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	0							
	2034	2035	2036	2037	2038	2039	2040	2041
Principal & Interest								
<u>Scheduled Debt</u>	0	0	0	0	0	0	0	0
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	0							
	2042	2043	2044	2045	2046	2047	2048	TOTAL
Principal & Interest								
<u>Scheduled Debt</u>	0	0	0	0				
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0				
<i>Proposed Future Debt</i>								
Total	0	435						

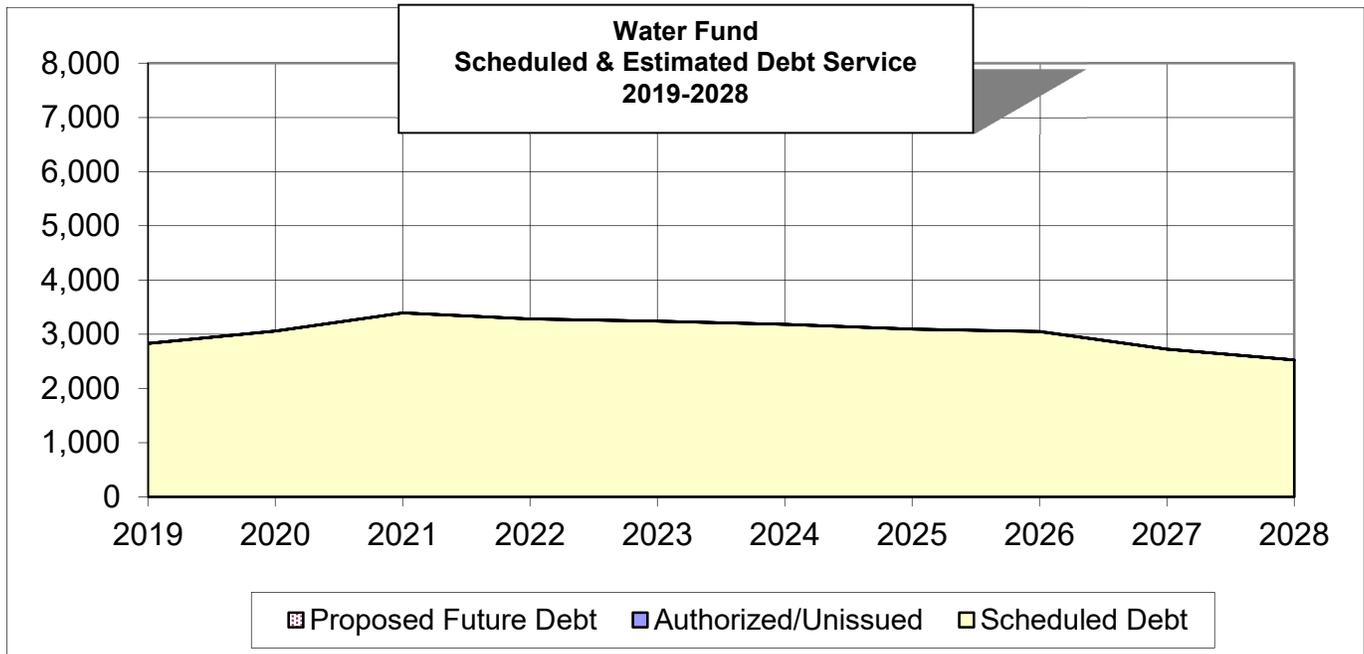
Special Districts

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

**Water Fund
Debt Service Summary**

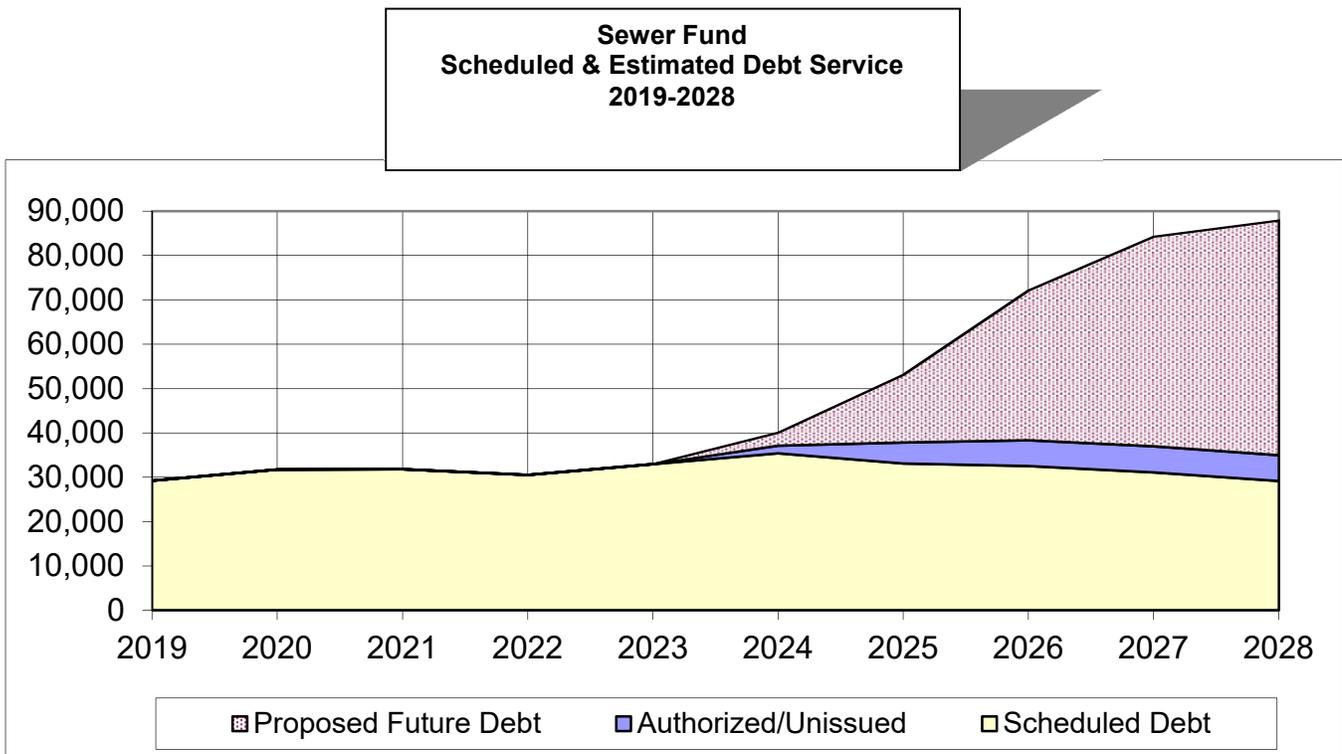
<i>Payments in (\$000's)</i>	2018	2019	2020	2021	2022	2023	2024	2025
Principal & Interest								
<u>Scheduled Debt</u>	2,844	2,829	3,058	3,395	3,282	3,239	3,183	3,092
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	2,844	2,829	3,058	3,395	3,282	3,239	3,183	3,092
	2026	2027	2028	2029	2030	2031	2032	2033
Principal & Interest								
<u>Scheduled Debt</u>	3,049	2,724	2,521	2,528	2,445	2,339	2,294	2,045
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	3,049	2,724	2,521	2,528	2,445	2,339	2,294	2,045
	2034	2035	2036	2037	2038	2039	2040	2041
Principal & Interest								
<u>Scheduled Debt</u>	1,247	1,022	640	570	403	261	103	103
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	1,247	1,022	640	570	403	261	103	103
	2042	2043	2044	2045	2046	2047	2048	TOTAL
Principal & Interest								
<u>Scheduled Debt</u>	0	0	0	0				
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0				
<i>Proposed Future Debt</i>								
Total	0	33,808						

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**

<i>Payments in (\$000's)</i>	2018	2019	2020	2021	2022	2023	2024	2025
Principal & Interest <u>Scheduled Debt</u>	26,802	29,245	31,720	31,831	30,545	32,987	35,409	33,102
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	1,704	4,702
<i>Proposed Future Debt</i>	0	0	0	0	0	0	2,974	15,334
Total	26,802	29,245	31,720	31,831	30,545	32,987	40,087	53,138
	2026	2027	2028	2029	2030	2031	2032	2033
Principal & Interest <u>Scheduled Debt</u>	32,547	31,094	29,134	28,119	27,790	27,035	25,947	25,365
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	5,781	5,847	5,847	5,847	5,847	5,847	5,847	5,847
<i>Proposed Future Debt</i>	33,827	47,304	52,919	55,044	54,927	53,721	52,518	51,312
Total	72,155	84,245	87,900	89,010	88,564	86,603	84,312	82,524
	2034	2035	2036	2037	2038	2039	2040	2041
Principal & Interest <u>Scheduled Debt</u>	24,461	23,541	21,941	19,465	18,508	14,285	11,901	11,832
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	5,847	5,847	5,847	5,847	5,847	5,847	5,847	5,847
<i>Proposed Future Debt</i>	50,107	48,901	47,694	46,487	45,284	44,078	42,873	41,668
Total	80,415	78,289	75,482	71,799	69,639	64,210	60,621	59,347
	2042	2043	2044	2045	2046	2047	2048	TOTAL
Principal & Interest <u>Scheduled Debt</u>	9,561	5,287	5,210	0				
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	5,847	5,847	1,940	0				
<i>Proposed Future Debt</i>	40,463	39,258	38,051	34,016	22,892	10,631	4,133	976,416
Total	55,871	50,392	45,201	34,016	22,892	10,631	4,133	1,584,463

AUTHORIZED PROJECTS

WATER ENVIRONMENT PROTECTION

Brewerton WWTP Asset Renewal Improvements

Project On-going

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. 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 include the following:

- Energy use improvements to sludge re-aeration tanks, mixed liquor tanks and digester tanks via installation of new turbo blowers.
- Energy use improvements to existing grit tank via installation of new positive displacement blowers.
- Installation of new fine bubble diffuser system in sludge re-aeration tanks.
- Relocation of all new blowers to outside locations in heated and sound proof enclosures.
- Replacement of various aging and outdated programmable logic controllers (PLC's).
- Replacement of aging variable frequency drives (VFD's) for raw pumps and return activated sludge pumps.
- Supervisory control and data acquisition (SCADA) programming for all new PLC's.
- Replacement sodium hypochlorite chemical bulk storage tanks.
- In-kind replacement of the grit system in Raw Sewage Pumping Station (RSPS).
- Rehabilitation of special manhole #1, including influent sluice gate replacement.
- Replacement of isolation gates for screen rake/grit chamber bypass channel in RSPS.
- Site security improvements to exterior fencing, surveillance monitoring, and alarms.
- Fire alarm improvements for code compliance.
- Site lighting improvements and enhancement to public address (PA) system.
- Replacement of plant water piping and hydrants.
- Control Building improvements to include restrooms, office and laboratory.
- Heating and ventilation air conditioning improvements throughout Control Building.
- Replace many exterior doors and overhead doors for all buildings.
- Masonry repair and sealant joint replacement.
- Replace lightning protection system.
- Odor control upgrades to include new carbon odor control system.
- Rehabilitation/lining of the mixed liquor effluent channels.
- Replace both tepid eyewash and deluge shower stations in rotary drum thickener area and chemical bulk storage area for safety.
- All exterior process tanks and associated walkways to have railings replaced and kick plates added as needed for safety.
- Installation of personnel retrieval systems for all tanks, (14) fourteen total - for safety.
- Roof replacement for the Control Building.

Cash funding for engineering design, in the amount of \$1.5 million, was procured for this project. Bonding resolution #18187R of December 2018, in the amount of \$12.575 million, was for construction.

Final design has been completed. Construction began in November 2019 and is expected to be completed in July of 2021. As of June 2021, approximately \$11.8 million has been spent for this project.

Combined Sewer Overflow 029 Walton Street Abatement Project

Project On-going

The combined sewer overflow (CSO) outfall 029 is located where Walton Street crosses over Onondaga Creek in the City of Syracuse. This CSO outfall is one of the more active CSOs remaining in the County system discharging 18 times per year (for the 1991 typical year). The original facility plan for this outfall intended the overflow volumes to be conveyed to the Clinton Regional Treatment Facility. Onondaga County has hired an engineering firm to design sewer system improvements to reduce discharges from CSO 029. This work is required to meet State and Federal CSO policy requirements. Engineering for this project was funded through the previously authorized Amended Consent Judgment Clinton CSO Service area project.

Bonding authorization was received in October 2019 (BR 19213A) in the amount of \$2.02 million. It is anticipated that bidding for construction will occur in late 2021 and that construction will start in the spring of 2022.

Combined Sewer Overflow 067 Abatement Project

Project On-going

Legislative authorization for \$900,000 in cash was approved in October 2019 to fund engineering.

The combined sewer overflow (CSO) outfall 067 and existing vortex demonstration treatment facility at CSO 067 is on West Newell Street at Onondaga Creek. The vortex demonstration treatment facility was constructed in the 1970s and is no longer utilized for treatment. Presently, the vortex facility and associated pump station acts as a pass-through for combined sewer flow from the CSO 067 drainage basin with limited solids removal before connecting to the MIS. Decommissioning and demolishing the unused vortex treatment facility and improving the hydraulics of the connection of the facility to the MIS will reduce maintenance requirements at CSO 067.

In the second quarter of 2021 a mini-bid scope of work will be developed for this project under the Green Projects Design Services contract. Construction is expected to start in early 2022 and be completed in early 2023

Energy Efficiency Improvements/Performance Contracting

Project On-going

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 20 years.

This project includes the replacement of aeration blowers, pumps, aeration mixers, and other equipment at select WEP wastewater treatment plants in 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. This design-build project will be paid for via energy cost savings.

Bonding in the amount of \$10.3 million was authorized in 2016 (BR-16058) for the design-build project

Phase I design started in January 2018 and was completed in September 2020. Construction started in March of 2021 and is scheduled to be completed in April 2022. As of June 2021, approximately \$1.6 million has been spent for this project.

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 in the Inner Harbor area. The Hiawatha Trunk Sewer consists of approximately 4,600 linear feet of reinforced concrete sewer pipe ranging from 33 to 36-inches in diameter. This project will provide adequate sewerage 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.

The project was authorized on 12/19/2014 by the County Legislature, for \$4.5 million for construction. 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.

Approximately \$1.5 million was spent in 2015 rehabilitating the Hiawatha Trunk Sewer using trenchless technology applied by the contractor selected under the blanket contract for these services. The sewer lining portion of the project was completed in November of 2015.

In 2021, approximately \$355,000 was spent to modify the Combined Sewer Overflow (CSO) 075 structure at the corner of Hiawatha Boulevard and Solar Street. This project was completed in May 2021. The completed CSO 075 modifications will reduce or eliminate discharges to the barge canal and ultimately Onondaga Lake. Approximately \$2.1 million is being spent in 2021 through 2022 rehabilitating the Hiawatha Trunk Sewer and associated service area using trenchless technology.

Meadowbrook Limestone WWTP Fine Screen Replacement

Project On-going

On February 1, 2022 the county legislature authorized \$1,000,000 in bonds (Resolution #29) to complete the following scope:

This project will replace the existing influent bar screen and rake system to improve solids capture and protect down-stream equipment.

The new screens will have half inch spaces and the rake system will be upgraded to a two-arm system, which performs better. Under this project we will perform some additional rehabilitation as well.

The Meadowbrook Limestone WWTP is under order on consent by NYSDEC to address issues associated with the treatment plant performance. WEP has 35.5 months from a NYSDEC approved schedule, dated 06/01/2020, to design and construct the

Special Funds

fine screens replacement. Fine Screens Replacement design is 100% complete and WEP is waiting on regulatory approval from NYSDEC. Once approved, WEP will advertise the bid in January 2022 with anticipated construction notice to proceed in May 2022 and anticipated completion of December 2022, ahead of the Consent Order deadline of May 2023.

Through this project WEP will improve influent solids capture which will provide better effluent performance, as well reduce the amount of maintenance tasks on downstream equipment. Rehab will be done to various MBLS WWTP assets including the influent screen, rake, concrete channel, and safety features associated with the screen rake. Due to the order on consent by NYSDEC, WEP is required to make enhancements to the MBLS WWTP in order to improve effluent water, and replacing the fine screen was one of the requirements.

We have started the engineering phase of this project in early 2021 using cash

Meadowbrook-Limestone WWTP Inflow & Infiltration Abatement

Project On-going

This project is based on a Sewer System Evaluation Survey (SSES) conducted in 2002 and recently updated by an engineering consultant which identified areas where the inflow and infiltration of storm water and groundwater into the sanitary sewer system was compromising treatment at the Meadowbrook-Limestone WWTP. The extraneous flows have frequently caused the plant to exceed its SPDES permit limits during periods of wet weather, resulting in violations cited by the NYSDEC. As a result of those SPDES permit violations, the NYSDEC issued a Consent Order in April 2020. Amongst other requirements, that Consent Order requires the implementation of this infiltration and inflow abatement project. The work being performed involves sewer lining, lateral lining, manhole replacement and rehabilitation, and other sewer system improvements.

Bonding for this project was authorized in October 2018 (BR #113) in the amount of \$9 Million. A consultant was selected in early 2019 to develop a work plan to identify priority areas and to direct the County term services contractor to execute the I/I reduction work. Construction started in the summer 2020 and is expected to be completed in 2023. As of June 2021, approximately \$1.1 million has been spent on this project.

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 requirements 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.
- Installation of a new bypass tank outfall conveyance.
- 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 #17016A of March 2017, for \$21.355 million, was for construction.

Construction started in October 2017 and is largely completed; it is expected to be fully completed in 2021.

As of June 2021, approximately \$15.1 million has been spent on this project. It is expected that a total of approximately \$15.3 million will be spent on the project.

Metropolitan (Metro) Wastewater Treatment Plant - Thickener Rehabilitation

Project On-going

The Thickener Complex at the Metro WWTP, constructed in 1978, requires process equipment replacement, rehabilitation, and modifications to extend the life of the Thickener System for an additional 25-30 years. This project serves to address this requirement through structural, mechanical, HVAC and electrical improvements associated with the Thickener Complex.

The following improvements are included in the project:

Special Funds

- Replacement of thickener feed wells, sludge boxes, center columns, drive mechanisms and associated equipment.
- Replacement of deteriorated influent channels.
- Replacement of thickener effluent weirs, scum baffles and effluent troughs of each thickener with FRP weirs, baffles, and troughs.
- Replacement of sludge collector and scrapper system of each thickener.
- Replacement of scum pumps, scum house sump pumps, and associated piping valves and appurtenances.
- Removal and replacement of an air compressor, pulsation dampeners, sump pump, and effluent water line.
- Replacement of electrical grounding and lightning protection systems for safety.
- Installation of a new tanker truck unloading station for system efficiency and reliability.
- HVAC improvements including replacement of unit ventilator, condensate receiver, unit heaters, roof exhaust fans, steam piping, condensate lines and associated valves.
- Supervisory Control and Data Acquisition (SCADA) programming and instrument control upgrades.
- Structural improvements, various concrete repairs, repair and replacement of railings, replacement of carbon steel bridges and grating, replacement of doors, installation of railings and kick plates, rehabilitation of exterior building brick façade, and removal and replacement of existing concrete coating systems.
- Ancillary civil, electrical and mechanical improvements.

Cash funding for engineering design, in the amount of \$450,000, was procured for this project. Bonding resolution #18185R of December 2018, for \$3.73 million, was for construction.

Final design was completed in 2021 and an additional \$1 million was authorized in February 2022 (BR# 29) for construction due to increased cost related to COVID inflation. Construction bids were received in April 2022 and construction will be completed circa March 2024.

Metropolitan (Metro) Wastewater Treatment Plant - Phase II Digester

Project On-going

The Metro WWTP Digester Complex was originally constructed in 1959 and serves as the solids disposal facility for five of the County owned wastewater treatment plants. Here, bio solids are brought to the facility via tankers to be processed through anaerobic digestion. The Digester complex consists of 3 primary digesters (1, 2, and 3) and a secondary digester/gas holder (Digester 4). Each primary digester can hold approximately 1.8 million gallons; the secondary digester can hold 1.6 million gallons.

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 for safety and operations effectiveness.
- 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 for safety.
- Repair of all cracked and spalled concrete pilasters and other concrete repairs to 60-year old tanks.
- Installation of two new cogeneration units to convert excess methane gas into electricity which will subsequently be used at the Metro WWTP. Moreover, the "waste" heat generated from cogeneration units will be used to supplement digester heating requirements. The installation of the cogeneration units will reduce greenhouse gas emissions via beneficial use of methane gas and the system's waste heat. It is noted that the department has been awarded a 50% matching grant (maximum reimbursement value of \$1.3 million) for the cogeneration units from the Department of Environmental Conservation (DEC) Office of Climate Change (OCC) via 2017 Climate Smart Communities Grant Program; part of NYS Environmental Protection Fund. With this grant the new cogeneration units would have an expected payback period of seventeen years.

Cash funding for engineering design, in the amount of \$1.2 million, was procured for this project. Bonding resolution #19006 of January 2, 2019, for \$27.68 million, was for construction.

Final design has been completed. Construction began in January 2020 and is expected to be completed in February 2022. As of June 2021, approximately \$14.1 million has been spent on this project.

Metropolitan WWTP Biosolids Drying System

Special Funds

Project On-going

The Metro WWTP produces approximately 37,000 wet tons of dewatered sludge at 30% solids per year. With a transportation and disposal cost of \$87.23 per wet ton, that equates to over \$3.2 million per year on landfill spending. The amount of water content in the biosolids has a direct effect on the disposal costs. The current biosolids disposed consists of 30% solids and 70% water. The more water that can be removed from the biosolids, the less expensive it will be to dispose of. As part of a NYSERDA Flextech Study completed in 2016, WEP and their contracted consultant explored the concept of installing a biosolids dryer to reduce the water content of the sludge. At that time, biosolids disposal costs were around \$50/wet ton, which resulted in a greater than 20-year payback. As such, the project was not pursued any further.

Recent dramatic changes in the biosolids disposal marketplace have caused this project to be re-evaluated. Combined with the recent evolution of biosolids drying technology, the project now is proposed to have an acceptable (8.1 - 11.1 year) payback period. Specifically, it is anticipated that by increasing the dryness of the biosolids to approximately 90%, the transport and disposal costs are expected to be reduced by \$1.9 million per year, with net annual savings of \$1.4 million per year (after debt service and O&M costs of the dryer and related infrastructure). Savings calculations include a service contract for \$60,000 per year, which includes annual parts and consumables and quarterly inspections by the manufacturer.

The proposed project includes a biosolids dryer system, a building to house the dryer system, a control room and an electrical room. Additional infrastructure includes the extension of utilities, construction of odor control systems, and a materials handling system. The project is being proposed as a design-build project under the NYS Energy Law.

Bonding resolution #18189A of December 2018, for \$15.106 million, was for the entire design-build project.

Design of this design-build project began in December of 2019 and is expected to be complete circa July 2021.

Construction is anticipated to start in September 2021 and be completed in March 2023. As of June 2021, approximately \$1.1 million has been spent on this project.

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 \$703 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

Special Funds

- Midland 044 Conveyances.
- Sewer Separation

Projects still in progress include:

- Metro WWTP Phosphorus Optimization.

In accordance with the ACJ 4th Stipulation, Phosphorus Workplan and Optimization reports have been completed for the Metro WWTP. The NYSDEC has approved the Workplan and the Optimization report.

The Optimization 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 a 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 improvements was approved by the New York State Department of Environmental Conservation in April 2017. Construction started in October 2017 and is largely completed; it is expected to be fully completed by the end of 2021. As of June 2021, approximately \$15.1 million has been spent on this project. It is expected that a total of approximately \$15.3 million will be spent on the project.

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

- 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 active CSO's will be abated by using green infrastructure and implementing floatable control (where warranted). Green and grey infrastructure will be implemented where appropriate throughout the Midland sewer shed to reduce the volume of stormwater entering the combined sewer system.

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 029 (Walton St.). The remaining CSO's were evaluated in a facilities plan to determine how best to abate their overflows. Green and grey 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 (11/18/01-12/31/21 for \$108.5M – Ongoing)

- This project was completely authorized in October 2016.
- Construction of a new storage facility on State Fair Boulevard has been completed.
- The remaining CSO's have been evaluated to determine how best to abate their overflows. The remaining active CSO's will be abated by using grey and green infrastructure (where warranted).

Route 481/298 Industrial Corridor Sewer Improvements

Project On-going

The area in the Town of DeWitt east of Fly Road supports numerous industrial users such as Ultra Dairy, Inficon and Fulton Boiler. The sanitary sewer system that serves these industries is at full capacity and will need to be addressed to allow for planned future expansion by Ultra Dairy and potentially others in the area.

This proposed project will install a new wastewater pumping station that will serve Ultra Dairy and Fulton Boiler and will provide capacity for future expansion. The wastewater will be routed directly to the County owned Franklin Park Trunk Sewer where adequate capacity exists. Rerouting of the wastewater will also eliminate significant maintenance issues related to the makeup of the industrial discharges from the industries served. An engineering consultant was hired in 2019 to meet the aggressive economic development expectations.

The following benefits will be realized by this project:

- Economic development priorities will be met.
- Capacity for future expansion will be provided.

Cash funding for engineering design, in the amount of \$650,000, was procured for this project. In February 2021 the County Legislature approved by resolution BR#9 for \$6,250,000 for construction.

As of June 2021, the project design was completed and project bids for construction were received. It is anticipated that construction of the project will commence in early August 2021 and that the facility will be placed in service by May of 2022. To date, approximately \$282,000 has been expended on the project for engineering design services.

Suburban I/I Reduction - Green and Innovative Improvements

Project On-going

Special Funds

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 innovative projects. 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: Camillus, Cicero, Clay, DeWitt, Geddes, Lysander, Manlius, Onondaga, Pompey, Salina and the City of Syracuse and villages: Baldwinsville, Camillus, East Syracuse, Fayetteville, Liverpool, Manlius, North Syracuse, and Solway.

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.

Bonding for this project was authorized as follows: 2012 in the bonded amount of \$3 million (BR #12115); 2013 in the bonded amount of \$2 million (BR #13135); in 2015 for \$1.98 million in bonds (BR #127); and in 2018 in the amount of \$500,000 in cash. As of June of 2021, approximately \$6 million has been spent on this project.

White Pine Industrial Park Conveyances

Project On-going

This project will provide public sewer service to the White Pine Industrial Park and surrounding areas. These areas are located along and in the vicinity Route 31 and Caughdenoy Road in the Town of Clay, Onondaga County. The project is estimated to cost \$17.6 million and will consist of an 8 MGD pumping station and a 24" PVC sanitary forced pressure main that will be approximately 20,500 feet in length and will be routed to the Oak Orchard Wastewater Treatment Plant that is located along the Oneida River in the Town of Clay.

We in summer 2020 we received legislative approval for \$1,600,000 cash for engineering services, and in February 2022 we received legislative approval for \$16 million in debt for construction.

Special Funds

SPECIAL DISTRICTS PROPOSED PROJECTS SUMMARY

Special Funds

Department	STATUS	PROJECT	2023 - 28 Total
Sewer Fund			
WATER ENVIRONMENT PROTECTION			
		Baldwinsville Seneca Knolls and Oak Orchard WWTP Oxygen System Replacement (NEW)	10,000
		Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	21,220
		Camillus Force Main Replacement	26,270
		Comprehensive Asset Renewal at Baldwinsville WWTP	4,986
		Comprehensive Asset Renewal at Brewerton WWTP	7,288
		Comprehensive Asset Renewal at Meadowbrook Limestone WWTP	16,777
		Comprehensive Asset Renewal at Metro WWTP	3,925
		Comprehensive Asset Renewal at Oak Orchard WWTP	10,525
		Comprehensive Asset Renewal at Wetzels Rd. WWTP	4,975
		Davis Rd Pump Station and Forcemain Improvements	26,080
		Department Wide Building and Site improvements	17,969
		Department Wide Mechanical, Electrical and Process Improvements	21,726
		Harbor Brook Miscellaneous Culvert and Channel Improvements	1,700
		Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project	70,374
		Meadowbrook Limestone & Brewerton WWTP - Drum Replacement	5,000
		Meadowbrook-Limestone WWTP Large Scale Upgrade	4,600
		Metro WWTP 1978 Plant Annex Asset Renewal - Phase I	78,528
		Oak Orchard Wastewater Treatment Plant Major Upgrade Project	220,000
		Oak Orchard WWTP Secondary Clarifier Rehabilitation	9,850
		Route 81, Sanitary Sewer Betterments	16,020
		Sewer Consolidation	101,750
new		Storm hazard mitigation in various affected facilities (NEW)	400
new		Velasko Road Dam Repairs & Improvements (NEW)	1,056
		Wastewater Transportation System Improvements	64,730
Sewer Total			\$ 745,749

SPECIAL DISTRICTS FUNDING SOURCES

Sewer

SOURCE OF FUNDS	2023	2024	2025	2026	2027	2028	6yr Total
Special District Tax		8,586	7,811	7,701	7,305	7,139	38,542
Authorized Borrowing	12,078	5,700	275				18,053
Borrowing to be Authorized	56,614	200,332	230,137	122,888	47,083	31,700	688,754
State Aid	400						400
TOTALS	\$69,092	\$214,618	\$238,223	\$130,589	\$54,388	\$38,839	\$745,749

SPECIAL DISTRICTS ESTIMATED DEBT SERVICE

Estimated Debt Service

Payment Schedule (\$ in 000's)

WATER ENVIRONMENT PROTECTION

	2023	2024	2025	2026	2027	2028
Oak Orchard WWTP Secondary Clarifier Rehabilitation	0	0	190	585	750	735
Baldwinsville Seneca Knolls WWTP Disinfection and Sewer Consolidation	0	105	905	1,357	1,329	1,301
Oak Orchard Wastewater Treatment Plant Major	0	0	2,468	10,033	16,733	18,334
Route 81, Sanitary Sewer Betterments	0	0	0	0	841	1,362
Department Wide Building and Site improvements	0	308	654	739	723	708
Department Wide Mechanical, Electrical and Process	0	454	735	720	705	690
Meadowbrook-Limestone WWTP Large Scale Upgrade	0	0	0	0	121	316
Baldwinsville Seneca Knolls and Oak Orchard WWTP Comprehensive Asset Renewal at Baldwinsville WWTP	0	5	9	8	37	243
Wastewater Transportation System Improvements	0	613	1,561	2,500	3,126	3,770
Comprehensive Asset Renewal at Meadowbrook	0	0	200	402	530	1,057
Velasko Road Dam Repairs & Improvements (NEW)	0	5	58	90	88	86
Camillus Force Main Replacement	0	263	1,265	2,053	2,187	2,141
Harbor Brook Miscellaneous Culvert and Channel	0	11	17	17	95	143
Ley Creek/Liverpool Force Main	0	525	2,425	4,695	5,701	5,751
Davis Rd Pump Station and Forcemain Improvements	0	158	564	1,117	1,329	1,301
Metro WWTP 1978 Plant Annex Asset Renewal - Phase	0	420	2,413	4,941	6,209	6,355
Meadowbrook Limestone & Brewerton WWTP - Drum	0	0	158	360	420	411
Comprehensive Asset Renewal at Metro WWTP	0	37	60	137	232	257
Comprehensive Asset Renewal at Oak Orchard WWTP	0	4	201	321	314	308
Comprehensive Asset Renewal at Wetzel Rd. WWTP	0	34	78	90	206	278
Comprehensive Asset Renewal at Brewerton WWTP	0	32	231	500	590	578
Department Total	0	2,974	15,334	33,827	47,304	52,919

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Baldwinsville Seneca Knolls and Oak Orchard WWTP Oxygen System Replacement

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

Level of Development: Intermediate

Project Description:

This project will replace the pure oxygen generation systems at Baldwinsville and Oak Orchard Wastewater Treatment Plants. These systems are approximately 40 years old and require significant maintenance and parts are becoming difficult to obtain. These systems are also large energy users. The oxygen generation equipment will be replaced by having liquid oxygen delivered and stored in onsite tanks. Original analog controls will be replaced by modern digital equipment.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Cash on Hand	1,000							0	1,000
Borrowing to be Authorized	0		5,000	5,000				10,000	10,000
TOTALS	1,000		5,000	5,000				10,000	11,000

Project Detail and Status:

Both Baldwinsville Seneca Knolls and Oak Orchard Wastewater Treatment Plants (WWTP) operate using a high purity oxygen activated sludge process (aeration using pure oxygen instead of air). Both facilities currently utilize oxygen generated on-site by Union Carbide Pressure Swing Absorption (PSA) systems which are approximately 40 years old and are in need of replacement.

The PSA systems require significant maintenance and parts are becoming difficult to obtain. In addition, the PSA systems are large energy users.

This project will replace the existing on-site PSA oxygen generation system and associated infrastructure (piping and valves) at Baldwinsville Seneca Knolls WWTP with modern Vacuum Pressure Swing Adsorption (VPSA) which will be more reliable and energy efficient. The existing liquid oxygen storage tank used for peak demands and emergency back-up will also be replaced. At Oak Orchard WWTP the existing liquid oxygen storage tank will be replaced to ensure reliability and safety while evaluations and decisions affecting possible major expansion and potential process changes at Oak Orchards are being considered. The new oxygen system infrastructure will be designed and constructed to provide a service life of 30 years.

In fall 2023 we intend to seek legislative authorization for \$10,000,000 in bonding for construction.

Special Funds

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: Advanced

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 became effective May 15, 2018. The disinfection portion of this project has been completed in accordance with the SPDES permit. Additionally, the plant is over thirty-seven 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 and odor control improvements. Additional work is also being pursued for rehabilitating the primary and secondary clarifier tanks as a next phase of the asset renewal program.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	2,000	14,000					16,000	16,000
Special District Tax	1,150							0	1,150
Authorized Borrowing	32,360	5,220						5,220	37,580
TOTALS	33,510	7,222	14,000					21,220	54,730

Project Detail and Status:

The disinfection/dechlorination portion of this project provided 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 was installed downstream of the existing chlorination system, along with ancillary improvements. Construction of disinfection improvements has been completed in accordance with SPDES due date.

The ongoing 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, life safety, major mechanicals, fire alarm system, odor control, code compliance, water supply systems, energy conservation measures, and other necessary asset renewal measures. The project is also being expanded via pursuit of rehabilitating the primary and secondary settling clarifier tanks as a next phase of the asset renewal program.

Bonding in the amount of \$3.4 million was authorized in December 2, 2014 (BR-226) for the engineering design phase for disinfection and Phase II asset renewal. Bonding in the amount of \$1.8 million was authorized in February 7, 2017 (BR-13) for the construction of the disinfection improvements project; additional bonding in the amount of \$1.1 million was authorized in July 5, 2017 (BR-99) for construction (resulting in a total amount of \$2.9 million).

Bonding in the amount of \$30,280,200 was authorized on December 17, 2019 (BR-211) for the construction of Phase II asset renewal improvements and also \$1,000,000 for engineering design of rehabilitation of select clarifier tanks. Total bond authorization was \$31,280,200. The Phase II improvements have been structured into two components so as to expedite construction of the odor control upgrades. The design and regulatory approval for the odor control component will be completed in April 2021, with construction began in September 2021.

For the second component, asset renewal, design and regulatory approval was completed in April 2022. The cost estimates for construction of the asset renewal portion of Phase II improvements were higher than anticipated due to ongoing COVID related inflation, therefore the scope was reduced to stay within the budget.

It is anticipated that legislative approval will be sought in fall 2022 for approximately \$16 million in bonding for construction of clarifier rehabilitation project component.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Camillus Force Main Replacement

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

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	5,000	16,000	5,270				26,270	26,270
Authorized Borrowing	3,500							0	3,500
Special District Tax	600							0	600
TOTALS	4,100	5,000	16,000	5,270				26,270	30,370

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 pipeline using "Smart ball" technology indicated numerous pipe line anomalies that may indicate that the pipe line has a high probability of failure.

Phase I of the replacement project has been completed and included the installation of approximately 7,700 feet of HDPE pipe lining. The smaller diameter HDPE lining will provide shorter retention times and, due to the new corrosion resistant pipeline material, a 50-year or greater, service life.

Phase II of the replacement project will include lining the remaining 28,900 feet of force main.

This specific project is being advanced for the following reasons:

- Advances rehabilitation of the wastewater force main damaged by chemical degradation.
- Prevents future raw sewer discharges to the environment and public health exposures.
- Provides improved operational conditions and shorter retention times in the pipeline which will decrease odor control chemical usage at the Camillus Pump Station and odor issues at the West Side Pump Station.
- Reduces the risk to the County by addressing failing infrastructure.

Phase 1 bonding of \$3.5 million was authorized through Bond Resolutions BR17022A and BR17197A. Phase I of the project was bid in early 2019 and construction was substantially completed by the end of 2019. As of March 2021, approximately \$2.8 million has been spent on this project. An additional \$600,000 in cash funding for Phase II engineering services was authorized in October 2019. Design of Phase II is anticipated to be complete in 2022.

In Spring 2023 we intend to seek legislative authorization for \$26,270,000 in bonding for phase II construction in 2023-2025.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Baldwinsville WWTP

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various assets at Baldwinsville Wastewater Treatment Plant (WWTP). The scope of this project is wide and will include repair or replacement of a large variety of small and midsize assets that are not too big and costly to be standalone projects or that are not going to be part of the department wide projects' scope.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	0			100	646			746	746
Borrowing to be Authorized	0	100			550	3,590		4,240	4,240
TOTALS	0	100		100	1,196	3,590		4,986	4,986

Project Detail and Status:

The following describes the scope and cost estimates for this capital project.

In 2023 we plan to spend \$100,000 (in debt) for construction on the following scope:

1. Aeration Grit Diffuser Grid Replacement

In 2025 we plan to spend \$100,000 (in cash) for engineering on the following scope:

1. Louvers and HVAC Improvements

In 2026 we plan to spend \$646,000 (in cash) for engineering and \$550,000 (in debt) for construction on the following scope:

1. Aeration - Mixer: Replacement (engineering)
2. Miscellaneous Gate Replacements (engineering)
3. Recycled Activated Sludge (RAS) & Waste Activated Sludge (WAS) Pumping System Replacements (engineering)
4. Louvers and HVAC Improvements (construction)

In 2027 we plan to spend \$3,590,000 (in debt) for construction on the following scope:

1. Aeration - Mixer: Replacement
2. Miscellaneous Gate Replacements
3. (RAS) & (WAS) Pumping System Replacements

In fall 2022 we intend to seek legislative authorization for \$100,000 in bonding to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Brewerton WWTP

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various assets at Brewerton Wastewater Treatment Plant (WWTP).

The scope of this project is wide and will include repair or replacement of a large variety of small and midsize assets that are not too big and costly to be standalone projects or that are not going to be part of the department wide projects' scope.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	0		250					850	850
Borrowing to be Authorized	0	600	3,438	3,000				7,038	7,038
TOTALS	0	600	3,688	3,000				7,288	7,288

Project Detail and Status:

The following describes the scope and cost estimates for each of the six years of this capital project.

In 2023 we plan to spend \$600,000 (in debt) for engineering on the following scope:

1. Clarifier Rehabilitation Project. The rehabilitation will generally include miscellaneous concrete repair and replacement of all mechanical and electrical equipment.

In 2024 we plan to spend \$250,000 (in cash) for engineering and \$3,438,000 (in debt) for construction on the following scope:

1. Clarifier Rehabilitation Project (construction) (cost are subject to update after the engineering is done in 2023).
2. Raw Sewage Pump and Influent Screen Asset Renewal. The rehabilitation will general include miscellaneous concrete repair and replacement of the influent pumps and screen rake, mechanical, electrical, and HVAC equipment (engineering).

In 2025 we plan to spend \$3,000,000 (in debt) for construction on the following scope:

1. Raw Sewage Pump and Influent Screen Asset Renewal (construction) (cost are subject to update after the engineering is done in 2024).

In fall 2022 we intend to seek legislative authorization for \$600,000 in debt to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Meadowbrook Limestone WWTP

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various assets at Meadowbrook Limestone Wastewater Treatment Plant (WWTP).

The scope of this project is wide and will include repair or replacement of a large variety of small and midsize assets that are not too big and costly to be standalone projects or that are not going to be part of the department wide projects' scope.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	0		300			35	100	435	435
Borrowing to be Authorized	0		3,800	1,500	1,649	9,193	200	16,342	16,342
Cash on Hand	400							0	400
TOTALS	400		4,100	1,500	1,649	9,228	300	16,777	17,177

Project Detail and Status:

The following describes the scope and cost estimates for each of the six years of this capital project.

In 2022 authorization was received to spend \$400,000 (cash on hand) for study and engineering on the following scope:

1. Aeration System Improvements and Asset Renewal.

In 2024 we plan to spend \$3,800,000 in debt and \$300,000 in cash respectively on the following scopes:

1. Construction of Aeration System Improvements and Asset Renewal (\$3,800,000).

And engineering for (\$300,000):

1. Plant Water and Effluent Water System Improvements as well as adding or replacing of Hydrants.
2. Digester Rehabilitation Project.

In 2025 we plan to spend \$1,500,000 (in debt) (subject to update after the engineering is done) for construction on the following scope:

1. Plant Water and Effluent Water System Improvements as well as adding or replacing of Hydrants.
2. Digester Rehabilitation Project.

In 2026 we plan to spend \$1,649,000 (in debt) for engineering on the following scope:

1. Influent Building & Grit System Improvements and Rehabilitation.

Special Funds

In 2027 we plan to spend \$35,000 (in cash) for engineering and \$9,158,000 (in debt) for construction (subject to update after the engineering is done) on the following scope:

1. Influent Building & Grit System Improvements and Rehabilitation (construction).
2. Secondary Clarifier Electrical & Control Improvements (engineering).

In 2028 we plan to spend \$100,000 (in cash) for engineering and \$200,000 (in debt) for construction on the following scope:

1. UV Disinfection System Evaluation (engineering)
2. Secondary Clarifier Electrical & Control Improvements (construction).

In fall 2023 we intend to seek legislative authorization for \$3,800,000 in bonding and \$300,000 in cash to fund the 2024 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Metro WWTP

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various assets at Metro Wastewater Treatment Plant (WWTP).

The scope of this project is wide and will include repair or replacement of a large variety of small and midsize assets that are not too big and costly to be standalone projects or that are not going to be part of the department wide projects' scope.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	0		625	200				825	825
Authorized Borrowing	800							0	800
Cash on Hand	30							0	30
Borrowing to be Authorized	0	700		1,500	900			3,100	3,100
TOTALS	830	700	625	1,700	900			3,925	4,755

Project Detail and Status:

The following describes the scope and cost estimates for each of the six years of this capital project.

On February 1, 2022, the County Legislature authorized us to spend \$830,000 (800,000 debt by Resolution #29 and \$30,000 in existing cash on the following scope:

Engineering funds for:

1. Rehabilitation of biogas pipe feed to low lift boiler room (\$10,000). Funds for construction are cash on hand.
2. Aeration Air flow meter replacement (\$10,000).
3. Mixer replacement in sludge blend building (\$10,000).

We will pay the cost of this component (\$30,000 in cash) with existing funds and we are not asking for new funds.

Construction funds for:

1. Biological Aerated Filtration (BAF) Spectra units replacement/rehabilitation (\$300,000 in debt). The engineering for this component will be completed in 2021 with available cash.
2. Rehabilitation of Secondary Effluent Pump # 2 (\$250,000 in debt)
3. Rehabilitation of Secondary Effluent Pump # 4 (\$250,000 in debt)

In 2023 we plan to spend \$250,000 (in debt) for engineering and \$450,000 (in debt) for construction on the following scope:

1. Rehabilitation of Secondary Effluent Pump # 3 (\$250,000 for construction)
2. Mixer replacement in sludge blend building (\$100,000 for construction)
3. Aeration air flow meter replacement (\$50,000 for construction)
4. Secondary Bypass Outfall Shore Structure and Manhole Repairs (\$50,000 for construction)
5. UV Disinfection System Evaluation and Alternatives Study (\$200,000 for engineering)

Special Funds

6. Grease/Grit Handling with Dewatering Provisions / Lagoons (\$50,000 for engineering)

In 2024 we plan to spend \$325,000 (in cash) for engineering and \$300,000 (in cash) for construction on the following scope:

1. BAF Media Evaluation Study (\$100,000 for engineering and construction)
2. Secondary Effluent Pump Station CFD analysis, Feasibility and Cost Benefit Analysis Study (\$75,000 for engineering)
3. Chemical B - Building and Chemical System Improvements (\$150,000 for engineering)
4. Thickener Gallery Leaking Pipe Penetration Repair (\$50,000 for construction)
5. Rehabilitation of Secondary Effluent Pump # 1 (\$250,000 for construction)

In 2025 we plan to spend \$200,000 (in cash) for engineering and \$1,500,000 (in debt) for construction on the following scope:

1. Centrifuge evaluation study (\$100,000 for engineering)
2. Aeration System Replacement Alternatives Study (\$100,000 for engineering).
3. Chemical B - Building and Chemical System Improvements (\$1,500,000 for construction)

In 2026 we plan to spend \$900,000 (in cash) on the following scope:

1. Low Lift Force Main- Evaluation/Inspection and rehabilitation (\$150,000 for engineering and \$750,000 for construction)

In fall 2022 we intend to seek authorization for \$700,000 in bonds to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Oak Orchard WWTP

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various assets at Oak Orchard Wastewater Treatment Plant (WWTP).

The scope of this project is wide and will include repair or replacement of a large variety of small and midsize assets that are not too big and costly to be standalone projects or that are not going to be part of the department wide projects' scope.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	0					750		750	750
Borrowing to be Authorized	0	75	3,700				6,000	9,775	9,775
Cash on Hand	425							0	425
TOTALS	425	75	3,700			750	6,000	10,525	10,950

Project Detail and Status:

The following describes the scope and cost estimates for each of the six years of this capital project.

In 2022 authorization was received to spend \$425,000 (Cash on hand) for engineering and construction on the following scope:

1. Primary clarifier tank improvements. The rehabilitation will generally include miscellaneous concrete repair and application of protective coatings.

In 2023 we plan to spend \$75,000 (in debt) for construction on the following scope:

1. Alum Pump and VFD Replacement

In 2024 we plan to spend \$3,700,000 for construction on the following scope:

1. Thickener tanks improvements. The rehabilitation will generally include miscellaneous concrete repair and replacement of all mechanical and electrical equipment. (\$1,500,000 for construction)
2. Lagoon Distribution Structure #2 – Rehabilitation (\$200,000 for construction)
3. Electrical Substation, Grit Bldg & I Bldg Unit Substation, and Generator(s) (\$2,000,000)

In 2027 we plan to spend \$750,000 for engineering on the following scope:

1. Alum Chemical System and Tank Asset Renewal (\$750,000 for engineering).

Special Funds

In 2028 we plan to spend \$6,000,000 for construction on the following scope:

1. Influent Area Asset Renewal (\$6,000,000 for construction).

In fall 2022 we intend to seek authorization for \$75,000 in debt to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Wetzel Rd. WWTP

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various assets at Wetzel Rd. Wastewater Treatment Plant (WWTP).

The scope of this project is wide and will include repair or replacement of a large variety of small and midsize assets that are not too big and costly to be standalone projects or that are not going to be part of the department wide projects' scope.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	0		400	250	400	300	300	1,650	1,650
Borrowing to be Authorized	0	650	425		2,250			3,325	3,325
Cash on Hand	225							0	225
TOTALS	225	650	825	250	2,650	300	300	4,975	5,200

Project Detail and Status:

The following describes the scope and cost estimates for each of the six years of this capital project.

In 2022 authorization was received to spend \$225,000 (Cash on Hand) on the following scope:

1. Concrete repairs in the primary clarifier area (\$75,000 for construction)
2. Comprehensive planning engineering study (\$150,000 for study) These funds were used on emergency projects and the scope of the planned project was moved to 2023.

In 2023 we plan to spend \$650,000 (in debt) on the following scope:

1. Secondary Digester Cleaning and Asset Renewal (\$500,000 for construction)
2. Comprehensive planning engineering study (\$150,000 for study)

In 2024 we plan to spend \$400,000 (in cash) for engineering and \$425,000 (in debt) construction on the following scope:

1. Primary clarifier and chemical bulk storage improvements (\$400,000 for engineering)
2. Cloth Disc Media Filter (CDMF) cloth replacement (\$225,000 for construction)
3. BAF Piping and Strainers Rehab and Repairs (\$200,000 for construction)

In 2025 we plan to spend \$250,000 (in cash) on the following scope:

Special Funds

1. CMDF PLC & HMI Replacement (\$250,000 for construction)

In 2026 we plan to spend \$400,000 (in cash) for engineering and construction and \$2,250,000 (in debt) for construction on the following scope:

1. Primary clarifier and chemical bulk storage improvements (\$2,250,000 for construction)
2. Primary Digester #1 Cleaning (\$300,000 for construction)
3. UV System Evaluation and Alternatives Study (\$100,000 for engineering)

In 2027 we plan to spend \$300,000 (in cash) on the following scope:

1. Primary Digester #2 Cleaning (\$300,000 for construction)

In 2028 we plan to spend \$300,000 (in cash) on the following scope:

1. Secondary Digester Cleaning (\$300,000 for construction)

In fall 2022 we intend to seek authorization for \$650,000 in debt to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Davis Rd Pump Station and Forcemain Improvements

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

The project includes the replacement of mechanical and electrical equipment, HVAC systems, cranes & hoists, concrete and mortar repair, and other necessary improvements for the Davis Rd Pump Station (PS). The project will also include improvements to the Davis Rd PS Force Main system - with the end result being two separate Force Mains.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	774							0	774
Authorized Borrowing		4,800	5,400					10,200	10,200
Borrowing to be Authorized	0	3,000	5,880	7,000				15,880	15,880
TOTALS	5,574	7,800	11,280	7,000				26,080	26,854

Project Detail and Status:

The Davis Road Pump Station (PS) was put into service circa 1980 after decommissioning of the Davis Rd Wastewater Treatment Plant (WWTP). The Davis Rd PS reused some of the wastewater infrastructure, including the Raw Sewage Building, Control Building and Chemical Building, while others were abandoned in place or removed completely such as the settling tanks. The pump station receives flow from Town of Cicero and the Village of North Syracuse and subsequently pumps flow to Oak Orchard WWTP through two County-owned Force Mains 24- inch and 36-inch, respectively.

Davis Road Pump Station has a significant number of assets many of which are reaching the end of their useful life. This project is for the rehabilitation and renewal of assets at the facility and for installation of two new Force Main sections which will allow for two distinct Force Mains. The project upgrades will improve operator safety, improve and optimize system performance and reduce operating expenses. The project includes modifications to Oak Orchard WWTP influent structure that provide influent connections for anticipated development within the sewer service area.

Pump Station Improvements:

- Replacement of manual bar rack.
- Replacement of sluice gate.
- Replacement of isolation and check valves for the pumps, including all original installation valve operators.
- Rehabilitation of Force Main pipe header and supports.
- Replacement of mechanical screen rake.
- Replacement of the emergency power generator.
- Replacement the chemical pump hoist and chemical storage and feed systems.
- Installation of tempered eyewash station where there is exposure to harmful substances.
- Replacement of the screen room garage door.
- Other civil, electrical, and mechanical infrastructure rehabilitation measures.

Force Main System Improvements:

A unique feature of the pump station is that it has a combination of single and dual Force Main systems consisting of a 30-inch diameter pipe leaving the station; the splitting into dual Force Mains of 24-inch and 36-inch; and the recombining into one 30-inch Force Main. One of the goals of this project is to separate the Force Mains and create two fully independent Force Mains; this will provide system redundancy. A new 450-foot of section will be installed in parallel to the existing 30-inch pipe and will create the needed redundancy. The existing 24-inch Force Main that is connected to the Oak Orchard Force Main will be disconnected and will be reconnected to a new 6,000-foot parallel pipe discharging to a new influent structure at the Oak Orchard headworks. Cash funding was previously procured for the engineering portion of this project.

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The first phase of this project will be the improvements at the Davis Rd. Pump Station site. This phase will be implemented in 2023 and 2024.

On February 1, 2022 the county legislature authorized \$10.2 million (resolution #29) to start this phase. Due to COVID related inflation turned out to be higher than anticipated and we will seek additional funds in fall 2022.

The second phase of the project will address the improvements related to the addition of the force main to the Oak Orchard WWTP. This phase will be implemented in 2025.

It is anticipated that legislative approval for additional bonding for the first phase will be sought in fall 2022 for construction in the amount of \$8,880,000.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Department Wide Building and Site improvements

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various components which are common in all the buildings and sites in our Wastewater Treatment Plants (WWTP's), Regional Treatment Facilities (RTF's), Pump Stations (PS's), and other satellite facilities.

The scope of this project is wide and will be updated every year. This scope will address issues related to structural integrity of our buildings as well as other structures that host our technology. It will include mechanical components that support our operations and maintenance, HVAC components and consider energy efficiency measures. In addition, the scope of this project will include communication, safety, security and alarm systems as well as grounds improvements such as paving, drainage, fencing, etc.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Although we make our best efforts in being proactive to prevent failure of our assets, we recognize that some time unpredicted failure happens and we need to be financially prepared to handle these situations, therefore we have created the phase 13, Miscellaneous Emergency repairs. The amount of funding for this phase is based on past experiences and on the fact that at the present we are following a very proactive preventative approach to minimize the amount of emergency repairs.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	2,506		1,125	1,612	1,630	2,250	2,539	9,156	11,662
Borrowing to be Authorized		5,873	2,940					8,813	8,813
Authorized Borrowing	2,370								2,370
TOTALS	4,876	5,873	4,065	1,612	1,630	2,250	2,539	17,969	22,845

Project Detail and Status:

The asset categories that will be part of the scope of this project are:

1. Building and Concrete Rehabilitations.
2. Crane and Hoists Systems
3. Overhead Doors
4. Roofs
5. Fire Suppression and Safety Alarm Systems
6. Safety Systems and Program
7. HVAC Systems
8. Network and Communication Systems
9. Site Security Systems
10. Paved Surfaces
11. Drainage system
12. Potable and Facility Water Systems
13. Miscellaneous Emergency repairs

As mentioned above, these listed assets are common in all the facilities of our department and it makes practical and financial sense to address their needs at department-wide level, rather than addressing them at a plant-by-

Special Funds

plant level.

The following describes the scope and cost estimates for each of the six years of this capital improvement plan.

In 2022 received authorization to spend \$2,506,000 in cash and \$2,370,000 in bonds on the following scope:

1. Building rehabilitations at Metro and Brewerton WWTP's and concrete rehabilitation at various facilities. This work will include leak and insulation repair as well as brick works in various buildings in the above WWTP's (\$275,000 in cash for construction).
2. Crane and hoist systems repairs, replacements and improvements at Baldwinsville and Oak Orchard WWTP's (\$20,000 in cash for construction).
3. Overhead Doors repairs and replacements in various locations at Baldwinsville and Metro WWTP (\$265,000 in cash construction).
4. Roofing repair and replacements in various buildings at Baldwinsville and Oak Orchard WWTP's and in Brook lawn PS and Davis Rd. Chemical Building (\$378,000 in cash for construction).
5. Fire suppression and safety alarm systems repairs, replacements and upgrades at Metro, MBLs, Oak Orchard WWTP's and HCMF (\$490,000 in debt for construction).
6. Safety systems in confined spaces will be upgraded and replaced in various locations (\$1,280,000 in debt for engineering and construction).
7. HVAC systems replacements, upgrades and repairs at Metro, Baldwinsville, Brewerton WWTP's and Manlius and Camillus PS (\$70,000 engineering in cash and \$500,000 in debt for construction).
8. Network and communication systems upgrade at Metro, Baldwinsville, Oak Orchard WWTP's (\$100,000 in debt for construction).
9. Site security systems upgrades at Wetzel Rd. WWTP and at Greenfield PS (\$195,000 in cash for construction).
10. Paving repairs and replacements at Brewerton WWTP (\$366,000 construction) and new paving at Henry Clay Maintenance Facility (HCMF) (\$100,000 in cash for study/design).
11. Drainage system improvements at Metro and Baldwinsville WWTP's to address storm water issues (837,000 in cash for engineering and construction). Only a part of these funds will be spent in 2022. The rest will be spent between 2022 and 2024.

In 2023 we plan to spend \$5,873,000 in debt on the following scope:

1. Building and Concrete Rehabilitation work including a facility evaluation and study for work area utilization including fleet repair facilities, office space, training facilities, and tanker storage; Oak Orchard WWTP entrance water infiltration issue; and concrete repair, coating, and improvements at Baldwinsville WWTP, Metro WWTP, Oak Orchard, Camillus, Gaskin and Long Point Pump Stations. (\$575,000 in debt for engineering and construction)
2. Crane and hoist systems repairs, replacements and improvements at Baldwinsville WWTP and various pump stations (\$150,000 in debt for construction).
3. Overhead and Personnel Door repairs and replacements in various locations at Baldwinsville, Metro, Wetzel Road WWTPs, Various Pump Stations, and Henry Clay Maintenance Facility (\$350,000 in debt for construction).
4. Roofing repair and replacements at control building in Baldwinsville WWTP (\$510,000 in debt for construction).

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5. Fire suppression and safety alarm systems repairs in the Wetzel Rd WWTP's server room and carbon monoxide alarm systems in various locations (\$100,000 in debt for construction).
6. Safety systems upgrades and replacement of non-code compliant equipment in various locations and the development of an electrical safety program (\$250,000 in debt for engineering and construction)
7. HVAC systems replacements, upgrades and repairs at Metro WWTP (\$50,000 in debt for engineering and \$898,000 in debt for construction), and Various Pump Stations (\$500,000 in debt construction).
8. Network and communication systems upgrade through the department including VOIP and associated infrastructure, replacement of obsolete network equipment at Pump Stations, and improvements of communication systems at various facilities (\$440,000 in debt for construction and \$300,000 in debt for construction).
9. Site security systems upgrades at various facilities including Henry Clay PS, HCMF, and Nedrow PS (\$90,000 in debt for construction).
10. Paving repairs and replacements at Metro, Oak Orchard WWTPs, Greenfield, Harbor Heights, and Jamesville Pump Stations (\$350,000 in debt construction)
11. Drainage system improvements at Metro WWTP repairing catch basins (\$10,000 in debt for construction)
12. Potable and Facility Water Systems at various WWTPs and Pump Station to include replacement of backflow preventers and improvements to effluent water usage (in debt \$300,000).
13. Miscellaneous Emergency Repairs funds will be used to fund unexpected and unpredicted scopes that might be encountered in any of the above 7 phases of this project. The funding source of this phase will be debt, which will not be issued if not used. (\$1,000,000 In debt for construction or engineering)

In 2024 we plan to spend \$1,025,000 (in cash) and \$2,940,000 (in debt) on the following scope:

1. Building rehabilitations and modifications related to consolidation needs, at HCMF. This work will include large scale HVAC upgrades; Admin Bldg Improvements including flooring at Metro WWTP; Concrete repairs and coatings at various facilities (\$1,200,000 in debt for construction).
2. Crane and hoist systems repairs, replacements and improvements at WWTPs and various pump stations (\$50,000 in cash for construction)
3. Overhead and Personnel Door repairs and replacements in various locations at Baldwinsville, Metro, Oak Orchard WWTPs, and Various Pump Stations (\$395,000 in debt for construction).
4. Roofing repair and at Oak Orchard's B building east and west , Metro's gallery access buildings, Brewerton raw sewage PS and Hillcrest PS Building (\$605,000 in debt construction).
5. Fire suppression and safety alarm systems repairs and carbon monoxide alarm systems in various locations (\$100,000 in debt for construction).
6. Safety systems upgrades and replacement of non-code compliant equipment in various locations and the development of an electrical safety program (\$250,000 is cash engineering and construction)
7. HVAC systems replacements, upgrades and repairs at Oak Orchard's C building (2nd fl) and various fans and ventilators at Baldwinsville's control building and gallery #8, Metro WWTP POB AHU (\$515,000 in debt for construction).
8. Network and communication systems upgrade and replacement of obsolete network equipment at Pump Stations, and improvements of communication systems at various facilities (\$75,000 in cash for construction).
9. Site security systems upgrades at various facilities including Baldwinsville WWTP (\$50,000 in cash for construction).

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10. Paving repairs and replacements at Metro WWTP and Various Pump Stations (\$125,000 in debt for construction)

11. Drainage system improvements at Metro and Baldwinsville WWTP's to continue addressing storm water issues (\$300,000 in cash for engineering and construction).

12. Potable and Facility Water Systems at various WWTPs and Pump Station to include replacement of backflow preventers and improvements to effluent water usage (\$300,000 in cash for construction).

In 2025 we plan to spend \$1,512,000 (in cash) on the following scope:

1. Building rehabilitations and concrete repairs and coatings at various facilities (\$200,000 in cash for construction).

2. Crane and hoist systems repairs, replacements and improvements at WWTPs and various pump stations (\$50,000 in cash for construction)

3. Overhead Doors replacements in various locations at Metro WWTP and Pump Stations (\$240,000 in cash construction)

4. Roofing repair and replacements in various pump stations and Brewerton's chemical storage building (\$153,000 in cash construction).

6. Safety systems upgrades and replacement of non-code compliant equipment in various locations and the development of an electrical safety program (\$200,000 in cash engineering and construction)

7. HVAC systems replacements, upgrades and repairs at Metro's low lift PS and various locations at Brewerton WWTP (\$494,000 in cash construction).

8. Network and communication systems upgrade and replacement of obsolete network equipment at Pump Stations, and improvements of communication systems at various facilities (\$75,000 in cash for construction).

9. Site security systems upgrades at various facilities (\$100,000 in cash for construction).

In 2026 we plan to spend \$1,630,000 (in cash) on the following scope:

1. Building rehabilitations and concrete repairs and coatings at various facilities (\$200,000 in debt for construction).

4. Roofing repair and replacements in various pump stations and Metro vehicle maintenance building (\$405,000 construction).

5. Fire suppression and safety alarm systems repairs and carbon monoxide alarm systems at Meadowbrook WWTP (\$50,000 in debt for construction).

6. Safety systems upgrades and replacement of non-code compliant equipment in various locations and initial audit of the developed electrical safety program (\$150,000 in cash engineering and construction)

7. HVAC systems replacements, upgrades and repairs at various WWTPs and Pump Stations (\$550,000 construction).

8. Network and communication systems upgrade and replacement of obsolete network equipment at Pump Stations, and improvements of communication systems at various facilities (\$75,000 in cash for construction).

12. Potable and Facility Water Systems at various WWTPs and Pump Station to include replacement of backflow preventers and improvements to effluent water usage (\$200,000).

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In 2027 we plan to spend \$2,250,000 (in cash) on the following scope:

1. Building rehabilitations and concrete repairs and coatings at various facilities (\$400,000 in debt for construction).
3. Overhear Doors replacements in various locations at Metro and Oak Orchard WWTP's (\$350,000)
4. Roofing repair and replacements in various pump stations and various buildings at Metro WWTP (\$1,500,000 construction).

In 2028 we plan to spend \$2,539,000 (in cash) on the following scope:

1. Building rehabilitations and concrete repairs and coatings at various facilities (\$200,000 in debt for construction).
3. Overhear Doors replacements in various locations at WWTP's (\$200,000)
4. Roofing repair and replacements in various pump stations and various buildings at Metro WWTP (\$2,139,000 construction).

In fall 2022 we intend to seek legislative authorization for \$5,873,000 in bonds to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Department Wide Mechanical, Electrical and Process Improvements

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project takes a systematic approach to repair, replace and renovate various departments assets which are common in all our Wastewater Treatment Plants (WWTP's), Regional Treatment Facilities (RTF's), Pump Stations (PS's) and other satellite facilities.

The scope of this project is wide and will be updated every year. This scope will address needs related to electrical, electronic, mechanical, analytical equipment as well as petroleum and chemical bulk storage equipment and a variety of other needs that are common in all facilities department- wide.

This project is created and will continuously be updated by strongly relying on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the priorities, the nature and the size of our capital investments.

Although we make our best efforts in being proactive to prevent failure of our assets, we recognize that some time unpredicted failure happens and we need to be financially prepared to handle these situations, therefore we have created the phase 8, Miscellaneous Emergency repairs. The amount of funding for this phase is based on past experiences and on the fact that at the present we are following a very proactive preventative approach to minimize the amount of emergency repairs.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	2,925		3,586	2,949	2,225	2,170	2,150	13,080	16,005
Borrowing to be Authorized		8,646						8,646	8,646
Authorized Borrowing	2,135								2,135
TOTALS	5,060	8,646	3,586	2,949	2,225	2,170	2,150	21,726	26,786

Project Detail and Status:

The asset categories that will be part of the scope of this project are:

1. Analytical Equipment.
2. Chemical Bulk Storage (CBS) and Petroleum Bulk Storage (PBS)
3. Electrical Equipment
4. Supervisory Control And Data Acquisition (SCADA) System
5. Mechanical Equipment
6. Miscellaneous Engineering
7. Asset Management (AM)
8. Miscellaneous Emergency repairs

As mentioned above, these listed assets are common in all the facilities of our department and it makes practical and financial sense to address their needs at department-wide level, rather than addressing them at a facility-by-facility level.

The following describes the scope and cost estimates for each of the six years of this capital improvement plan.

In 2022 authorization was received to spend \$2,925,000 in cash and \$2,135,000 in debt on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include flow meters, oil and

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grease analyzer, distillation equipment, sample storage cooler and incubator, maintenance testing equipment and other equipment (\$171,000 in cash for construction).

2. CBS and PBS systems replacements at Baldwinsville and Brewerton WWTP's (\$400,000 in debt for construction).

3. Electrical Equipment repairs and replacements in various locations at Metro, Baldwinsville and Meadowbrook - Limestone (MBLS) WWTP's and at Lakeside PS. In addition, under this category we will finance the energy monitoring program for which we will need some funds for engineering (\$142,500 in debt and \$1,380,000 in cash).

4. SCADA System improvements at Metro, Baldwinsville and Oak Orchard WWTP's (\$890,000 in cash for engineering and construction).

5. Mechanical Equipment maintenance and replacements in various buildings at Baldwinsville, Metro, Wetzel and MBLS WWTP's and in Camillus and Hillcrest PS's, as well as other miscellaneous replacements, maintenance and repairs in other WWTP's. Such equipment will include valves, pumps, centrifuges, piping, tank cleanings, clarifiers and odor control systems, etc. (\$1,583,500 in debt for construction).

6. Miscellaneous Engineering activities in various facilities will include improvements to the Biogas Boiler and Secondary Flow house at Wetzel Road, Inspection of the existing thickener tanks at Oak Orchard, as well as review and design of standard Offloading Stations to be constructed at Brewerton, MBLS, Wetzel (\$300,000 in cash for engineering).

7. Asset Management activities that will be funded this year include the cost of Procore Construction Management software, implementation of Mobile Solution for Maximo and expand technology application & integration of SCADA devices with Maximo - Phase 2 (\$184,405 in cash for Implementation).

In 2023 we plan to spend \$8,646,000 (in debt) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory, flow meters, and Mechanical and Electrical Equipment Testing and Monitoring Equipment. This scope will include Flow Injection Mercury System (FIMS); Microwave Digestive System (CEM); Two (2) Balances; and Lachat auto sampler, and other equipment such as flow meters and mechanical and electrical process meters. (\$208,000 debt - construction).

2. CBS and PBS systems replacements will include replacement of the ferrous chloride system at Brewerton WPCP, Burnet Ave Ferrous Chloride Tanks Replacement, Baldwinsville West PS PBS Replacement, and additional system repairs. (\$225,000 in debt for engineering and construction, and \$1,844,000 in debt for construction).

3. Electrical Equipment repairs and replacements in various locations including Brewerton WPCP, various Pump Stations and CSO Facilities, and energy conservation measures (\$750,000 in debt for engineering and construction and \$1,300,000 in debt for construction).

4. SCADA System renovations and upgrades at Meadowbrook Limestone, Oak Orchard and Metro WWTP's, and SCADA system and security Upgrades (\$665,000 in debt for engineering and construction and \$650,000 in debt for construction).

5. Mechanical Equipment maintenance and replacements in various buildings at Baldwinsville, Metro, Wetzel Road, and various PS. (\$654,000 in debt for construction).

6. Miscellaneous Engineering at various facilities including a Dept Wide Long-term Strategic Plan, Revenue Cost Recovery/ Sewer Rate Study, Communication Plan, Biosolids Management Plan, and additional engineering services will be funded this year (\$750,000 in debt for engineering).

7. Asset Management activities that will be funded this year include expand technology & Integration of SCADA Devices with Maximo including phase 2 of the automation assessment, and the digitizing of archived documents within the department (\$600,000 in debt construction).

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8. Miscellaneous Emergency Repairs funds will be used to fund unexpected and unpredicted scopes that might be encountered in any of the above 7 phases of this project. The funding source of this phase will be debt , which will not be issued if not used. (\$1,000,000 In debt for construction or engineering)

In 2024 we plan to spend \$3,586,000 (in cash) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include Flow meters and other instrumentation, TKN Block Digester, BOD Incubator, etc. (\$176,000 in cash for construction).
2. CBS and PBS systems replacements will include Baldwinsville Ferrous Chloride Tanks Replacement (\$325,000 in cash for engineering and construction).
3. Electrical Improvements to facility based on the results of the Arc Flash Studies at Wetzel Road WWTP and CSO Facilities (\$500,000 in cash for engineering and construction).
4. SCADA System renovations and upgrades at Baldwinsville and Oak Orchard WWTP and various pump stations (\$1,305,000 in cash for engineering and construction).
5. Mechanical Equipment maintenance and replacements in Gaskin Rd PS as well as replacements of activated carbon filters in various facilities (\$530,000 in cash for construction).
6. Miscellaneous Engineering activities in various facilities and database migration projects will be funded this year (\$600,000 engineering).
7. Asset Management activities that will be funded this year including the expansion of use with wireless technology and AM system integrations (\$150,000 construction).

In 2025 we plan to spend \$2,949,000 (in cash) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include Inductively Coupled Plasma Spectrometer, Low-level Mercury Analyzer, Reagent Pump for Lachat, Spectrophotometer, UV-Visible, and other equipment. (\$198,000 construction).
2. CBS and PBS systems replacements will include Tanks Replacements at MBLS WWTP (\$126,000 for engineering and construction).
3. Electrical Equipment repairs and replacements will include Baldwinsville WWTP and Brewerton WPCP electrical systems (\$875,000 for engineering and construction).
4. SCADA System renovations and upgrades at various facilities (\$800,000 for engineering and construction).
5. Mechanical Equipment maintenance and replacements including Duplex Thickened Sludge Transfer Pumps #1, 2, 3 and 4 at Metro WWTP and replacement of activated carbon filters in various facilities (\$500,000 for construction).
6. Miscellaneous Engineering activities in various facilities will be funded this year (\$300,000 engineering).
7. Asset Management activities that will be funded this year include AM Updates (\$150,000 construction).

In 2026 we plan to spend \$2,225,000 (in cash) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include Flow meters, Sterilizers, Foss Distillation Unit, Sample Custody Refrigerator, Flash Point Tester, and other equipment (\$125,000 for construction).
2. CBS and PBS systems replacements will include tanks Replacements and repairs (\$125,000 for

Special Funds

construction)

3. Electrical Equipment repairs and replacements at various pump stations and CSO facilities electrical systems (\$250,000 for engineering and construction).
4. SCADA System renovations and upgrades will include the SCADA professional services contract and various equipment replacements in various facilities (\$600,000 for engineering and construction).
5. Mechanical Equipment maintenance and replacements will include Clinton Storage Dewatering, Midland RTF Dewatering, and replacement of activated carbon filters in various facilities (\$650,000 for construction).
6. Miscellaneous Engineering activities in various facilities will be funded this year (\$300,000 for engineering).
7. Asset Management activities that will be funded this year include the MBL Service Area AM Update (\$175,000 for engineering).

In 2027 we plan to spend \$2,170,000 (in cash) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include Auto analyzer, Auto sampler for Auto analyzer, Laboratory Dishwasher, Spectrophotometer, Digestion Block, and other equipment (\$145,000 for construction).
2. CBS and PBS systems replacements will include tanks Replacements and repairs (\$100,000 for construction)
3. Electrical Equipment repairs and replacements will include Influent pump VFD's, at Wetzel WWTP (\$450,000 for construction).
4. SCADA System renovations and upgrades will include the SCADA Service Project and various equipment replacements in various facilities (\$475,000 for engineering and construction).
5. Mechanical Equipment maintenance and replacements will include Henry Clay PS and replacement of activated carbon filters in various facilities (\$500,000 for construction).
6. Miscellaneous Engineering activities in various facilities will be funded this year (\$300,000 for engineering).
7. Asset Management activities that will be funded this year include the Oak Orchard Service Area AM Update (\$200,000 for construction).

In 2028 we plan to spend \$2,150,000 (in cash) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include Flow meters, and other equipment (\$225,000 for construction).
2. CBS and PBS systems replacements will include tanks Replacements and repairs (\$100,000 for construction)
3. Electrical Equipment repairs and replacements at various pump stations and CSO facilities electrical systems (\$500,000 for engineering and construction).
4. SCADA System renovations and upgrades will include the SCADA professional services contract and various equipment replacements in various facilities (\$350,000 for engineering and construction).
5. Mechanical Equipment maintenance and replacements will include Low Harbor Brook Dewatering, rehabilitation of equipment at Metro, and replacement of activated carbon filters in various facilities (\$450,000 for construction).

Special Funds

6. Miscellaneous Engineering activities in various facilities will be funded this year (\$300,000 for engineering).
7. Asset Management activities that will be funded this year include the Metro Service Area AM Update (\$225,000 for engineering).

In fall 2022 we intend to seek legislative authorization for \$8,646,000 in debt to fund the 2023 projects.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Harbor Brook Miscellaneous Culvert and Channel Improvements

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

Level of Development: Advanced

Project Description:

Harbor Brook Miscellaneous Culvert and Channel Improvements Engineering and Planning study to include the following: Field Investigation, hydrology and hydraulic study and modeling, condition report, and planning document for future improvements.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	200			1,500			1,700	1,700
Authorized Borrowing	400							0	400
TOTALS	400	200			1,500			1,700	2,100

Project Detail and Status:

The Harbor Brook drainage channels and culverts were installed in the early 1900's to address flooding and public nuisance issues related to sanitary conditions and flooding. The 100 plus year old infrastructure is beginning to show signs of deficiency. The Harbor Brook Drainage District channels were constructed in 1905. The next phase of this project would be an Engineering and Planning study to include the following: Field Investigation, hydrology and hydraulic study and modeling, condition report, and planning document for future improvements. Future construction phases would be implemented as a result of the study.

Bonding in the amount of \$200,000 was authorized in March 2017 (BR 17 024R). In 2017, Most of these funds were used for the following work: channel headwall repairs, fencing repairs and restoration of erosion areas off Grand Avenue. Additional concrete wall rehabilitation was completed in 2019. The balance will be used for minor repairs.

Bonding in the amount of \$200,000 was authorized in February 2021 (BR # 5) to continue repairs of the deficient channel sections and culverts.

We will seek legislative approval for another \$200,000 in fall 2022 to perform an Engineering and Planning study.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project

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

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 their expected service life and have resulted in costly emergency repairs and additional regulatory scrutiny. The project schedule is driven by a September 2019 Consent Order from NYSDEC.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Authorized Borrowing	1,950	350						350	2,300
Borrowing to be Authorized	0	10,000	30,000	25,000	5,024			70,024	70,024
Special District Tax	0								
TOTALS	1,950	10,350	30,000	25,000	5,024			72,374	72,324

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 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.

In December 2017 the County Legislature (BR #194) authorized \$2.3 million for the engineering phase of Ley Creek/Liverpool Force Mains Replacement/Rehabilitation. 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. To expedite schedule, it is anticipated this Project will be completed in three (3) separate construction contracts (Ley Creek Force Main Rehabilitation, Liverpool Force Main Rehabilitation, and Construction of new Combined Ley Creek/Liverpool Force Main). A consulting engineer was hired in March of 2019 and design is anticipated to be complete in early 2023. Construction of the three contracts will begin in 2023 and continue through 2026.

It is anticipated that legislative approval for construction will be sought in spring 2023, in the amount of \$20 million in bonding, for phase 1 which will be implemented in 2023 – 2024.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Meadowbrook Limestone & Brewerton WWTP - Drum Replacement

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

Project Description:

This project will replace the rotary drum thickeners at Meadowbrook Limestone and Brewerton Wastewater Treatment Plants. Rotary drum thickeners are utilized to thicken or increase the percent total solids of the aerobically digester sludge, thereby reducing the volume necessary to be hauled to Metro for further treatment. In addition, odor control equipment will be added at the Meadowbrook Limestone facility to address and minimize local complaints (this technology was recently installed at the Brewerton WPCP rotary drum thickener location under a separate project).

The need to replace these assets was identified based on our new systematic approach that relies on our Asset Management System and the knowledge of our operations, maintenance and management teams. Assets considered under this project are analyzed and evaluated individually based on likelihood of failure and consequence of failure, which determine the time and extent of replacement.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Special District Tax	69							0	69
Borrowing to be Authorized	0		3,000	2,000				5,000	5,000
Cash on Hand	331							0	331
TOTALS	400		3,000	2,000				5,000	5,400

Project Detail and Status:

The rotary drum thickeners at both facilities are in excess of 20 plus years old, exceeding the useful life of the equipment evident by periods of increased maintenance. In the case of Meadowbrook Limestone, the thickened sludge holding tanks that are feed by the rotary drum thickeners, have contributed to historic, and increased recent odor complaints by adjacent residents.

In fall 2021 the County Legislature authorized \$69,000 (in cash) and use \$331,000 of existing funds (in cash) for engineering design. At this point we intend to start with engineering design in 2022 and continue with construction in 2024 and 2025.

It is anticipated that legislative approval will be sought in fall 2023 for \$5,000,000 in bonding for construction of this project.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Meadowbrook-Limestone WWTP Large Scale Upgrade

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment, Federal/State Mandate

Level of Development: Intermediate

Project Description:

This project will address a potential large scale upgrade of the Meadowbrook-Limestone WWTP so as to provide additional treatment plant capacity to support compliance with WWTP's NYSDEC SPDES permit and NYSDEC Compliance Order.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0				2,300	2,300		4,600	4,600
Cash on Hand	300							0	300
TOTALS	300				2,300	2,300		4,600	4,900

Project Detail and Status:

In April 2020 a NYSDEC Consent Order was issued for the ML WWTP for violations of the plant's NYSDEC SPDES permit for influent flow, settleable solids and several other parameters. The ML WWTP is designed to treat 6.5 million gallons per day (MGD) of wastewater: average daily flow from 2018 thru 2020 is 5.3 MGD. During rain events and/or snowmelt events, the plant can experience nearly five times the average daily flow, up to 27 MGD. This excessive flow decreases the performance of the treatment plant which in turn can result in SPDES permit violations. This excess flow is a result of groundwater and stormwater, known as infiltration and inflow (I/I) entering the sewer system. Groundwater (infiltration) seeps into sewer pipes through holes, cracks and faulty connections. Stormwater (inflow) rapidly flows into the sewer via rain downspouts, foundations drains, and storm drain cross connections. In accordance with the aforementioned Consent Order, the department is currently performing an I/I Abatement Project in the ML WWTP service area to reduce influent flows to the plant.

As required by the NYSDEC Compliance Order, in the event that there are exceedances of settleable solids, average monthly flow, or excessive peak hourly flows are still evident after the I/I Abatement project, the department will be required to submit a WWTP Upgrade Engineering Report by January 31, 2025 to the NYSDEC, identifying the necessary upgrades for the treatment plant. Based on a previous Wet Weather Planning Evaluation completed in 2016, construction cost estimates for a potential plant upgrade are approximately \$4.6 million dollars. Upgrades to the plant would include the following:

- New Headworks building with screening, grit removal, and influent pumping
- Addition of a third aeration tank.
- Construction of three 120-foot diameter clarifiers
- Construction of a new Recycle Activated Sludge Pump Station.
- Other associated improvements.

Design for such improvements would be initiated in 2026 if required by the NYSDEC.

In 2022 we will spend \$300,000 in cash for the engineering evaluations and reports mandated in the Consent Order as follows:

- Hydraulic design capacity
- Compliance report: WWTP Engineering Report on Permit Compliance due to I/I Abatement Project
- Facility Plan identifying necessary plant upgrades.

In fall 2025 we intend to seek authorization for \$4,600,000 (in bonding) for engineering.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Metro WWTP 1978 Plant Annex Asset Renewal - Phase I

Purpose: Maintain Existing Investment

Level of Development: Preliminary

Project Description:

Large-scale asset renewal project for numerous improvements to Metro WWTP's 1978 annex infrastructure. Various civil, electrical, mechanical, and other infrastructure rehabilitation and replacement measures to be performed in accordance with an asset management evaluation report.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	8,000	33,000	28,000	8,195			77,195	77,195
Authorized Borrowing	2,667	1,333						1,333	4,000
TOTALS	2,667	9,333	33,000	28,000	8,195			78,528	81,195

Project Detail and Status:

WEP completed a comprehensive assessment and evaluation of Metro's 1978 annex infrastructure in 2022. The effort is being completed under the auspices of WEP's Asset Management Program which evaluates assets and infrastructure in terms of the likelihood of failure, consequence of failure, and the risk associated with those ratings. Plant areas reviewed include primary clarifier systems, aeration systems, secondary clarifier systems, various building and structures, existing building envelopes, underground galleries and pipe chases, main plant electrical substation, and other infrastructure. In addition to reviewing the conditions and lifecycles of the assets, items such as equipment obsolescence, parts availability, capacity, and energy efficiency are being evaluated.

Asset renewal measures will include necessary equipment rehabilitation and/or replacement of mechanical equipment, electrical systems, structural and non-structural concrete, odor control covers, and other infrastructure works so as to extend lifecycles, ensure safe operations, and continued compliance with the facility's regulatory obligations (i.e., NYSDEC SPDES permit). Major project components consist of: replacement electrical components in the Harborbrook Pump Station; asset renewal in the New Screen and Grit building; replacement of odor control covers in the primary clarifier distribution structures; replacement of clarifier drives, mechanicals, and concrete rehabilitation in the primary and secondary clarifiers; and rehabilitation of several Metro's galleries and access structures. In addition, this project will address facility odor control system improvements.

The evaluation report includes recommendations for improvements in 5-yr, 10-yr, and 20-yr capital investment project cycles. Bonding in the amount of \$4,000,000 was authorized in January 2021 for engineering design and construction administration services for Phase I infrastructure improvements. It is anticipated that a Phase II project will follow the Phase I project.

Phase 1 is divided into three (3) Construction projects: (1) Clarifier and Gallery Asset Renewal, (2) Main Substation Asset Renewal, and (3) Harbor Brook Pump Station Asset Renewal Projects. The Gallery and Clarifier asset renewal project design will be completed in 2022. The design of the Main Substation and Harbor Brook Pump Station projects is anticipated to be complete in 2023 with construction in 2024-2025.

In spring 2023 legislative approval will be sought for approximately \$66,895,000 million in bonding for construction of the Clarifier and Gallery Asset Renewal project.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Oak Orchard Wastewater Treatment Plant Major Upgrade Project

Purpose: Community/Economic Development, Addition Capacity

Level of Development:

Project Description:

This project is for a large-scale upgrade to the Oak Orchard Wastewater Treatment Plant in the Town of Clay, NY. The current plant is nearing capacity and limits possibilities for economic growth. The project will increase the capacity so as to accommodate projected future growth. Project is necessary for the development of the White Pine Business Park and other economic development opportunities in the Oak Orchard WWTP service area.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized			47,000	115,000	58,000			220,000	220,000
Authorized Borrowing	30,000								30,000
TOTALS	30,000		47,000	115,000	58,000			220,000	250,000

Project Detail and Status:

The Oak Orchard WWTP was built circa 1980 for an average daily design flow of 10 million gallons per day. The plant has some capacity to accept new wastewater flows and loads but on a limited scale. In order to prepare for future growth from residential, commercial, and industries, expansion of plant capacity is necessary. To that end, an engineering consultant was hired to study a variety of flow contribution/input scenarios and identify the corresponding upgrades that would be necessary at the treatment plant. The engineering and construction costs estimates were included in the Oak Orchard Wastewater Treatment Plant Facilities Plan and Feasibility Study draft report in February 2021.

In February 2022 we received legislative authorization for \$30 million for Engineering Services for the Oak Orchard Wastewater Treatment Plant (WWTP) Expansion and rehabilitation project specifically, a major plant expansion utilizing the Membrane Bioreactor (MBR) approach to accommodate the anticipated higher flows and loads associated with the White Pines Development and corresponding industrial, commercial, and residential growth.

We plan to seek legislative approval for construction in fall 2023.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Oak Orchard WWTP Secondary Clarifier Rehabilitation

Purpose: Maintain Existing Investment

Level of Development: Advanced

Project Description:

The Oak Orchard 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 asset renewal.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Authorized Borrowing	0	375	300	275				950	950
Borrowing to be Authorized	0		3,618	5,282				8,900	8,900
TOTALS	0	375	3,918	5,557				9,850	9,850

Project Detail and Status:

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, or beyond, 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.
- Other civil, mechanical, and electrical infrastructure renewal measures.

Bonding in the amount of \$950,000 was authorized in March 2017 (BR-1720A) for the engineering design phase of this project. Engineering design is to be completed circa January 2024.

It is anticipated that legislative approval will be sought in fall 2023 for construction in the approximate amount of \$8.9 million, but this is contingent upon the implementation of the Oak Orchard Wastewater Treatment Plant Major Upgrade Project

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Route 81, Sanitary Sewer Betterments

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

Level of Development: Intermediate

Project Description:

WEP is partnering with the New York State Department of Transportation (NYSDOT) to provide funds for proposed sewer upgrades in conjunction with the Interstate 81 (I-81) renovations project. As NYSDOT is upgrading their infrastructure associated with I-81 this construction will have impacts to county sewer infrastructure. If the proposed DOT project is impacting WEP infrastructure then DOT will pay for and address the infrastructure impacts as needed. Items that WEP would like to address that are adjacent or near the I-81 work are considered betterments by the DOT. This project is to fund the betterment work above the DOTs scope that the County would like to have DOT address under the I-81 project.

Funding of this project by the County is contingent upon NYDOT advancing the Community Grid option for replacement of I-81.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized					16,020			16,020	16,020
TOTALS					16,020			16,020	16,020

Project Detail and Status:

The NYS DEC Consent Order requires WEP to undertake CSO abatement projects in accordance with EPA's CSO Control Policy. The majority of the County's long-term efforts to address combined sewer overflows will be centered on opportunistic projects in which the county teams with others such as this project with NYSDOT. These types of teaming projects have historically been the most affordable projects in the County's Combined Sewer Overflow (CSO) program.

WEP and DOT have coordinated the I-81 Renovation project and impacts on WEP sewer infrastructure. If the proposed DOT project is impacting WEP infrastructure then DOT will pay for and address the infrastructure impacts. Items that WEP would like to address that are adjacent or near the I-81 work are considered betterments by the DOT and would need to be funded by the County. Engineering of this project will be performed by the DOT, oversight will be performed by the County with engineering assistance as part of the Long Term Control Plan Scope of services currently in place, Construction Inspection services for WEP infrastructure is to be procured through an RFP process.

Currently, DOT is planning on starting construction of the I-81 project in 2023. WEP betterment projects that falls under Phase 1 of the I-81 project are as follows: Burnet Trunk Sewer and CSO 080A Regulator Replacement, and Hiawatha Trunk Sewer Replacement, New Floatables Control Facility (Replacing the Butternut and Burnet Facilities), Salina Street Stormsewer. Construction of the Phase 2 portion of the I-81 project is expected to start construction in 2026. WEP betterment work that falls under Phase 2 of the I-81 project is the Burnet Trunk Sewer and CSO 080A Regulator Replacement Project.

Approximate Cost of Sewer improvements as result of work related to I-81 project: \$80M, the majority of the work will be funded by NYS DOT, approximately \$65M. County will pay \$16M for betterments that make sense to be done in this circumstance (ground is open, pipes are exposed, workforce and machinery is in place). The extra scope that will cost \$16M under these circumstance (ground is open, pipes are exposed, workforce and machinery is in place) would cost \$50M if we had to do it later.

WEP will have one less Floatable Control Facilities, and the new facility will be downstream of the overflow rather than in the sewer and will be designed with less hard costs to operate the facility. Additionally the larger DOT project will remove 75 million gallons annually from the combined sewer system that will no longer be conveyed to Metro for treatment, saving the County approximately \$265,500 annually.

It is anticipated that legislative approval for \$16,020,000 will be sought in 2025.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Sewer Consolidation

Purpose: Reduce Operating Costs/Efficiency, Federal/State Mandate, Community/Economic Development, Maximize Outside Funding, Addition Capacity, Other

Level of Development: Preliminary

Project Description:

The ultimate end goal of this project is a (service connection to treatment) single service provider who can manage the assets more effectively and efficiently, leverage funding sources and grants to lessen the financial impacts, restore the assets, programmatically over time and remove devastating regulatory violations and compliance orders.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized			16,750	20,000	21,000	22,000	22,000	101,750	101,750
Authorized Borrowing	3,650							0	3,650
Cash on Hand	1,450							0	1,450
TOTALS	5,100		16,750	20,000	21,000	22,000	22,000	101,750	106,850

Project Detail and Status:

The wastewater infrastructure throughout Onondaga County has a fragmented ownership structure. This fragmented ownership structure has placed the County and some satellite municipal publicly owned sewer systems in regulatory jeopardy with the USEPA and NYSDEC. The consolidation effort will address the deferred maintenance by investing in the critical infrastructure and will ultimately consolidate ownership over time for a more efficient and centralized infrastructure management approach.

A long-term 40 year lease agreement, was prepared and authorized by the County Legislature in April 2020. The lease agreement includes a reimbursement of up to \$200,000 for the purpose of retiring outstanding debt or the implementation of a main street, green infrastructure project. The scope of this project will consist of several categorical elements: lease agreement fees, various sewer main and pumps station repairs, and sewer lateral repairs. The primary goal of consolidation will be to manage sanitary sewer systems in a more efficient and cost effective way while also addressing environmental and regulatory issues.

Phase 1 of Sewer Consolidation was initiated in 2020 with the execution of lease agreements, authorized by the County Legislature, with municipalities in the Meadowbrook – Limestone (MBLS) Service Area. This area was prioritized due to a NYSDEC Consent Order related to infiltration and inflow (I/I) issues at the MBLS WWTP. Phase 1 capital improvement is implementation of the Meadowbrook-Limestone WWTP Inflow & Infiltration Abatement project which is already authorized and described in the special funds authorized narrative chapter of this book. Additional activities in Phase 1 included repairs of sewer laterals, pump station equipment replacement, and payment of some lease agreement fees.

Phase 2 of Sewer Consolidation was initiated in January 2021 and focused on the three municipalities in the Baldwinsville-Seneca Knolls (BSK) Service area: Towns of VanBuren and Lysander and the Village of Baldwinsville. Lease agreements have been approved by the Legislature and have been fully executed for the two Towns. The Village is anticipated to execute the agreement in early 2022. Future phases of Sewer Consolidation will generally be prioritized based on service area I/I abatement, hydraulic capacity issues, economic development drivers and other metrics.

Based on the progress of Phase 1 and 2, the County is now responsible for repairs and rehabilitation of an additional 23 miles of sewer mains, 4,600 manholes, 19,300 laterals and 28 pump stations in those 6 leased municipalities.

In 2022 we received authorization to spend \$5,100,000 out of which \$3,650,000 in debt and \$1,450,000 in existing cash funds. The 2022 funds are being spent on the following scope:

Special Funds

1. West Entry Pump Station Upgrade (BSK Service Area). Continue the design of a major upgrade to the West Entry Pump Station, located in the Town of Lysander, generally including the replacement of the pumps, wet well, instrumentation and controls, valves and appurtenances, and the installation of a new force to shorten force main residence time and discharge directly to the Patchett Interceptor sewer. We will spend \$500,000 in cash for engineering services in 2022. We will pay the cost of this component (\$500,000) with existing funds (Cash on Hand) and we did not ask for new funds.

2. MBLS Pump Station Upgrades. Procure engineering services for the evaluation of and design of major upgrades to leased pump stations in the Town of Manlius, generally including the replacement of pumps, wet wells, controls and valves and appurtenances. We will spend \$750,000 in cash for engineering in 2022. We will pay the cost of this component (\$750,000) with existing funds (Cash on Hand) and did not ask for new funds.

3. Payment of lease debt reimbursement fees for municipalities in an anticipated Phase 3 of Sewer Consolidation. (\$200,000 in cash). We will pay the cost of this component (\$200,000) with existing funds (Cash on Hand) and we did not ask for new funds.

4. Lease agreement green projects, sewer lateral repairs, minor pump station upgrades, communication upgrades, and other miscellaneous asset improvements such as sewer linings and manhole repairs. (\$3,650,000 in debt for construction).

In 2024 we will start construction phase for the following projects:

1. West Entry Pump Station Upgrade (BSK Service Area). The total construction cost is estimated at \$9.5 million and will be spent from 2024-2025.

2. MBLS Pump Station Upgrades. The total construction cost is estimated at \$7.25 million and will be spent from 2024-2025.

It is noted that the funds anticipated to be spent in the future years are estimated and will be refined as the project progresses and additional lease agreements are executed.

It is expected that legislative approval for \$16,750,000 will be sought in fall 2023 to fund the projects planned for 2024 to 2025, which include the West Entry Pump Station Upgrade and MBLS Pump Station Upgrades

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Storm hazard mitigation in various affected facilities (NEW)

Purpose: Public/Employee Safety/Health, Maintain Existing Investment, Federal/State Mandate, Community/Economic Development

Level of Development: Intermediate

Project Description:

Between August 18th-19th 2021, WEP sustained damage caused by Tropical Storm Fred. Due to the extensive damage caused a Federal Disaster was declared by Federal Emergency Management Agency (FEMA), DR 4625. WEP will receive funding for repairs of the infrastructure affected by the storm and reimbursement for a portion of the cost to identify, evaluate, and potentially mitigate impacts from any future storms. WEP will receive 100% cost reimbursement (90% Federal, 10% State) for project costs.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
State Aid	0	400						400	400
TOTALS	0	400						400	400

Project Detail and Status:

The following describes the scope and cost estimates for each of the six years of this capital project.

In 2023, we plan to spend \$400,000 (in state aid) on the following scope:

Preparation of an engineering report documenting the damage inventory, development of scope and cost of repairs and evaluation of hazard mitigation improvements to prevent future damage to sewer infrastructure. This project is set up in the following ten (10) sub-projects in accordance with FEMA project management protocol:

1. Brewerton WWTP
2. BSK WWTP
3. MBLS WWTP
4. Metro WWTP
5. Wetzel WWTP
6. Metro WWTP Pump Stations: including Camillus PS, Hillcrest PS, Ley Creek PS, Liverpool PS
7. Outlying Pump Stations: including Davis Road PS, Fly Road PS, Harbour Village PS, Henry Clay PS, Long Point PS, Manlius PS, Sawmill PS
8. First Street Pump Station
9. Franklin Park Trunk Sewer
10. Harbor Brook Wetland

Future project costs will be established upon completion of the engineering report.

In fall 2023 we intend to seek authorization to use \$400,000 in state funds for the above scope.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Velasko Road Dam Repairs & Improvements

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

Level of Development: Intermediate

Project Description:

The Velasko Road Detention Basin Dam is a flood control dam and basin, in the Harbor Brook Drainage District, designed to hold, store, and gradually release high flows while letting normal and low flows pass through unimpeded. During the most recent Velasko Road Detention Basin Dam Bi-Annual Safety Inspection the Engineer identified items that need replacement and/or repair. This project will fund; immediate repairs as identified in the Bi-Annual safety inspection as well as the engineering and construction of larger repairs.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized	0	90	966					1,056	1,056
TOTALS	0	90	966					1,056	1,056

Project Detail and Status:

This project will fund; immediate repairs in 2023 as identifies in the Bi-Annual safety inspection, the Engineering and construction of larger repairs. Engineering services will take place in 2023, construction will follow in 2024 and/or 2025.

Correcting variations of the dam crest elevation.

Replacement of armoring at intersection of northern embankment and concrete structure.

Repair of the auxiliary spillway including removal of damaged asphalt, fill, and placement of new asphalt.

Investigation of a method for manually exercising the Tainter gate.

Installation of a crack gauge on concrete structure spalling, or comprehensive repair and sealing.

Investigation of scour at the base of the training walls and Tainter gate footing.

Improvements to the site to allow for easier maintenance.

In fall 2022 we will seek authorization for \$90,000 in debt to complete the engineering design, which is the first phase of this project.

Special Funds

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: Advanced

Project Description:

This project consists of three primary or categorical elements: pump station/force main improvements, trunk sewer improvements, and facility maintenance improvements.

Although we make our best efforts in being proactive to prevent failure of our assets, we recognize that sometimes unpredicted failures happen and we need to be financially prepared to handle these situations, therefore we have created the phase 5, Miscellaneous Emergency repairs. The amount of funding for this phase is based on past experiences and on the fact that at the present we are following a very proactive preventative approach to minimize the amount of emergency repairs.

Project Cost Summary:

FUNDING SOURCE:	Pre-2023	2023	2024	2025	2026	2027	2028	6yr Total	Total:
Borrowing to be Authorized		10,000	10,815	11,585	5,500	10,000	3,500	53,080	53,080
Special District Tax	69,674	1,680	2,300	2,700	2,800	1,800	2,050	11,650	81,324
Authorized Borrowing	29,790							0	29,790
Cash on Hand	1,200							0	1,200
TOTALS	100,664	11,680	13,115	14,285	8,300	11,800	5,550	64,730	165,394

Project Detail and Status:

This project consists of three primary or categorical assets:

1. Pump station improvements,
2. Trunk sewer improvements, and
3. Combined Sewer Overflow (CSO) Abatement
4. Facility maintenance improvements - including asset renewal measures/projects.
5. Miscellaneous Emergency repairs

Detailed below is a description of these three categories and of the assets included in each of these categories.

Pump Station Upgrade Program:

This program 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. Work at pump stations will also include the rehabilitation/resurfacing of interior pump station headers to improve corrosion resistance.

Trunk Sewer Network Upgrade Program:

The trunk sewer improvement/renewal program includes provisions for the design of improvements to a number of County owned sewers. Another major aspect of the project will be a manhole rehabilitation program, so as to achieve infiltration/inflow reductions.

Facility maintenance improvements:

This program provides for maintenance, repair and improvements of buildings, structures and sites that host our pump stations and conveyances, if these assets are not covered under the "Department Wide Building and Site Improvements" project.

Special Funds

Combined Sewer Overflow (CSO) Abatement

The County's CSO control program has been guided by the requirements of the Fourth Stipulation of the Amended Consent Judgment (ACJ) since 2009. In 2021 the ACJ was deemed satisfied and was terminated, upon the termination of the ACJ an Order between the County and NYSDEC became effective, this Order imposes requirements related to further abatement of the County's remaining Combined Sewer Overflows (CSOs). CSO Abatement Program includes County-led and opportunistic partnership (with City of Syracuse, NYS and others). Also included are CSO Abatement Projects under the guidance of the Interim Corrective Measures Plan (ICMP). The County will focus on partnering with other entities to maximize its capital investment to provide the greatest CSO reduction with the funds. The projects will be both Green and Grey Infrastructure, the primarily focus on the highest discharging CSOs. Additional metering will be performed to support the continued ongoing calibration and maintenance of the Stormwater Management Model (SWMM).

Miscellaneous Emergency repairs

The program provides for unanticipated emergency repairs of trunk sewers, force mains, and conveyance infrastructure.

In 2022 authorization was received to spend \$2,450,000 on the following scope:

Pump Station Upgrade Program Assets:

Richmond Street, Sackett Street, Taylor Street engineering design. **For this component (\$300,000) we planned using existing funds (Cash on Hand) and we did not ask for new funds.**

Woodard Pump Station engineering design. **For this component (\$600,000) we planned using existing funds (Cash on Hands) and we did not ask for new funds.**

Belgium Pump Station Site Improvements, phase 1. **For this component (\$300,000) we planned using existing funds (Cash on Hands) and we did not ask for new funds.**

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining - (\$1,000,000 in debt)

Manhole Repair (\$250,000 in debt)

In 2023 we plan to spend \$11,680,000 in debt for engineering and construction on the following scope:

1. Pump Station Upgrade Program:

Baldwinsville Service Area Pump Station Improvements (\$1,500,000 in debt for engineering).
Project would rehab Belgium, Bville North, Bville South, and Bville West Pump Station.

Camillus Pump Station Improvements (\$750,000 in debt for engineering).
Project will rehabilitate the pump station and improve the pumping capacity.

Liverpool Pump Station Improvements (\$750,000 in debt for engineering)
Pumping System, Piping, Chemical Feed, Electrical, and HVAC Improvements

Kirkpatrick Pump Station Improvements (\$750,000 in debt for engineering)
Pump Station Asset Renewal – Pump system, electrical, HVAC, Screen Rake, and concrete rehabilitation.

Park Street Pump Station Well and Valve Vault Improvements (\$30,000 in debt for construction)

Force Main Inspection, Evaluation & Rehabilitation

Evaluation of force mains including Nedrow, Belgium, Baldwinsville North, Manlius, Gaskin Road, and Sawmill.
(\$400,000 in debt for engineering)

Air valve manhole inspection and evaluation, in-situ soil evaluation, and pressure and/or flow metering

Special Funds

(\$100,000 in debt for engineering)

2. Trunk Sewer Network Upgrade Program Assets:

Trunk Sewer Inspection program as part of WEP's CMOM program will address the critical sewers. Inspection of the following trunk sewer will be completed: Colvin, Emerson, Onondaga Ave Connection, Walton Street, Elmhurst, Midland, Meadowbrook West, Freeman Avenue, Hillcrest, James Rigi, Tompkins, South Avenue Connection, Ainsley-Mattson, Brighton, Butternut, Burnet, Harrison, Fayette, Jefferson, and Erie, Meadowbrook East, Glenclyffe, Westfield ROW, and Spencer Street Siphons (\$850,000 in debt)

Sewer Lining (\$1,500,000 in debt for construction)

Repair of County owned trunk sewers will be accomplished using sewer lining contractor. This sewer lining will repair cracked, leaking, or damaged pipes found as a result of the department's inspection program.

Manhole Repair (\$300,000 in debt for construction)

Repairs completed will be a result of the continuous effort to inspect the manholes within the conveyance system.

3. Facility maintenance improvements

Asset Renewal at Midland RTF, Hiawatha RTF, Lower Harbor Brook Storage Facility, Teall Brook FCF, and EBSS to include chemical system, grit handling, concrete rehabilitation, pumps, isolation gates, and electrical improvements (\$850,000 in debt for engineering and construction)

4. Combined Sewer Overflow (CSO) Abatement

The County has developed a CSO metering plan, The County intends on recalibrating the Harbor Brook combined sewershed portion of the SWMM This recalibration will require extensive metering using 36 total flow meters or level sensors The metering will be performed for one year, planned to start in 2023 (\$1,900,000 in debt)

5. Miscellaneous Emergency Repairs

Funds will be used for unexpected and unpredicted scopes that might be encountered in any of the above phases of this project. The funding source of this phase will be debt, which will not be issued if not used. (\$2,000,000 In debt for construction or engineering)

In 2024 we plan to spend \$ 2,300,000 (in cash) and \$10,815,000 (in debt) for engineering and construction on the following scope:

1. Pump Station Upgrade Program Assets:

Lakeside Pump Station (\$2,500,000 in debt for construction)

Richmond Street, Sackett Street, Taylor Street (\$450,000 in debt)

Baldwinsville Service Area Pump Station Improvements - Construction (\$2,500,000 in debt)

Manlius Pump Station Asset Renewal Project (\$500,000 in cash for engineering)

Force Main Inspection, Evaluation & Rehabilitation

Evaluation, improvement, and rehabilitation of force mains and replacement or improvement of air release manholes. (Engineering \$500,000 in cash and Construction \$250,000 in debt)

2. Trunk Sewer Network Upgrade Program Assets:

Special Funds

Trunk Sewer Inspection program as part of WEP's CMOM program will address the critical sewers. Inspection of trunk sewer based on risk. (\$500,000 in cash)

Sewer Lining (\$500,000 in cash)

Manhole Repair (\$300,000 in cash)

3. Facility maintenance improvements

Asset Renewal at Midland RTF, Hiawatha RTF, Teall Brook FCF, and EBSS to include chemical system, grit handling, concrete rehabilitation, pumps, isolation gates, and electrical improvements (\$1,650,000 in debt for construction)

4. Combined Sewer Overflow (CSO) Abatement

CSO Abatement Program includes County-led and opportunistic partnership CSO Abatement Projects under the guidance of the Interim Corrective Measures Plan (ICMP). The County will focus on partnering with other entities to maximize its capital investment to provide the greatest CSO reduction with the funds. The projects will be both Green and Grey Infrastructure, the primarily focus on the highest discharging CSOs. (\$1,500,000 in debt)

In 2025 we plan to spend \$ 2,700,000 (in cash) and \$11,585,000 (in debt) for engineering and construction on the following scope:

1. Pump Station Upgrade Program Assets:

Lakeside Pump Station (\$2,500,000 in debt for construction)

Richmond Street, Sackett Street, Taylor Street (\$550,000 in debt for construction)

Baldwinsville Service Area Pump Station Improvements - Construction (\$2,500,000 in debt)

Camillus Pump Station Asset Renewal – Process piping and grit system (\$400,000 in cash for engineering)

Nedrow Pump Station Asset Renewal - Screen Rake replacement, wet well improvements, and grease handling system (\$300,000 in cash for engineering)

Woodard Pump Station Construction (\$1,335,000 in debt)

Force Main Inspection, Evaluation & Rehabilitation

Evaluation, improvement, and rehabilitation of force mains. (Engineering \$250,000 in cash and Construction \$250,000 in debt)

2. Trunk Sewer Network Upgrade Program Assets:

Trunk Sewer Inspection program as part of WEP's CMOM program will address the critical sewers. Inspection of trunk sewer based on risk. (\$500,000 in cash)

Sewer Lining - (\$500,000 in cash)

Manhole Repair (\$300,000 in cash)

3. Facility maintenance improvements

Special Funds

Asset Renewal at various CSO facilities to include chemical system, grit handling, concrete rehabilitation, pumps, isolation gates, and electrical improvements (\$1,700,000 in debt for construction)

4. Combined Sewer Overflow (CSO) Abatement

CSO Abatement Program includes County-led and opportunistic partnership CSO Abatement Projects under the guidance of the Interim Corrective Measures Plan (ICMP). The County will focus on partnering with other entities to maximize its capital investment to provide the greatest CSO reduction with the funds. The projects will be both Green and Grey Infrastructure, the primarily focus on the highest discharging CSOs. (\$1,500,000 in cash)

In 2026 we plan to spend \$ 2,800,000 (in cash) and \$5,500,000 (in debt) for engineering and construction on the following scope:

1. Pump Station Upgrade Program Assets:

Manlius Pump Station Asset Renewal Project (\$3,000,000 in debt for construction)

Force Main Inspection, Evaluation & Rehabilitation

Evaluation, improvement, and rehabilitation of force mains. (Engineering \$100,000 in cash)

2. Trunk Sewer Network Upgrade Program Assets:

Trunk Sewer Inspection program as part of WEP's CMOM program will address the critical sewers. Inspection of trunk sewer based on risk. (\$500,000 in cash)

Sewer Lining - (\$500,000)

Manhole Repair (\$400,000)

3. Facility maintenance improvements

Asset Renewal at Midland RTF, Hiawatha RTF, Teall Brook FCF, and EBSS to include chemical system, grit handling, concrete rehabilitation, pumps, isolation gates, and electrical improvements (\$1,650,000 in debt for construction)

4. Combined Sewer Overflow (CSO) Abatement

CSO Abatement Program includes County-led and opportunistic partnership CSO Abatement Projects under the guidance of the Interim Corrective Measures Plan (ICMP). The County will focus on partnering with other entities to maximize its capital investment to provide the greatest CSO reduction with the funds. The projects will be both Green and Grey Infrastructure, the primarily focus on the highest discharging CSOs. (\$1,500,000 in cash)

In 2027 we plan to spend \$ 1,800,000 (in cash) and \$10,000,000 (in debt) for engineering and construction on the following scope:

1. Pump Station Upgrade Program Assets:

Camillus Pump Station Asset Renewal – Process piping and grit system (\$3,000,000 in debt for construction)

Nedrow Pump Station Asset Renewal - Screen Rake replacement, wet well improvements, and grease handling system (\$3,500,000 in debt for construction)

Force Main Asset Renewal Program (\$100,000)

Trunk Sewer Network Upgrade Program Assets:

Trunk Sewer Inspection program as part of WEP's CMOM program will address the critical sewers. Inspection of

Special Funds

trunk sewer based on risk. (\$500,000 in cash)

Sewer Lining - (\$500,000)

Manhole Repair (\$400,000)

3. Facility maintenance improvements

Asset Renewal at Midland RTF, Hiawatha RTF, Teall Brook FCF, and EBSS to include chemical system, grit handling, concrete rehabilitation, pumps, isolation gates, and electrical improvements (\$1,650,000 in debt for construction)

4. Combined Sewer Overflow (CSO) Abatement

CSO Abatement Program includes County-led and opportunistic partnership CSO Abatement Projects under the guidance of the Interim Corrective Measures Plan (ICMP). The County will focus on partnering with other entities to maximize its capital investment to provide the greatest CSO reduction with the funds. The projects will be both Green and Grey Infrastructure, the primarily focus on the highest discharging CSOs. (\$1,500,000)

In 2028 we plan to spend \$ 2,050,000 (in cash) and \$3,500,000 (in debt) for engineering and construction on the following scope:

1. Pump Station Upgrade Program Assets:

Ley Creek Pump Station Screen Rake Replacement (\$250,000 in cash for engineering)

Force Main Asset Renewal Program (\$100,000)

2. Trunk Sewer Network Upgrade Program Assets:

Trunk Sewer Inspection program as part of WEP's CMOM program will address the critical sewers. Inspection of trunk sewer based on risk. (\$500,000 in cash)

Sewer Lining - (\$500,000)

Manhole Repair (\$400,000)

3. Facility maintenance improvements

Asset Renewal at Midland RTF, Hiawatha RTF, Teall Brook FCF, and EBSS to include chemical system, grit handling, concrete rehabilitation, pumps, isolation gates, and electrical improvements (\$1,650,000 in debt for construction)

4. Combined Sewer Overflow (CSO) Abatement

CSO Abatement Program includes County-led and opportunistic partnership CSO Abatement Projects under the guidance of the Interim Corrective Measures Plan (ICMP). The County will focus on partnering with other entities to maximize its capital investment to provide the greatest CSO reduction with the funds. The projects will be both Green and Grey Infrastructure, the primarily focus on the highest discharging CSOs. (\$1,500,000)

In fall 2022 we will seek legislative authorization for \$11,680,000 in debt to fund the projects planned for 2023.

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 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

Glossary

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 Pay as You Go .

Pay as You Go: Direct financing available from either surplus monies from prior years' taxation, or unused balances in existing capital accounts, or earnings on temporary investments.

Pay as You Go (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 subdepartment, 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.

Federal Revenue Sharing: The financing of eligible projects through the use of Revenue Sharing funds.

Glossary

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.

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

Glossary

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 re-borrowing 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.

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.

Glossary

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.