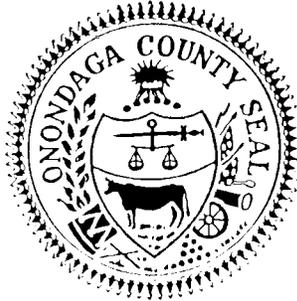


ONONDAGA COUNTY
NEW YORK



2022 – 2027
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

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County Executive, Chair, CPC

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Chairman, County Legislature

Tim Burtis
Chair, Ways & Means Committee

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Robert A. Durr
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Deputy Director of Planning

ONONDAGA COUNTY PLANNING BOARD

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Chairperson

James Stelter

James Corbett (Vice Chair Person)

Michael LaFlair

Marty Voss (ex officio)

David Skeval

Marty Masterpole (ex officio)

STAFF TO THE PLANNING COMMITTEES

Rustan Petrela
Coordinator

Tara Venditti
Management & Budget

Don M. Jordan
Planning

To be updated



J. Ryan McMahon, II
COUNTY EXECUTIVE

Onondaga County Planning Board

Onondaga County Planning Board Resolution Concerning the 2021 to 2026 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 2021 – 2026 Tentative Capital Improvement Plan; and

WHEREAS, debt management remains a high priority in the 2021 – 2026 Tentative Capital Improvement Plan; and

WHEREAS, the projects proposed in the 2021 – 2026 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 2021 – 2026 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 2021 – 2026 Tentative Capital Improvement Plan.

Daniel Cupoli, Chairman
Onondaga County Planning Board
November 25, 2020

1100 Civic Center, 421 Montgomery Street, Syracuse, NY 13202
Phone: (315) 435-2611, Fax (315) 435-2439
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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 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

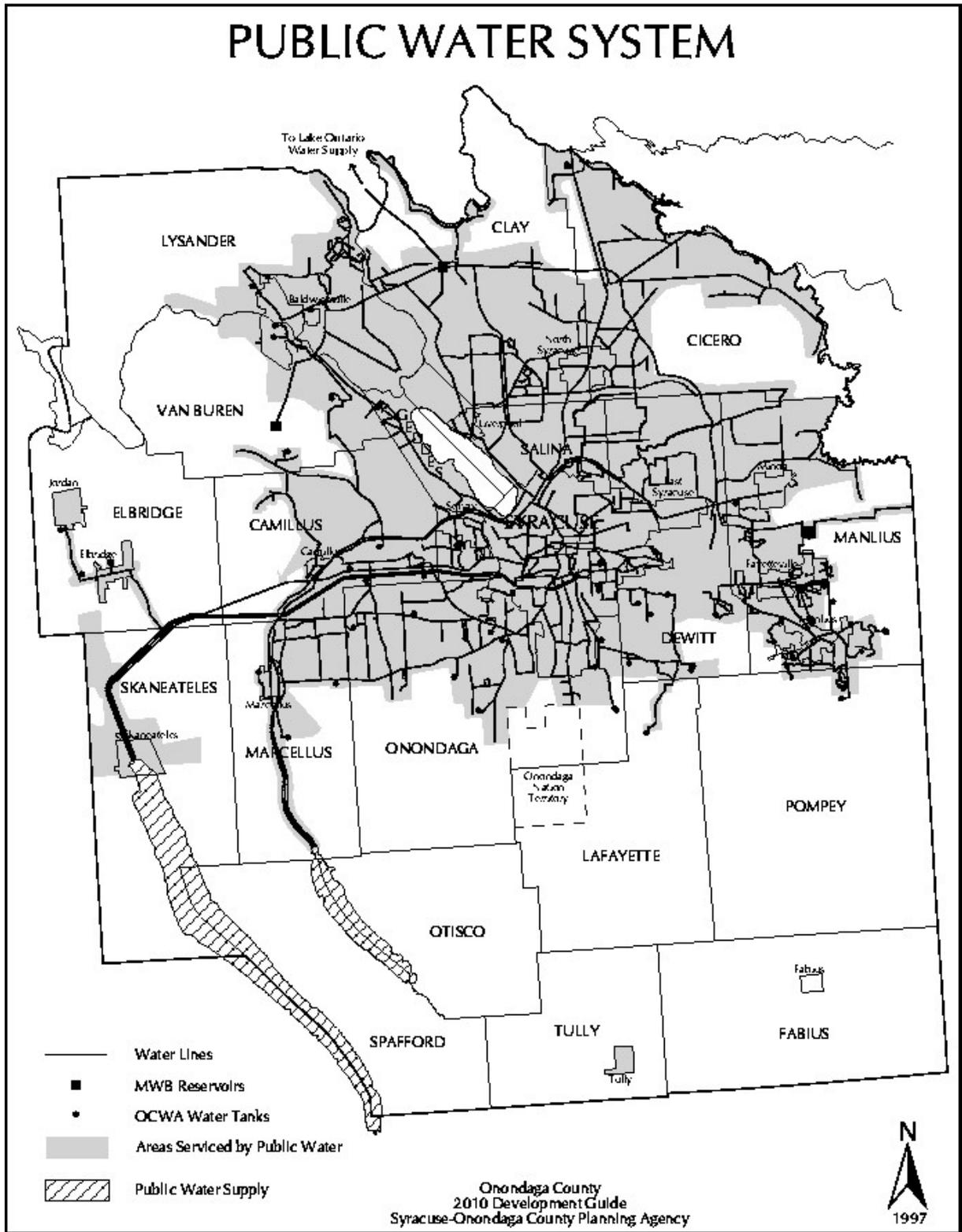
Effective January 1, 2017, Onondaga County entered into a Public Water Supply Cooperation Agreement with the Onondaga County Water Authority (OCWA), under which OCWA agreed to lease and operate the assets of the Onondaga County Water District.

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

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

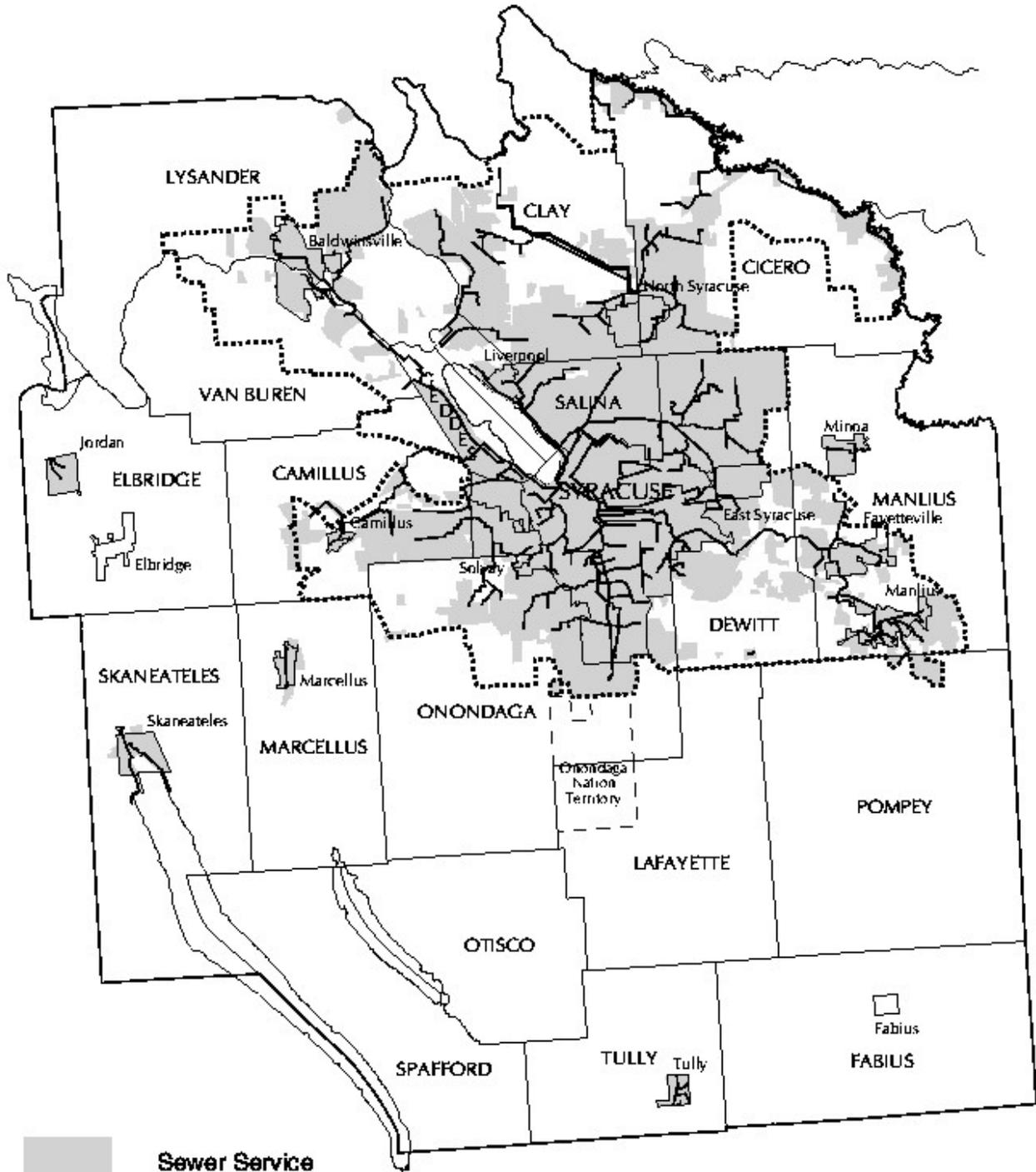
Transportation

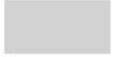
Onondaga County owns and maintains 25.4% or 800 miles of the combined public highway system within the County and is comprised of arterials, collectors and local roads (see map p.8). Of these, thirty-nine miles are four or five lane highways, some divided by medians. The Onondaga County Department of Transportation (OCDOT) uses a computerized pavement condition survey performed annually to determine priorities for maintenance, rehabilitation, and reconstruction. The goal of this system is to minimize the need for major reconstruction by performing timely maintenance and extending pavement life. The County's bridges are also inspected on a biennial basis to determine rehabilitation needs.

The Department of Transportation is responsible for project planning, detailed project design, right-of-way acquisitions, construction layout and inspection of major highway reconstruction projects funded by Federal, State, and local dollars. Additionally the OCDOT is responsible for the inspection, maintenance, and rehabilitation of 210 bridges, numerous culverts as well as operating and maintaining 119 signals and beacons throughout the County.

The Department of Transportation performs routine maintenance functions and limited repaving and rehabilitation with County forces. Private contractors are used to build major construction projects and to repave hot mix and cold mix bituminous highways. These projects are competitively bid as mandated by state law. The Department is currently administering federal highway funds on numerous projects. The Department of Transportation operates four Highway Maintenance Facilities- Camillus, Marcellus, Jamesville, and North Area - as bases for fleet maintenance, material storage, and labor deployment. The Administration and Engineering Divisions are located on the 11th floor of the John H. Mulroy Civic Center.

PUBLIC WASTEWATER SYSTEM



-  Sewer Service
-  Trunk Sewers
-  Sanitary District

Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency



PATTERN OF COUNTY ROAD JURISDICTION



— County Roads

Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency



ONONDAGA COUNTY 2010 DEVELOPMENT GUIDE

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

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

Background

In New York State, municipalities - cities, towns and villages - have strong land use controls available through zoning and subdivision regulations. Counties, on the other hand, have no state enabling legislation with which to 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 adopted the 2010 Development Guide to define the conditions for extensions of county highways, sewer, and water lines. By implementing these policies through the capital program, the county can guide development and control capital and operating expenditures.

Employment Trends

NOTE: The COVID-19 Pandemic interrupted meaningful employment data in 2020 and early 2021. As the employment trends are still in recovery these numbers have not been updated for this CIP. Next year the CIP will be up to date with Census 2020 data as well as more typical employment data. The following information is from last year's CIP (2021-2026).

According to the New York State Department of Labor's Quarterly Census of Employment and Wages (QCEW), annual average employment by place of work in Onondaga County grew slightly from 239,697 in 2010 to 248,436 in 2019. The number of firms increased slightly from 12,544 to 12,724 over the same period, with wages experiencing steady modest increases from \$43,199 in 2010 to \$53,313 in 2019 (QCEW). The New York State Department of Labor Local Area Unemployment Statistics (LAUS) program reported that employment by place of residency in Onondaga County decreased from 218,000 in 2010 to 211,900 in 2019. The annual unemployment rate decreased from 8.0% in 2010 to 3.9% in 2019.

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

Labor Statistics in Onondaga County

	2000	2005	2010	2019
Annual Average Employment (by Place of Work in Onondaga County)	252,477	248,149	239,697	248,436
Annual Average Establishments (# of Firms)	12,280	12,565	12,544	12,724
Average Annual Wages	\$32,499	\$37,641	\$43,199	\$53,313
Employment (by Place of Residency in Onondaga County)	221,400	223,200	218,000	211,900
Annual Unemployment Rate	3.5%	4.5%	8.0%	3.9%
<i>Source: NYS Dept. of Labor QCEW and LAUS Programs</i>				

Demographic Trends

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

Population in Onondaga County has remained relatively unchanged over the past forty years, currently totaling 464,242 according to the 2014-2018 American Community Survey 5-Year Estimate. In general, between 1970 and 2000, population within the towns has increased, villages have remained unchanged, and the City of Syracuse has seen a steady decrease in population, with the City losing approximately 50,000 residents. According to the 2010 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 national housing market slump, and changes in household makeup.

Demographic Statistics in Onondaga County

	1970 Census	2000 Census	2010 Census	2014-2018 ACS est.
Onondaga County Population	472,835	458,336	467,026	464,242
Town Population	275,538	311,030	321,856	320,949
City Population	197,297	147,306	145,170	143,293
Housing Units	153,576	196,633	202,357	207,567
Households	145,122	181,153	187,686	185,624
<i>Source: 1970, 2000, and 2010 US Decennial Census, American Community Survey 5-Year Estimate (2014-2018)</i>				

Urban sprawl, available infrastructure capacity, and a trend toward smaller families have resulted in an increase of more than 50,000 new housing units in Onondaga County since 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 one hundred year old sewers in Syracuse and suburban roads built to farm-to-market standards. All these factors have necessitated the 2010 Development strategy to prioritize redevelopment, minimize the need for expanded infrastructure and to take maximum advantage of existing infrastructure and limited population growth.

The Land Use Plan

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

The plan provides a means for coordinating land use decisions by thirty-five municipalities with county plans for infrastructure and fiscal stability. The plan outlines the implications of 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. The CIP process provides an inventory of anticipated capital projects, prioritizes these according to need, provides cost estimates, and analyzes the community's financing capabilities. Finally, it provides a schedule of project execution that relates projects to one another (e.g. scheduling sewer and water lines prior to or concurrent with road work in a given right-of-way) and to financing requirements.

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

2022 - 2027 Capital Plan Priorities

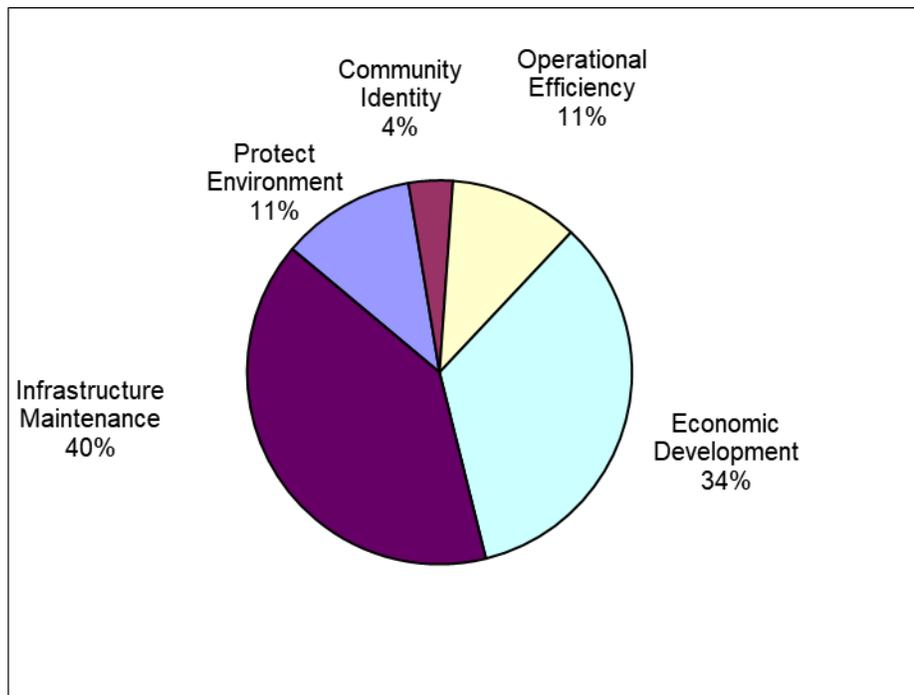
The 2022-2027 Capital Plan places high priority on projects that are consistent with county's current Development Guide. Most of our investments will be in the areas of infrastructure maintenance, environmental protection, and operational efficiency. Wastewater treatment projects account for 67.3% of the Capital Program. Mandated projects drive 24% of the proposed projects in this plan.

It should be noted that the Onondaga Lake project is now fully authorized. New wastewater treatment facilities and technologies will result in improved water quality in Onondaga Lake and the Seneca River system. The lake 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 9 capital construction projects through 2027 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.

**2022-2027
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 Aa3.

Debt Management - Department of Water Environment Protection

For 2022, the County Executive is continuing the commitment to the current debt management efforts. While taking advantage of the current favorable interest rates we also utilize resources in the Department's operating budget to fund recurring capital needs. The main components of the plan call for greater investment in preventive maintenance, rapid retirement of debt that is issued, and the strategic use of the Water Environment Protection (WEP) designated fund balance and reserve for bonded 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.

In 2000, Onondaga County defeased \$10.7 million of debt using its fund balance. The County Legislature had passed a resolution in November 1999 that established a fund balance target of 10% of General Fund revenues. Any excess would be used to avoid or reduce debt and provide property tax relief. The defeasance had a benefit to taxpayers of \$11.7 million in 2000-2004. In August 2001, the county participated in a pooled financing with five other New York counties to sell its rights to the tobacco revenues guaranteed under the Master Tobacco Settlement Agreement with the four major tobacco companies. This resulted in defeasing \$95 million in Onondaga County General Obligation debt, lowering total debt service by \$130 million during the years 2002-2021. Again, in 2005, the county participated in another pooled financing with twenty-three other New York counties. With the proceeds, \$19.9 million of scheduled debt was defeased, benefiting the years 2007-2025. An additional \$11.6 million was set aside to finance energy saving initiatives, thereby avoiding debt. Taking advantage of the lowest interest rate environment in forty years, the county refunded \$18.5 million of ten year old bonds in 2003, saving \$1.8 million through 2014. In 2007, \$8 million in cash was used to fund capital projects, avoiding debt and maintaining the county's 10% fund balance target. In 2009 and 2012, successful refunding issues resulted in savings of \$3.3 million and \$1.2 million respectively. In 2014 the county issued \$19.6 million of refunding bonds saving over \$1.1 million and in 2015 the county issued \$11.4 million in refunding bonds saving \$0.66 million. The County once again refunded bonds in 2016 totaling close to \$34.8 million resulting in NPV savings of approximately \$3.2 million for 2017 through 2033. In 2017 the County refunded the 2013 bond issuance for a total issuance size of \$33,835,000. This resulted in an NPV savings of \$3.5 million.

In 2019, The County refunded the 2009 refunding bonds and the 2010 BAB and 2010 RZ bonds that produced NPV savings of \$1,929,015 for 2019 through 2030. In February of 2020, the County refunded approximately \$24.75 million of 2012 bonds saving an additional \$2.86 million through 2037.

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

As evidenced on page 21, the county's net indebtedness is currently at 17.75% of its total borrowing capacity.

Borrowing Criteria

In general, the State Legislature has granted the power and defined the procedure for the county to issue debt by enactment of the Local Finance Law (Chapter 33-A of the Consolidated Laws of New York). One central requirement states that the duration of debt payments cannot exceed the Period of Probable Usefulness (PPU).

Financial Summaries

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 2022-2027, 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 27, 2021 the county has utilized 17.75% of its Statutory Debt Limit.

Should all Authorized and Unissued debt be issued this would represent 4.05% of the debt limit.

If the entirety of the projects proposed in the 2022 CIP advance and the corresponding debt is issued by the county in 2022 to fund said projects, this debt would represent 1.47% of the debt limit but combined with the debt that will retire in 2022 the net effect is a 0.18% 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	\$28,364,702,035
Debt Limit (7% of 5-year average) (1)	\$1,985,529,142

Outstanding Indebtedness	Scheduled Debt as of August 31, 2021	Authorized and Unissued Debt	Proposed Debt for 2022	Total Debt as of Dec 31, 2022
Bonds	\$ 663,072,175			
Bond Anticipation Notes	\$18,801,421			
Outstanding Gross Indebtedness	\$681,873,596	\$146,662,533	\$108,622,000	\$937,158,129
Less Exclusions (Sewer, Water, Defeased Debt)	(\$329,447,673)	(\$66,209,371)	\$ (79,405,000)	(\$475,062,044)
Less Retired Debt			(\$25,729,273)	(\$25,729,273)
Total Net Indebtedness	\$352,425,923	\$80,453,162	\$3,487,727	\$436,366,812
Debt Limit Margin	\$1,633,103,219			\$1,549,162,330
Percentage of Debt Limit Exhausted	17.75%	4.05%	0.18%	21.98%

(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	0	1	General Fund
DEPARTMENT OF CORRECTIONS	5	0	1	General Fund
ELECTIONS BOARD	1	0	0	General Fund
EMERGENCY COMMUNICATIONS	17	9	2	General Fund
FACILITIES MANAGEMENT	16	4	6	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	4	Community College
ONONDAGA COUNTY PUBLIC LIBRARY	3	0	2	Library
PARKS & RECREATION DEPT.	13	4	10	General Fund
SHERIFF CUSTODY	1	0	0	General Fund
SHERIFF POLICE/CIVIL	1	1	1	General Fund
TRANSPORTATION	0	2	9	County Road
TRANSPORTATION	3	0	0	General Fund
VAN DUYN EXTENDED CARE	6	0	0	Van Duyn
WATER ENVIRONMENT	28	12	25	Drain & San
Total	135	37	63	

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	2022 - 27 Total
General Fund			
COUNTY CLERK (RECORDS DEPT)			
	new	Records Digitalization	360
		Subtotal	\$ 360
DEPARTMENT OF CORRECTIONS			
		Physical Plant Improvements and Security Upgrades	592
		Subtotal	\$ 592
EMERGENCY COMMUNICATIONS			
	new	OCICS Radio Fleet Template Refresh (NEW)	442
		Tower Site Shelter Rehabilitation	1,091
		Subtotal	\$ 1,533
FACILITIES MANAGEMENT			
		Carnegie Library Rehabilitation	4,101
		Community Plaza and Walks Renovations	300
		Community Plaza Garage	1,710
		Courthouse - HVAC Renovations	9,000
		Facilities Various Capital Improvements	9,565
		Oncenter Rehabilitations	8,000
		Subtotal	\$ 32,676
HILLBROOK DETENTION HOME			
	new	Education, recreation and vocational center at Hillbrook detention center	2,000
		Subtotal	\$ 2,000
OFFICE OF ENVIRONMENT			
		Ash Tree Management	2,625
		Subtotal	\$ 2,625
PARKS & RECREATION DEPT.			
		Build an African Savannah Exhibit	7,050
		Carpenters Brook Fish Hatchery Building Replacement	850
		County Multi Sports Complex	25,000
		Lights on the Lake Storage Facility	370
		Long Branch Park Improvements	1,000
		Oneida Shores Facility Upgrade	850
		Oneida Shores Park Shoreline Rehabilitation	450
		Parks Various Infrastructure Rehabilitation and Improvement	12,585
		Veterans Cemetery Lawn Crypts	1,000
	new	Zoo Mechanical Systems and Roofs Replacement (NEW)	4,000
		Subtotal	\$ 53,155
SHERIFF POLICE/CIVIL			
	new	Radio Replacement (NEW)	4,665
		Subtotal	\$ 4,665
		General Fund Total	\$ 97,606
Library			
ONONDAGA COUNTY PUBLIC LIBRARY			
		Mobile Library Outreach	260
		Petit Branch Library addition and improvements	1,428
		Library Total	\$ 1,688

Financial Summaries

County Wide

Department	STATUS	PROJECT	2022 - 27 Total
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Community College

ONONDAGA COMMUNITY COLLEGE

Allyn Hall Upgrades and Improvements	2,780
Elevator Replacement and Upgrades/ Protection of the Campus E-mail and Phone Servers	646
Infrastructure - Campus Wide	10,488
Site Improvements	2,718

Community College Total	\$ 16,632
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County Road

TRANSPORTATION

Bituminous Surface Treatment	17,049
Bridges	9,860
Capital Highway Construction	28,850
Caughdenoy Road / NYS Route 31 Road Improvements	11,000
Cold Mix Bituminous Paving	29,580
Guide Rail	3,420
Repaving Program (Hot Mix Bituminous)	71,630
Testing, Drainage and Facilities Repair	2,784
Traffic Systems Management	2,160

County Road Total	\$ 176,333
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County Wide Total	\$ 292,259
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Special Funds

Department	STATUS	PROJECT	2022 - 27 Total
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Drain & San

WATER ENVIRONMENT PROTECTION

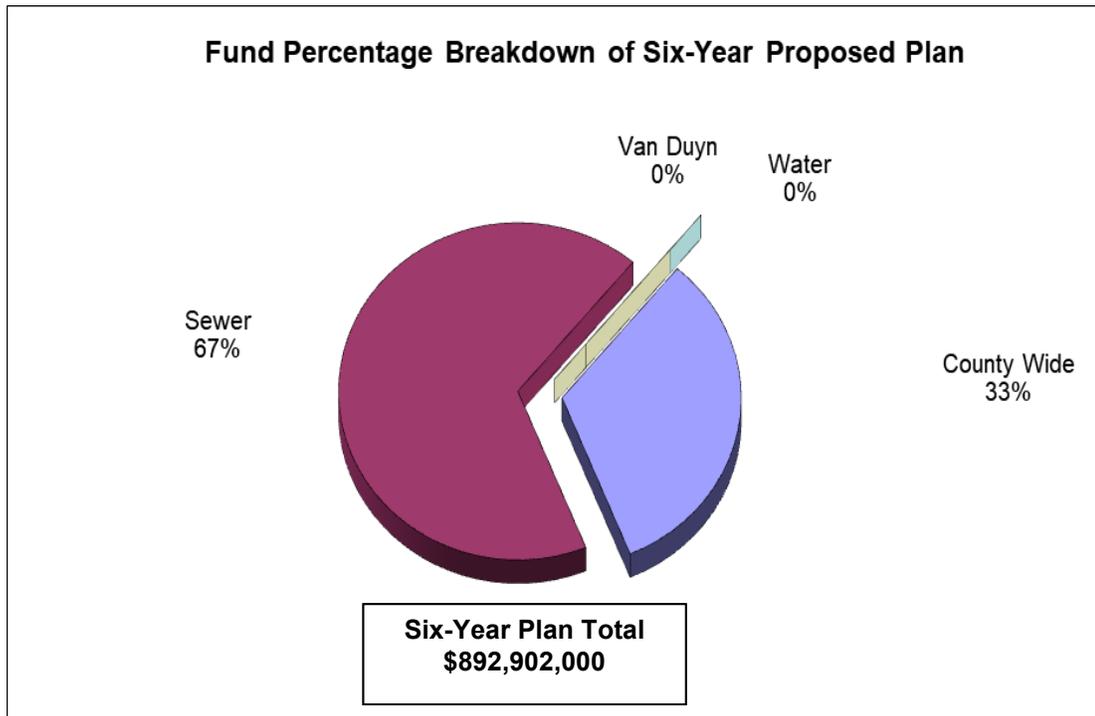
new Baldwinsville Seneca Knolls and Oak Orchard WWTP Oxygen System Replacement (NEW)	10,000
Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	27,720
Camillus Force Main Replacement	10,000
new Comprehensive Asset Renewal at Baldwinsville WWTP (NEW)	4,236
new Comprehensive Asset Renewal at Brewerton WWTP (NEW)	3,120
new Comprehensive Asset Renewal at Meadowbrook Limestone WWTP (NEW)	13,576
new Comprehensive Asset Renewal at Metro WWTP (NEW)	2,545
new Comprehensive Asset Renewal at Oak Orchard WWTP (NEW)	1,727
new Comprehensive Asset Renewal at Wetzel Rd. WWTP (NEW)	1,605
Davis Rd Pump Station and Forcemain Improvements	16,000
new Department Wide Building and Site improvements (NEW)	13,819
new Department Wide Mechanical, Electrical and Process Improvements (NEW)	17,849
Harbor Brook Miscellaneous Culvert and Channel Improvements	400
Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project	29,230
new Meadowbrook Limestone & Brewerton WWTP - Drum Replacement (NEW)	2,396
new Meadowbrook-Limestone WWTP Fine Screen Replacement (NEW)	1,000
new Meadowbrook-Limestone WWTP Large Scale Upgrade (NEW)	4,600
Metro WWTP 1978 Plant Annex Asset Renewal - Phase I	30,712
Metropolitan (Metro) Wastewater Treatment Plant - Thickener Rehabilitation	1,000
Oak Orchard Wastewater Treatment Plant Major Upgrade Project	250,000
Oak Orchard WWTP Secondary Clarifier Rehabilitation	7,273
new Route 81, Sanitary Sewer Betterments (NEW)	15,400
Sewer Consolidation	105,350
Wastewater Transportation System Improvements	15,085
White Pine Industrial Park Conveyances	16,000

Sewer Total	\$ 600,643
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Grand Total	\$ 892,902
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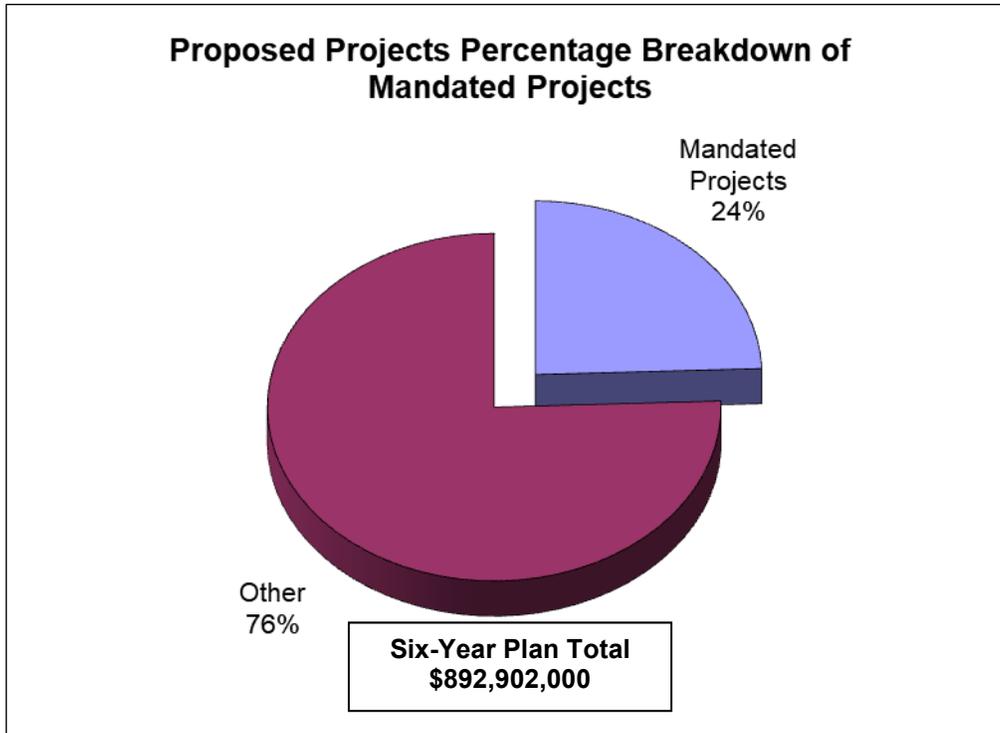
Financial Summaries

Out of the 62 projects proposed in this plan, 37 are in the Countywide Funds, and they account for 32% of the costs, as illustrated by the graph below.



MANDATES

Of the \$892,902,000 in proposed projects, 24% 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, 76% 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

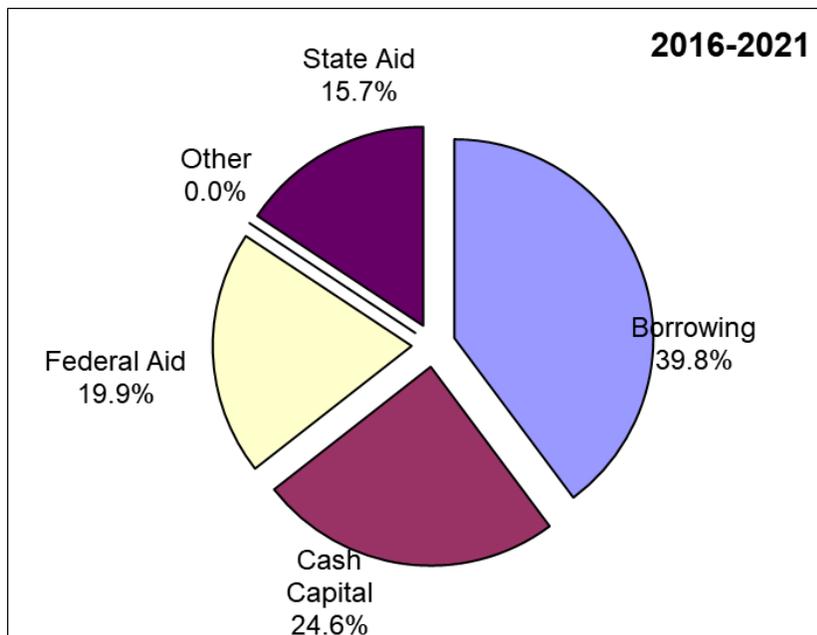
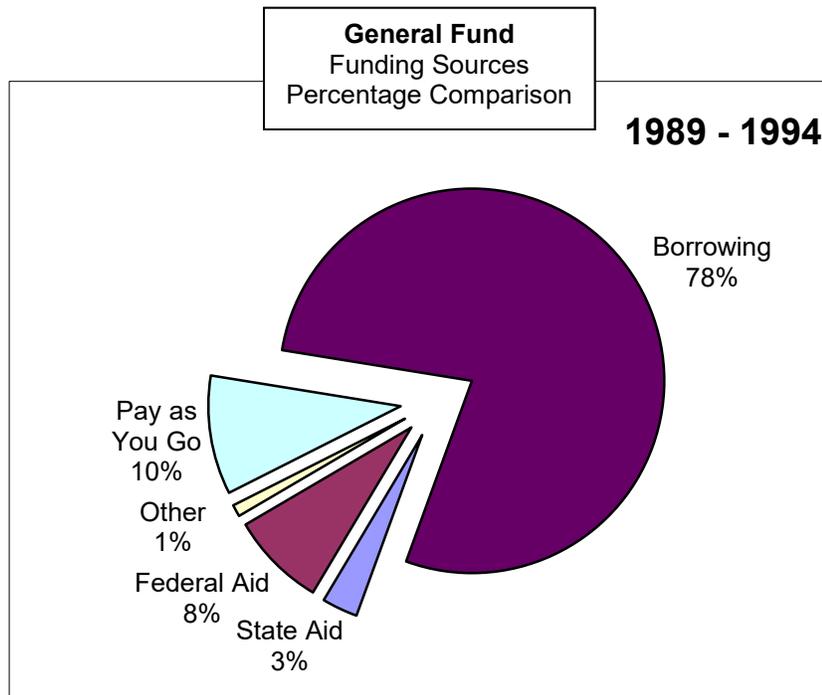
To achieve a balanced program that effectively serves the community's needs, careful attention must be given to the methods or sources of funding for capital projects. Customarily, projects are funded through the issuance of debt, cash capital, federal and state aid, and to a lesser degree other sources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

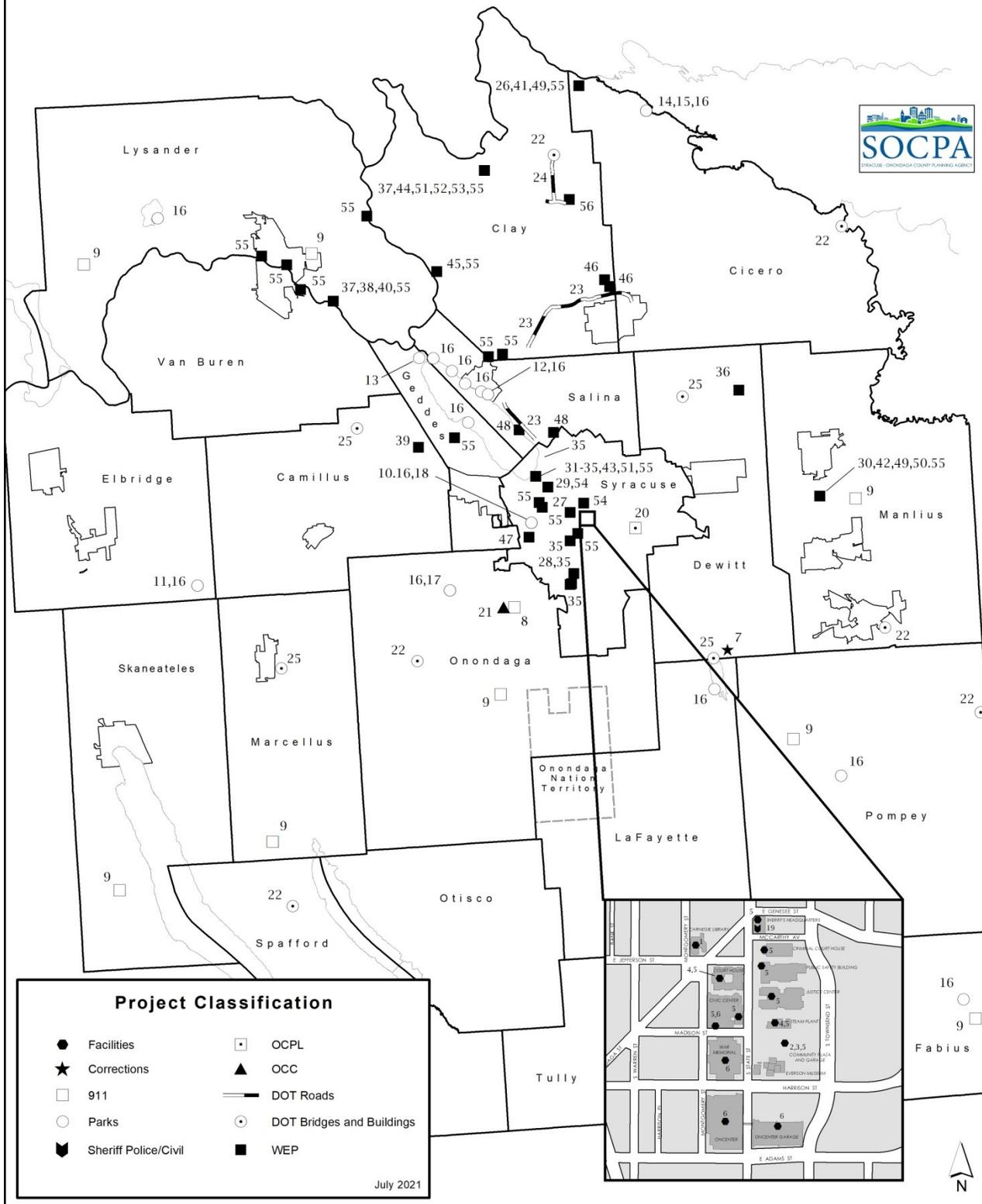
County Wide	2022	2023	2024	2025	2026	2027	6yr Total
General Fund							
Pay as You Go	470						470
Borrowing to be Authorized	17,017	18,733	14,135	7,025	2,125	1,000	60,035
Federal Aid	33,365	1,736					35,101
State Aid	2,000						2,000
SUB TOTALS	\$52,852	\$20,469	\$14,135	\$7,025	\$2,125	\$1,000	\$97,606
County Road							
Pay as You Go	5,046	7,717	11,098	13,489	15,901	18,152	71,403
Borrowing to be Authorized	9,835	8,250	11,060	9,890	4,170	3,770	46,975
Federal Aid	7,760	6,000	3,200	2,000	2,000	2,000	22,960
State Aid	6,195	5,840	5,740	5,740	5,740	5,740	34,995
SUB TOTALS	\$28,836	\$27,807	\$31,098	\$31,119	\$27,811	\$29,662	\$176,333
Library							
Borrowing to be Authorized	1,210						1,210
State Aid	478						478
SUB TOTALS	\$1,688						\$1,688
Community College							
Borrowing to be Authorized		8,316					8,316
State Aid		8,316					8,316
SUB TOTALS		\$16,632					\$16,632
County Wide TOTALS	\$83,376	\$64,908	\$45,233	\$38,144	\$29,936	\$30,662	\$292,259
Special Funds							
Drain & San							
Pay as You Go	5,831	8,394	8,464	8,729	9,067	10,280	50,765
Authorized Borrowing	18,516	7,022	118				25,656
Borrowing to be Authorized	113,005	174,374	128,426	49,985	23,649	34,783	524,222
Special Funds TOTALS	\$137,352	\$189,790	\$137,008	\$58,714	\$32,716	\$45,063	\$600,643
GRAND TOTAL	\$220,728	\$254,698	\$182,241	\$96,858	\$62,652	\$75,725	\$892,902

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.



Onondaga County 2022-2027 Capital Improvement Plan Locations



Project Classification

● Facilities	□ OCPL
★ Corrections	▲ OCC
□ 911	— DOT Roads
○ Parks	⊙ DOT Bridges and Buildings
👮 Sheriff Police/Civil	■ WEP

July 2021

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

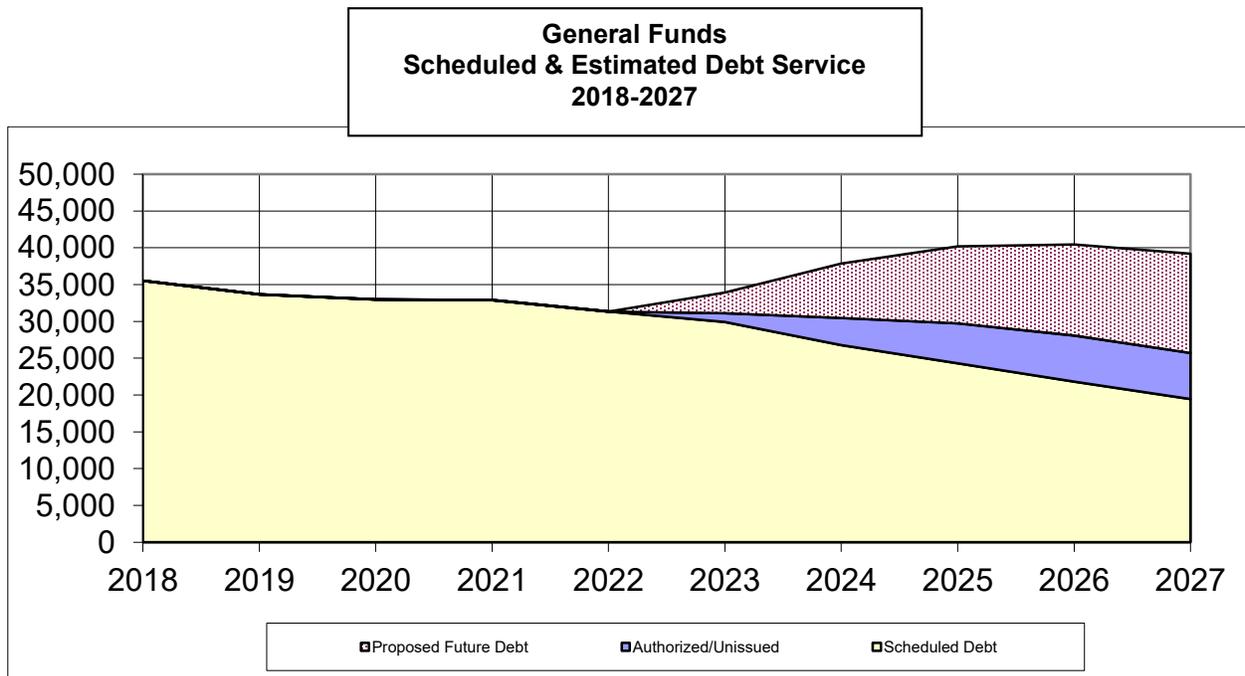
SEWER DISTRICT

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>	2017	2018	2019	2020	2021	2022	2023	2024
Principal & Interest								
<u>Scheduled Debt</u>	36,334	35,528	33,676	32,985	32,905	33,106	31,680	28,537
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	1,401	4,231
<i>Proposed Future Debt</i>	0	0	0	0	0	0	1,474	5,046
Total	36,334	35,528	33,676	32,985	32,905	33,106	34,555	37,814
	2025	2026	2027	2028	2029	2030	2031	2032
Principal & Interest								
<u>Scheduled Debt</u>	25,986	23,482	20,923	18,875	17,769	16,920	15,085	14,147
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	6,053	6,861	6,885	6,619	6,595	6,595	6,595	6,595
<i>Proposed Future Debt</i>	8,316	10,307	11,419	11,755	11,578	11,174	10,774	10,377
Total	40,355	40,650	39,227	37,249	35,942	34,689	32,454	31,119
	2033	2034	2035	2036	2037	2038	2039	2040
Principal & Interest								
<u>Scheduled Debt</u>	12,971	11,990	10,657	9,765	8,237	7,752	6,253	5,264
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	6,407	6,368	6,336	6,336	6,336	5,975	5,975	5,975
<i>Proposed Future Debt</i>	9,987	8,753	7,479	6,914	6,260	6,024	4,766	3,456
Total	29,365	27,111	24,472	23,015	20,833	19,751	16,994	14,695
	2041	2042	2043	2044	2045	2046	2047	TOTAL
Principal & Interest								
<u>Scheduled Debt</u>	5,237	2,578	2,554	2,520	0			
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	5,975	5,975	3,567	1,507	0			
<i>Proposed Future Debt</i>	2,554	1,847	1,572	1,231	836	344	211	154,454
Total	13,766	10,400	7,693	5,258	836	344	211	611,904

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 2021. A brief summary of most of them follows.

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 updating and installing 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 spring 2021, this project is well underway. The general contractor is on site installing conduits, transformers, and other hardware both inside and outside the building. Excavation has begun for the foundations required to support the new generator, switch gear, and other electrical components. This project is slated to be complete by the end of 2021.

Computer Aided Dispatch (CAD) System Hardware Refresh

Project Complete

In July 2019 the County Legislature authorized \$903,000 (Reso #105) which will be used to refresh computer aided dispatch (CAD) software and replace the CAD hardware system.

The CAD hardware and software were last refreshed in 2013. The hardware (CAD servers and workstations in the Main 911 Center and the Backup Operations Center) were six years old in 2019. In addition, CAD servers are currently running on outdated SQL server software that will need to be updated to stay consistent with any security patches necessary to protect mission critical CAD systems from being vulnerable to a cyber-attack.

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

E911 started this project in 2019 and intends to finish in early 2021. This will require an on-site presence from the CAD vendor's engineering staff to ensure smooth implementation which is necessary due to the size and complexity of our system which serves 94 police, fire and EMS agencies.

E911 Center Facility Rehabilitation

Project On-going

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

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

E911 Main Center HVAC System Replacement

Project On-going

In Fall 2014 we received legislative authorization for \$350,000 to fund the engineering design and to develop a request for

proposals (RFP), which was issued in June 2015 and subsequently awarded through the County procurement process. The engineering design was completed in May 2016.

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

The replacement of the heat pumps will be accomplished by the successful bidder in close cooperation with engineers, County Facilities, and E911 Center staff to ensure that public safety communications operations and systems are not disrupted. Call taking and dispatch areas will be moved to the Civic Center back-up site, as necessary, to permit work to be done on heat pumps, ducts and ventilation in operations floor area.

Bids were awarded in mid-2016 and Airside Technology was selected as the HVAC contractor. Knapp Electric was selected as the electrical contractor. 1st Point, LLC, was selected as the project manager. Work began in late 2016 and finished in 2017/2018.

Additional repairs, replacements, and enhancements continue to be made on an as needed basis.

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 24x7 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 on April 21, 2021.

Onondaga County has entered into a contract with Motorola Solutions. Work on this project is slated to begin in late summer/early fall 2021.

Oblique Aerial Digital Imagery Refresh (2019)

Project Complete

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

On December 3, 2019, the County Legislature approved Resolution #170 for \$300,000.

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

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

The initial flyover was completed in the spring of 2020 however, when the imagery was reviewed it was found to be of poor quality due to condensation on one of the lenses. A second flyover was performed in the fall of 2020 but the results were again not useable due to foliage and weather conditions. A third flyover was performed in spring of 2021 and was successful in obtaining quality imagery. This project is now complete.

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 are 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, resolution #169 for \$265,000, which 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 as of this writing, 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.

Radio Tower & Property Rehabilitation

Project On-going

This project will fund the necessary refurbishing of selected 911 Center remote tower sites. This will include replacement of security fencing, upgrade of the IP remote video/audio monitoring system, installation of proximity detection, replacing roofs, siding, and doors as well as replacing the HVAC system at the Pompey legacy site to increase energy efficiency. We will also add quick generator connect “Jones Plugs” at all sites to allow emergency hook up of a portable generator in the event of a catastrophic generator failure.

Progress has been on-going. Fence repairs have been made and Jones plugs have been installed at all tower sites except E911. As of Spring 2020, E911 has finished installing the updated tower lighting and security camera system. The intent in 2021 is to repair/replace the roof at the Pompey site and add additional security lighting to sites where required. It is hoped that we will close out this project by the end of 2021.

Repave E911 Center Parking Lot

Project Complete

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. This project was successfully completed in June of 2021.

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.

As of spring 2021, installation of the modems has begun and is moving along smoothly.

FACILITIES MANAGEMENT

Center for Forensic Sciences Building Rehab./Renovations

Project On-going

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

1. Installation of additional proximity card readers, electric locks and door position contacts on doors for six areas. 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.

Civic Center Office Maintenance, Repairs and Improvements

Project Completed

This is an ongoing project. Since October 2011 the County Legislature has authorized 5 bond resolutions for a total of \$5,217,000. In addition, we appropriated \$400,000 from Fund Balance in 2012. This money was designated for the following scopes:

Masonry repointing and repairs to the street level brick veneer.

Renovations of floors 7, 8, 13, and 15 will include new office environments, painting, lighting, carpeting, and HVAC modifications. The aforementioned floors are the original floor configurations since the building was opened. This will increase operational efficiency for departments located in those spaces and improve air flow, as well as allow more natural lighting into these spaces.

In 2012 we were successful in renovating the west side of Civic Center 15 with a strategy of open floor planning. We were able to create the swing space needed for other renovations as well as the temporary relocations for the departments displaced by the KOB abatement and demolition project. We also renovated a portion of 15 east and now a program of Mental Health occupies this area. We also renovated the space vacated by the Syracuse Symphony and moved Facilities offices to this space. We renovated the former CNY Arts offices and moved the Syracuse Opera into the more efficient consolidated space.

In 2016 completed the renovations of Bureau of Vital Statistics and Health Department, Floor 9 east.

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

We have completed the office design and construction for floors 6 and 7.

The funds allocated in 2018 were used to continue and finish the above projects.

This project is complete

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.

We intend to engage the necessary engineering services for this project.

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 and we intend to complete them in 2020 and 2021. 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 lost. 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 lead 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 \$220,000 so far and will continue through this summer and fall of 2021 with an expected completion of 12/30/21

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. We intend to start the implementation of this project in 2021

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

Remodeling Social Services Reception

Project On-going

On 12/04/2012, by Resolution #217, we received authorization of \$378,000, which was spent for the study and design for construction.

On 12/05/2017, by Resolution #192, we received authorization of \$3,000,000 which will be used for construction.

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

The rehabilitation will include improved service environments, enhanced video surveillance, duress alarms, security stations, new public address systems, reconfigured client approaches, and progressive stations. The signage will be graphic lighted displays

and call up. There will be interpretive language systems. In addition we will enhance access control on doors and barriers, and the new furnishings will be ergonomic, appropriately aligned with the program flow. The building systems will be rehabilitated to include improved, efficient and balanced HVAC, sustainable lighting solutions, and maintenance friendly BMS interfacing. ADA enhancements will include mechanical door operators, selective seating arrangements, comfortable approach, and service stations. We expect that a more comfortable yet durable environment will improve the services to the clients. This project is 95% complete with only some minor modifications being created and installed due to new strategies of distancing in the workplace due to the pandemic experience.

This project will be completed in Summer 2021.

FINANCE DEPT

Build a Science, Technology, Engineering, Arts and Mathematics

Project On-going

On May 5, 2020 the county Legislature approved resolution # 60 authorizing the issuance of \$74 million bonds to rehabilitate the Central High School in downtown Syracuse and transform it to 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, business partnerships with employers in the programs listed above, students will be positioned for a career or college upon completion of high school, either 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.

Tax Collection and Delinquency Software

Project On-going

This project was authorized by the County Legislature in December 2014 (Resolution # 212). The goal of this project is to standardize and modernize its delinquent tax collection software, as well as the tax collection software systems utilized by the nineteen towns, fifteen villages, and twenty-five school districts for which it guarantees taxes. There are currently several different vendors providing varying levels of services and support. At the end of each collection period a report of paid and unpaid taxes are turned over to the County and are uploaded/entered into the delinquency program so that we can begin to accept payments and enforce collection. These reports are often formatted differently, or in some instances, hand written. In addition, this process relies heavily on the experience, expertise, and technical ability of each individual Tax Collector/Receiver to send accurate and timely information. Standardizing the collection systems will ease this burden and allow the reconciliation process to be automated, while providing the County with a consolidated database throughout the collection period. The delinquency program went live in 2018 at the county level and to-date 31 municipalities have adopted the software. The scope of the project was expanded to include the City of Syracuse where implementation is ongoing. As part of this project the county's tax mapping program will be converted from CAD to GIS. This is in the beginning stages and is projected to take 12 months.

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.

Countywide Funds

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 performing the phone system upgrade on July 10th, 2021.

Ongov Web Site Redesign – the RFP was awarded to Modern Tribe. The project has started and we are in the requirements phase. We project that we will incur 80% - 100% of the project costs this year (2021).

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.

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. The next step is to complete engineering and preparation of specifications, drawings and bid documents. Getting started with this work has been delayed by COVID-19.

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. Expected construction completion is Fall of 2021.

Carpenters Brook Fish Hatchery Pond Repair

Project Completed

Carpenters Brook Fish Hatchery has 30 ponds, 18 of which are in need of repair. Parks has researched other hatcheries in the North East to learn what is currently being done in this industry to improve fish production. Based on this research it was decided to apply a 3/16" fiberglass lining to the affected tanks.

On December 19, 2017 the Legislature approved BR-231 authorizing \$100,000 to begin surface preparation of eighteen (18) 25' circular ponds.

On December 18, 2018 the Legislature approved BR-170 authorizing \$1,697,000 of which \$302,000 was authorized to complete the lining of the tanks as planned. Bids were issued early 2019 and the contract for the work is in process. Work began summer of 2019 later than expected due to contractual and weather delays. Work on 12 of the 18 ponds was completed before the ponds needed to be refilled to accept fish. The remaining 6 ponds were completed in summer of 2020.

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.

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 SMTC 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.

Onondaga Lake Park Shoreline Stabilization

Project Completed

On December 20, 2016 the County Legislature approved BR-250 authorizing \$756,000 to fund this project. The shoreline around Onondaga Lake Park has seen some significant erosion and is in need of stabilization to prevent further deterioration. This is a phased project that will address several hundred feet of shoreline each year over the next several years. Phase 1 was completed Fall of 2017.

Work on all phases of this project were completed in May 2020.

Veteran's Cemetery Expansion

Project Completed

As a part of BR-009, on February 2, 2016 the County Legislature authorized \$480,000 to fund this project.

This project is the expansion of the Veterans Memorial Cemetery. A master plan was completed in late 2015 and we have started the implementation of this plan with phase one by clearing land for an expanded roadway to access future burial sites. These additional burial sites will accommodate the needs of the cemetery for several years.

Phase two will include the rehabilitation of the chapel building, enlarging the parking area to better accommodate the larger site, with the possibility of a new maintenance building if funds permit.

Work on the rehabilitation of the chapel building was completed May 2020.

SHERIFF POLICE/CIVIL

Sheriff's New Headquarters Facility

Project On-going

The purpose of this project is to consolidate all of the Sheriff's Office facilities including the K-9 Unit and the Police Substations. Initially, we intend to hire an engineering/consulting firm to help us with identifying a location and configuration of this new facility as well as the cost of construction. The funds we have available will serve to acquire these services. Once we get the study completed, we will request the design and construction funds. The funds that are needed to complete the needs assessment study are available from previous authorizations of \$369,000 bonds which were authorized by bond resolution No. 185 dated November 9, 2012.

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; and 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; and Replace Card Readers.

As of July 2021 we are 95% complete with this project.

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 winter 2022.

Countywide Funds

PROPOSED CAPITAL PROJECT SUMMARY

County Wide

Department	STATUS	PROJECT	2022 - 27 Total
General Fund			
COUNTY CLERK (RECORDS DEPT)			
	new	Records Digitalization	360
		Subtotal	\$ 360
DEPARTMENT OF CORRECTIONS			
		Physical Plant Improvements and Security Upgrades	592
		Subtotal	\$ 592
EMERGENCY COMMUNICATIONS			
	new	OCICS Radio Fleet Template Refresh (NEW)	442
		Tower Site Shelter Rehabilitation	1,091
		Subtotal	\$ 1,533
FACILITIES MANAGEMENT			
		Carnegie Library Rehabilitation	4,101
		Community Plaza and Walks Renovations	300
		Community Plaza Garage	1,710
		Courthouse - HVAC Renovations	9,000
		Facilities Various Capital Improvements	9,565
		Oncenter Rehabilitations	8,000
		Subtotal	\$ 32,676
HILLBROOK DETENTION HOME			
	new	Education, recreation and vocational center at Hillbrook detention center	2,000
		Subtotal	\$ 2,000
OFFICE OF ENVIRONMENT			
		Ash Tree Management	2,625
		Subtotal	\$ 2,625
PARKS & RECREATION DEPT.			
		Build an African Savannah Exhibit	7,050
		Carpenters Brook Fish Hatchery Building Replacement	850
		County Multi Sports Complex	25,000
		Lights on the Lake Storage Facility	370
		Long Branch Park Improvements	1,000
		Oneida Shores Facility Upgrade	850
		Oneida Shores Park Shoreline Rehabilitation	450
		Parks Various Infrastructure Rehabilitation and Improvement	12,585
		Veterans Cemetery Lawn Crypts	1,000
	new	Zoo Mechanical Systems and Roofs Replacement (NEW)	4,000
		Subtotal	\$ 53,155
SHERIFF POLICE/CIVIL			
	new	Radio Replacement (NEW)	4,665
		Subtotal	\$ 4,665
		General Fund Total	\$ 97,606
Library			
ONONDAGA COUNTY PUBLIC LIBRARY			
		Mobile Library Outreach	260
		Petit Branch Library addition and improvements	1,428
		Library Total	\$ 1,688

Countywide Funds

County Wide

Department	STATUS	PROJECT	2022 - 27 Total
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Community College

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

County Road

TRANSPORTATION			
		Bituminous Surface Treatment	17,049
		Bridges	9,860
		Capital Highway Construction	28,850
		Caughdenoy Road / NYS Route 31 Road Improvements	11,000
		Cold Mix Bituminous Paving	29,580
		Guide Rail	3,420
		Repaving Program (Hot Mix Bituminous)	71,630
		Testing, Drainage and Facilities Repair	2,784
		Traffic Systems Management	2,160
		County Road Total	\$ 176,333
		County Wide Total	\$ 292,259

Countywide Funds

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

County Wide

SOURCE OF FUNDS	2022	2023	2024	2025	2026	2027	6yr Total
Pay as You Go	5,516	7,717	11,098	13,489	15,901	18,152	71,873
Borrowing to be Authorized	28,062	35,299	25,195	16,915	6,295	4,770	116,536
Federal Aid	41,125	7,736	3,200	2,000	2,000	2,000	58,061
State Aid	8,673	14,156	5,740	5,740	5,740	5,740	45,789
TOTALS	\$83,376	\$64,908	\$45,233	\$38,144	\$29,936	\$30,662	\$292,259

Estimated Debt Service

Payment Schedule (\$ in 000's)

County Wide

General Fund

FACILITIES MANAGEMENT

	2022	2023	2024	2025	2026	2027
Facilities Various Capital Improvements	0	241	699	833	879	924
Oncenter Rehabilitations	0	26	69	110	151	191
Community Plaza Garage	0	0	90	145	142	139
Courthouse - HVAC Renovations	0	0	105	428	878	1,191
Community Plaza and Walks Renovations	0	16	41	39	38	37
Department Total	0	283	1,004	1,555	2,088	2,482

DEPARTMENT OF CORRECTIONS

	2022	2023	2024	2025	2026	2027
Physical Plant Improvements and Security Upgrades	0	0	31	60	59	57
Department Total	0	0	31	60	59	57

COUNTY CLERK (RECORDS DEPT)

	2022	2023	2024	2025	2026	2027
Records Digitalization	0	19	49	47	46	45
Department Total	0	19	49	47	46	45

EMERGENCY COMMUNICATIONS

	2022	2023	2024	2025	2026	2027
OCICS Radio Fleet Template Refresh (NEW)	0	23	60	58	57	55
Tower Site Shelter Rehabilitation	0	0	57	111	108	106
Department Total	0	23	117	169	165	161

OFFICE OF ENVIRONMENT

	2022	2023	2024	2025	2026	2027
Ash Tree Management	0	28	151	271	387	499
Department Total	0	28	151	271	387	499

PARKS & RECREATION DEPT.

	2022	2023	2024	2025	2026	2027
Oneida Shores Park Shoreline Rehabilitation	0	5	15	33	45	44
Parks Various Infrastructure Rehabilitation and	0	141	605	1,013	1,142	1,197
Lights on the Lake Storage Facility	0	0	19	38	37	36
Build an African Savannah Exhibit	0	0	26	386	598	586
Veterans Cemetery Lawn Crypts	0	53	102	99	97	95
Zoo Mechanical Systems and Roofs Replacement	0	105	308	402	393	383
Carpenters Brook Fish Hatchery Building Replacement	0	0	5	48	72	71
Oneida Shores Facility Upgrade	0	0	14	27	56	71
Long Branch Park Improvements	0	53	102	99	97	95
Department Total	0	357	1,196	2,145	2,537	2,578

Countywide Funds

Estimated Debt Service

Payment Schedule (\$ in 000's)

SHERIFF POLICE/CIVIL

	2022	2023	2024	2025	2026	2027
Radio Replacement (NEW)	0	184	534	617	601	585
Department Total	0	184	534	617	601	585
General Fund Total	0	894	3,082	4,864	5,883	6,407

County Road

TRANSPORTATION

	2022	2023	2024	2025	2026	2027
Bridges	0	68	179	292	409	528
Capital Highway Construction	0	73	212	317	371	403
Guide Rail	0	0	0	0	0	0
Testing, Drainage and Facilities Repair	0	0	0	0	0	0
Bituminous Surface Treatment	0	0	0	0	0	0
Traffic Systems Management	0	18	54	89	124	159
Repaving Program (Hot Mix Bituminous)	0	242	657	980	1,214	1,365
Caughdenoy Road / NYS Route 31 Road Improvements	0	26	77	363	869	1,101
Cold Mix Bituminous Paving	0	89	233	312	366	412
Department Total	0	516	1,412	2,353	3,353	3,968

Library

ONONDAGA COUNTY PUBLIC LIBRARY

	2022	2023	2024	2025	2026	2027
Petit Branch Library addition and improvements	0	50	81	79	77	76
Mobile Library Outreach	0	14	35	34	33	32
Department Total	0	64	116	113	110	108

Community College

ONONDAGA COMMUNITY COLLEGE

	2022	2023	2024	2025	2026	2027
Elevator Replacement and Upgrades/ Protection of the Infrastructure - Campus Wide	0	0	17	44	42	41
Site Improvements	0	0	275	708	690	671
Allyn Hall Upgrades and Improvements	0	0	71	116	113	111
Department Total	0	0	436	986	961	936

County Wide Total	0	1,474	5,046	8,316	10,307	11,419
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Countywide Funds

DEPARTMENT: COUNTY CLERK (RECORDS DEPT)

Project: Records Digitalization (NEW)

Purpose: Reduce Operating Costs/Efficiency, Community/Economic Development

Level of Development: Advanced

Project Description:

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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	360						360	360
TOTALS	0	360						360	360

Project Detail and Status:

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 have received two proposals (attached) for the cost of each project. They consist of \$238,000 for the mortgage project and \$122,000 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 fall 2021 we intend to seek legislative authorization to borrow \$360,000 and we intend to complete this project in 2022.

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-2022	2022	2023	2024	2025	2026	2027	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.

Countywide Funds

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 2021 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: EMERGENCY COMMUNICATIONS

Project: OCICS Radio Fleet Template Refresh (NEW)

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

Level of Development: Intermediate

Project Description:

This project will allow changes to be made to the templates that are programmed into Onondaga County radios (portables and mobiles) on the OCICS (Onondaga County Interoperable Communications System). The current templates were developed at the beginning of the OCICS project, over 10 years ago and have become outdated.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	442						442	442
TOTALS	0	442						442	442

Project Detail and Status:

This project will allow changes to be made to the templates that are programmed into Onondaga County radios (portables and mobiles) on the OCICS (Onondaga County Interoperable Communications System). The current templates were developed at the beginning of the OCICS project, over 10 years ago. Since that time we have learned from the past and have developed templates that are much more efficient in their layout. In addition, the Central New York Interoperable Communications Consortium (CNYICC), of which Onondaga is a part, has voted to make changes to the EVENT bank as well as changes to the way we assign Unit ID's (UID's) and other numbering protocols which bring us in line with State and Federal guidelines that were established after our system came on line. The E-911 Radio Division would work with representatives of our member agencies to make overall improvements in talk group layout and zone assignments using the experience we have gathered from the first 11 years of OCICS operation. These changes would include the ability for Law Enforcement to talk with Fire without the need to navigate away from their primary bank, eliminating instances of having unused or un-programmed channel assignments and removing the now unused LE Data talk group thereby eliminating the need to patch the 2 Data talk groups together. Encryption would be added to non-dispatch talkgroups in accordance with recommendations from the Commission on Accreditation for Law Enforcement Agencies (CALEA) and to enhance officer safety.

In fall 2021 we intend to seek legislative authorization for \$442,000 in debt to implement this project.

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	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 hill top locations and must be target hardened and continue to operate in the event of adverse conditions and/or utility failure. Some E911 radio towers require FCC/FAA mandated tower paint (aviation orange/white) that must be maintained within FCC/FAA specifications.

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

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

Countywide Funds

DEPARTMENT: FACILITIES MANAGEMENT

Project: Carnegie Library Rehabilitation

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

Level of Development: Advanced

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Federal Aid	0	2,365	1,736					4,101	4,101
TOTALS	0	2,365	1,736					4,101	4,101

Project Detail and Status:

OCFM will design and manage this project from concepts that have been developed over the last years. We will undertake a facelift to the finishes, keeping in kind with the historical character of the building. We will deliver open floor office environments for strategic departments we would relocate into this property.

We will need to expand on the HVAC system, the fire protection system, introduce a wireless network, and enhance security.

The plan will be designed in-house, saving money and time, and maintaining concept continuity. Structural modifications will not be needed. We intend to start construction in late 2021 and finish in late 2022. We will use \$4,101,000 in federal aid funds for construction.

Countywide Funds

DEPARTMENT: FACILITIES MANAGEMENT

Project: Community Plaza and Walks Renovations

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

Level of Development: Preliminary

Project Description:

The goal of this project is to renovate Community Plaza, building court yards and pedestrian paths, and the walks around the Everson Museum, also the sidewalks around the downtown complex, which are settled and severely cracked and uneven, leading to significant liability for both the County and the Everson Museum.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	1,357							0	1,357
Borrowing to be Authorized	0	300						300	300
TOTALS	1,357	300						300	1,657

Project Detail and Status:

The Community Plaza and the walks around the Everson Museum are approaching forty years of age, with only minor maintenance efforts over the last ten years. The reflecting pool has had several attempts at minor repairs that have proven temporary in nature. Many of the walks are settled and severely cracked and uneven. The Plaza and the Museum are a significant asset to our community and to the image of Syracuse, which makes this project all the more important in our efforts to promote our community.

Sidewalks around the War Memorial in particular and other miscellaneous areas have been in dire need of repairs. We have begun repairing these areas and are continuing to do so with the fund we have already received from past authorizations.

We intend to seek legislative authorization for \$300,000 in fall 2021.

Countywide Funds

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	250							0	250
Borrowing to be Authorized	0		1,710					1,710	1,710
TOTALS	250		1,710					1,710	1,960

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 2023 cost of \$1.71 million. If we use the same escalation factor on the initial estimate of \$2.85 million this figure would be \$3.75 million in 2022 money. In this case the savings are \$2.17 million.

We intend to seek legislative approval for construction funds in Fall 2022.

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-2022	2022	2023	2024	2025	2026	2027	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 million for construction in fall 2022.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	4,595	1,500	500	500	500	500	8095	8,095
Pay as You Go	380	470						470	850
Authorized Borrowing	9,405							0	9,405
Federal Aid		1,000						1,000	1,000
TOTALS	9,785	6,065	1,500	500	500	500	500	9,565	19,350

Project Detail and Status:

This is an ongoing project.

In October 2011 the County Legislature authorized \$3,860,000 to be used in 2012 on the following scope:

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

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

COURTHOUSE: \$50,000

We completed the Motor Control Center replacement project.

JUSTICE CENTER: \$413,000

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

PUBLIC SAFETY BUILDING: \$350,000

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

SHERIFF'S HEADQUARTERS: \$50,000

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

MULTIPLE BUILDINGS/EXTERIOR COMPLEX: \$800,000

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

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

The abatement project for floors 1, 2, 4, 5 and 6 was completed. This project was the first step of a multiple floor

rehabilitation project.

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

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 work space 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.

We intend to seek legislative authorization for \$4,595,000 in bonds and \$470,000 in cash for construction in fall 2021.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	4,500							0	4,500
Borrowing to be Authorized	500	500	500	500	500	500	500	3,000	3,500
State Aid	100							0	100
Federal Aid	0	5,000						5,000	5,000
TOTALS	5,100	5,500	500	500	500	500	500	8,000	13,100

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.

Countywide Funds

- 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 2021 we will seek legislative authorization for \$500,000 in bonds and use \$5,000,000 in federal aid to continue with the improvements mentioned above as well as some more improvements.

Countywide Funds

DEPARTMENT: OFFICE OF ENVIRONMENT

Project: Ash Tree Management

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

Level of Development: 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	525	525	525	525	525		2,625	2,625
Cash on Hand	250							0	250
Authorized Borrowing	3,525							0	3,525
TOTALS	3,775	525	525	525	525	525		2,625	6,400

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 \$525,000 in Fall 2021

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-2022	2022	2023	2024	2025	2026	2027	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 2021.

Countywide Funds

DEPARTMENT: ONONDAGA COUNTY PUBLIC LIBRARY

Project: Petit Branch Library addition and improvements

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

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	0	478						478	478
Borrowing to be Authorized	0	950						950	950
TOTALS	0	1,428						1,428	1,428

Project Detail and Status:

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

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

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

We are planning to seek \$477,454 from New York State Library Construction Aid. In addition we will seek bond authorization for \$949,796

We plan to seek Legislative authorization for these funds in October 2021

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Allyn Hall Upgrades and Improvements

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Preliminary

Project Description:

Complete the renovation of Allyn Hall.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	0		1,390					1,390	1,390
Borrowing to be Authorized	0		1,390					1,390	1,390
TOTALS	0		2,780					2,780	2,780

Project Detail and Status:

This project will complete the renovation of Allyn Hall including updating the existing locker rooms and restroom facilities, upgrading of the HVAC system, and the installation of a sprinkler system.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

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

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	0		323					323	323
Borrowing to be Authorized	0		323					323	323
TOTALS	0		646					646	646

Project Detail and Status:

Replace existing elevators with new, energy efficient units. Upgrade and enhance the software protection associated with College's e-mail and Phone servers currently housed in the Mawhinney Hall basement.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Infrastructure - Campus Wide

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

Level of Development: Preliminary

Project Description:

Various campus wide infrastructure enhancements.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	0		5,244					5,244	5,244
Borrowing to be Authorized	0		5,244					5,244	5,244
TOTALS	0		10,488					10,488	10,488

Project Detail and Status:

Provide for the addition and enhancement to various campus infrastructure items including the installation of a centralized emergency generator, installation of building kiosk system, update HVAC controls, campus lighting, technology upgrades, building access controls, and other various capital investment maintenance items.

Countywide Funds

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Site Improvements

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

Level of Development: Preliminary

Project Description:

Various campus site improvements and projects.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	0		1,359					1,359	1,359
Borrowing to be Authorized	0		1,359					1,359	1,359
TOTALS	0		2,718					2,718	2,718

Project Detail and Status:

Various campus site improvements and projects including: outdoor campus spaces, development of the overlook parking lot and upgrading the northeast part of campus.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		500	6,550				7,050	7,050
TOTALS	0		500	6,550				7,050	7,050

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 2023 and begin construction in 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 \$500,000 in fall 2022. These funds will be used for Engineering.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		100	750				850	850
TOTALS	0		100	750				850	850

Project Detail and Status:

In 2023 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. (\$100,000)

In 2024 we will construct the new hatchery building (\$750,000).

In Fall 2022 we intend to seek legislative authorization for \$100,000. 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-2022	2022	2023	2024	2025	2026	2027	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 2022 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 2021.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		370					370	370
TOTALS	0		370					370	370

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.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Long Branch Park Improvements

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

Level of Development: Advanced

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	1,350							0	1,350
Borrowing to be Authorized	0	1,000						1,000	1,000
TOTALS	1,350	1,000						1,000	2,350

Project Detail and Status:

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

Designs for the maintenance building, ADA compliant comfort station and parking lot are complete. The shelters were completed in the Spring of 2017. (\$296,000)

On December 17, 2019 Bond Resolution 219 authorized the Parks Department to spend \$1,000,000 for the construction of the maintenance building, ADA compliant comfort station and associated upgraded electrical service capacity for those buildings in 2020. This work was scheduled to begin in October 2020 after most of the Long Branch Park events are over.

Funding for the parking lot upgrades will be requested in fall 2021 for construction in 2022 at the amount of \$1,000,000.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		275	75	500			850	850
TOTALS	0		275	75	500			850	850

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 (\$75,000)

In 2023 we will perform a shoreline stabilization project at Muskrat Bay to eliminate the loss of land and shoreline due to erosion.(\$200,000)

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 (\$75,000)

In 2025 we will build the new combination restroom/changing room/office building (\$500,000)

In Fall 2022 we intend to seek legislative authorization for \$275,000 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	100	100	250				450	450
Authorized Borrowing	320							0	320
Cash on Hand	300							0	300
TOTALS	620	100	100	250				450	1,070

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 Fall 2021 after Labor Day.

In 2022 we plan to install a new pay gate for users of the boat launch. (\$100,000).

In 2023 we plan to install a fish weigh station that will be used for the many fishing tournaments that are held at Oneida Lake (100,000).

In 2024 we anticipate the need to repair/replace the retaining wall at the boat launch (250,000).

In fall 2021 we intend to seek legislative authorization for \$100,000 intended to fund the scope of 2022 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	2,685	6,315	1,985	1,000	600		12,585	12,585
Authorized Borrowing	3,955							0	3,955
TOTALS	3,955	2,685	6,315	1,985	1,000	600		12,585	16,540

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 includ250000
- ing 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)

Countywide Funds

- 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)
- 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)

Countywide Funds

- 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 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 Fall 2021 we intend to seek legislative authorization for \$2,685,000. These funds will be used in 2022 to complete the following:

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)

Countywide Funds

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)

In 2023 we plan to do the following:

Pratts Falls:

- Pratts Falls - Camp Brockway Kitchen Remodel. Camp Brockway is one of the County's most rented facilities for parties and banquets. This project will update the kitchen facilities. (\$45,000)

Beaver Lake:

- Restore "Lake House" at Beaver Lake for use in Parks Department Programs (\$100,000)
- Evaluate relocating Beaver Lake Concession Building and provide water, drainage and electric (\$10,000)

Highland Forest:

- Replace chlorination systems at Pratts Falls and Highland Forest with UV disinfectant system (\$20,000)

Jamesville Beach:

- New Jamesville Beach Shelter to replace aging point tent (\$85,000)

Onondaga Lake Park:

- Upgrade archery range pending Willow Bay beach study (\$100,000).
- Renovate Hiawatha Point Comfort Station which is outdated (\$160,000)

Paving:

- Pave the parking lots at Highland Forest Sledding Hill and maintenance area at Beaver Lake (\$400,000)
- Repave Jamesville Beach parking lot and driveways (\$450,000)

Countywide Funds

- Pave Oneida Shores office and maintenance compound (\$70,000)
- Repave various sections of the Highland Forest Main Road (\$310,000)
- Mill and repave OLP East Shore trail from Griffin Visitor Center to Old Concession building (approx. 2.6 mi.) (could be moved to 2022) (\$1,000,000)
- Pave the parking lot at the Griffin visitor center (\$675,000)

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. (\$80,000)

Oneida Shores:

- Repave Oneida Shores McKinley Shelter Parking Area and entry road and main entry road (\$275,000)

Highland Forest:

- Add equipment storage garage at Highland Forest to protect operating equipment (\$300,000)

Playgrounds:

- Add playground at Highland Forest and continue to replace and add playground structures and surfaces to various parks (\$500,000)

Veterans and Loomis Cemeteries:

- Build a maintenance and storage building at Veterans Cemetery (also include new single wall fuel tanks) (\$400,000)
- Veteran's Monument - Phase 2 to include; construction of a walkway and lighting. (\$40,000)

Zoo:

- Replace old heating boilers at the Rosamond Gifford Zoo (\$100,000)
- 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. (\$50,000)
- 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. (\$50,000)
- 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. (\$50,000)
- 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 (\$200,000)
- Lakeview Point Park:
- Install cameras, lights, HVAC, Water wheel, hydrant, other capital equipment (\$100,000)

Lakeview Point Park:

- Pave the 270,000 square foot Employee Lot (\$653,400)

Countywide Funds

- Pave the 1/2 mile long Crucible Steel loop (\$92,000)

2023 Subtotal \$6,315,400

In 2024 we plan to do the following:

Beaver Lake:

- Replace Beaver Lake Septic Tank (\$100,000)

Jamesville Beach:

- Build a new reserve shelter to mitigate capacity constraints (\$125,000)
- Replace Sandpiper Shelter and Overlook deck at Jamesville Beach which are decaying (\$215,000)

Onondaga Lake Park:

- Convert former Onondaga Lake Park Concession building that is now empty to a reserved shelter space (\$325,000)

Playgrounds:

- Continue to replace and add playground structures and surfaces to various parks (\$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 (\$20,000).
- 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 weather proofing 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 (\$100,000).
- 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 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 (\$50,000).
- 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 (\$200,000).
- 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 (\$150,000).
- 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 (\$100,000).

Lakeview Point Park:

- Capital Maintenance of various infrastructure components (\$100,000)

Countywide Funds

2024 Subtotal \$1,985,000

In 2025 we plan to do the following:

Playgrounds:

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

Zoo:

- Move the bear exhibit and support building to trails location. In order to bring our bear exhibit up to modern zoological standards. (\$200,000)
- Construct a Zoo Storage Building/Warehouse for its various equipment, supplies, and vehicles which are stored outside and exposed to the elements. An indoor storage facility would allow zoo staff to reduce waste, improve safety through organization, and increase longevity of vehicles by keeping them inside.(\$200,000)

Lakeview Point Park:

- Capital Maintenance of various infrastructure components (\$100,000)

2025 Subtotal \$1,000,000

In 2026 we plan to do the following:

Playgrounds:

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

Lakeview Point Park:

- Capital Maintenance of various infrastructure components (\$100,000)

2026 Subtotal \$600,000

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Veterans Cemetery Lawn Crypts

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

Level of Development: Advanced

Project Description:

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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	1,000						1,000	1,000
Pay as You Go	100							0	100
TOTALS	100	1,000						1,000	1,100

Project Detail and Status:

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.

We plan to seek legislative authorization for \$1,000,000 in fall 2021.

Countywide Funds

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Zoo Mechanical Systems and Roofs Replacement (NEW)

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

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	2,000	2,000					4,000	4,000
TOTALS	0	2,000	2,000					4,000	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.

We intend to seek legislative authorization for \$2,000,000 in fall 2021. 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.

Countywide Funds

DEPARTMENT: SHERIFF POLICE/CIVIL

Project: Radio Replacement (NEW)

Purpose: Public/Employee Safety/Health

Level of Development: Advanced

Project Description:

The Onondaga County Sheriff's Office plans 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. The Sheriff's Office seeks funding to replace all portable radios in 2022 and all mobile and control station radios in 2023.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	3,510	1,155					4,665	4,665
TOTALS	0	3,510	1,155					4,665	4,665

Project Detail and Status:

In 2008 the Onondaga County Legislature authorized bonding to pay for the infrastructure and subscriber radios for the Onondaga County Interoperable Communications System (OCICS), a common platform trunked radio system for use by all public safety agencies operating within Onondaga County. In 2009, the County purchased subscriber radios for all public safety agencies, including the Sheriff's Office. By January of 2022, those radios (portables and mobiles) will be approximately 13 years old.

Approximately one year ago, the Sheriff's Office learned that the portable and mobile radios purchased in 2009 were deemed "end of life", and that repair parts were becomingly increasing unavailable. Since then, a growing number of radios are being returned from the radio shop or manufacturer factory depot as unserviceable. It is expected that the number of unserviceable radios will increase significantly in the coming years. To insure that law enforcement services are uninterrupted, the Sheriff's Office has developed a plan to replace all of the subscriber equipment (portables, mobiles, control stations, accessories) by the end of 2023.

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.

In fall 2021 we plan to seek legislative authorization for \$4,665,000.

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 with a dining hall. 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. 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	0	2,000						2,000	2,000
TOTALS	0	2,000						2,000	2,000

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.

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 8/27/21

We are anticipating starting construction at the beginning of 2022. The construction will be funded by state aid funds and will start only if the state funds are approved.

Countywide Funds

DEPARTMENT: TRANSPORTATION

Project: Bituminous Surface Treatment

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

Level of Development: Ongoing

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go		2,500	2,600	2,750	2,900	3,080	3,219	17,049	17,049
Borrowing to be Authorized	2339							0	2,339
TOTALS	2,339	2,500	2,600	2,750	2,900	3,080	3,219	17,049	19,388

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:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	1200	1,300	1,300	1,400	1,450	1,500	1,500	8,450	9,650
Pay as You Go	210	220	230	230	240	240	250	1,410	1,620
TOTALS	1,410	1,520	1,530	1,630	1,690	1,740	1,750	9,860	11,270

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:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	1450	1,385	1,350	800	400	400	400	4,735	6,185
State Aid	675	555	200	100	100	100	100	1,155	1,830
Federal Aid	8500	7,760	6,000	3,200	2,000	2,000	2,000	22,960	31,460
TOTALS	10,625	9,700	7,550	4,100	2,500	2,500	2,500	28,850	39,475

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	530							0	530
Borrowing to be Authorized	0	500	500	5,000	5,000			11,000	11,000
TOTALS	530	500	500	5,000	5,000			11,000	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 Investment

Level of Development: Ongoing

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	971	1,700	1,150	500	680	400		4,430	5,401
Pay as You Go		500	900	2,100	2,300	3,000	3,950	12,750	12,750
State Aid	2140	1,700	2,140	2,140	2,140	2,140	2,140	12,400	14,540
TOTALS	3,111	3,900	4,190	4,740	5,120	5,540	6,090	29,580	32,691

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:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go		520	540	560	580	600	620	3,420	3,420
Borrowing to be Authorized	500							0	500
TOTALS	500	520	540	560	580	600	620	3,420	3,920

Project Detail and Status:

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

Countywide Funds

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:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
State Aid	3474	3,940	3,500	3,500	3,500	3,500	3,500	21,440	24,914
Pay as You Go		870	3,000	5,000	7,000	8,500	9,620	33,990	33,990
Borrowing to be Authorized	3700	4,600	3,600	3,000	2,000	1,500	1,500	16,200	19,900
TOTALS	7,174	9,410	10,100	11,500	12,500	13,500	14,620	71,630	78,804

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 Investment

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:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	425	436	447	458	469	481	493	2,784	3,209
Authorized Borrowing	75							0	75
TOTALS	500	436	447	458	469	481	493	2,784	3,284

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 Investment

Level of Development: Ongoing

Project Description:

This program addresses Traffic System improvements on County highways.

Project Cost Summary:

FUNDING SOURCE:	2021	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	340	350	350	360	360	370	370	2,160	2,500
TOTALS	340	350	350	360	360	370	370	2,160	2,500

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.

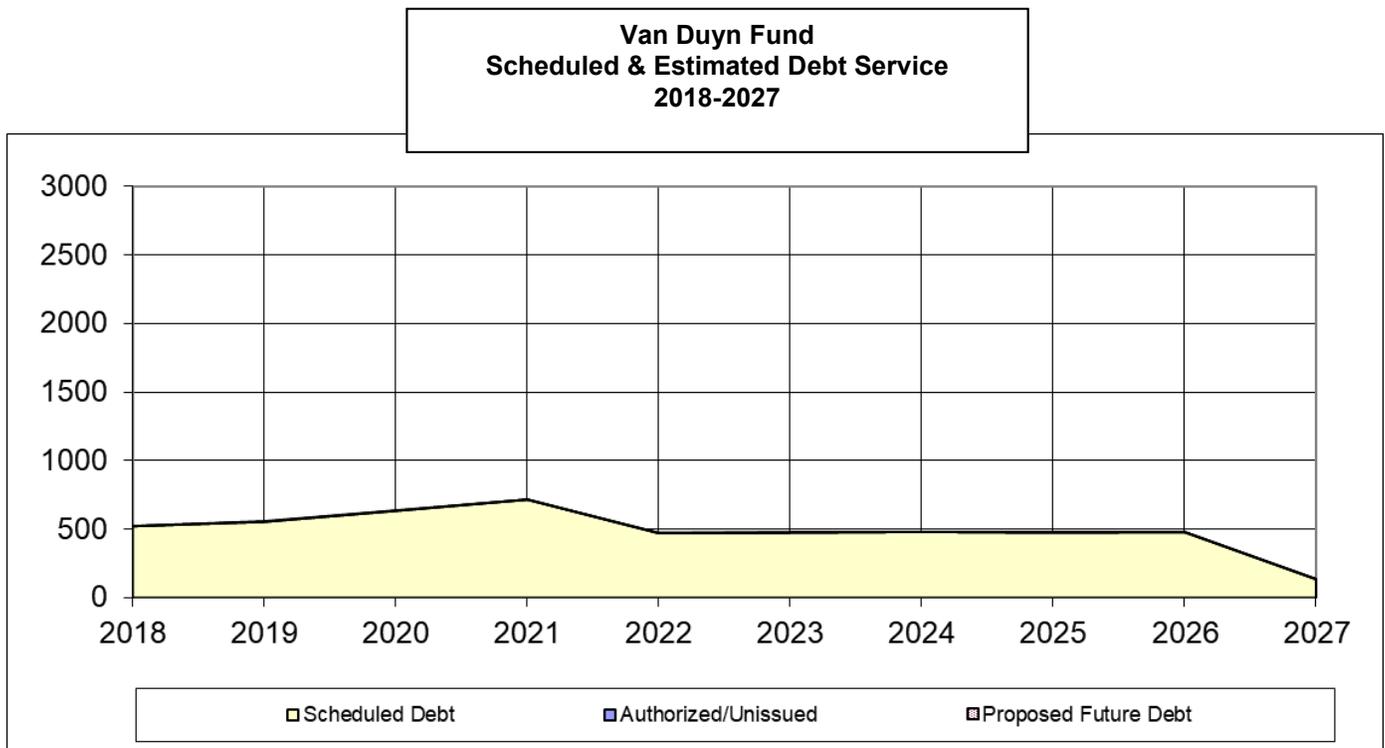
The Department is constantly working to acquire Federal and State funds to supplement this program.

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 2022-2027 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>	2017	2018	2019	2020	2021	2022	2023	2024
Principal & Interest								
<u>Scheduled Debt</u>	475	481	473	764	456	446	435	0
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	475	481	473	764	456	446	435	0
	2025	2026	2027	2028	2029	2030	2031	2032
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							
	2033	2034	2035	2036	2037	2038	2039	2040
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							
	2041	2042	2043	2044	2045	2046	2047	TOTAL
Principal & Interest								
<u>Scheduled Debt</u>	0	0	0	0	0			
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0			
<i>Proposed Future Debt</i>								
Total	0	881						

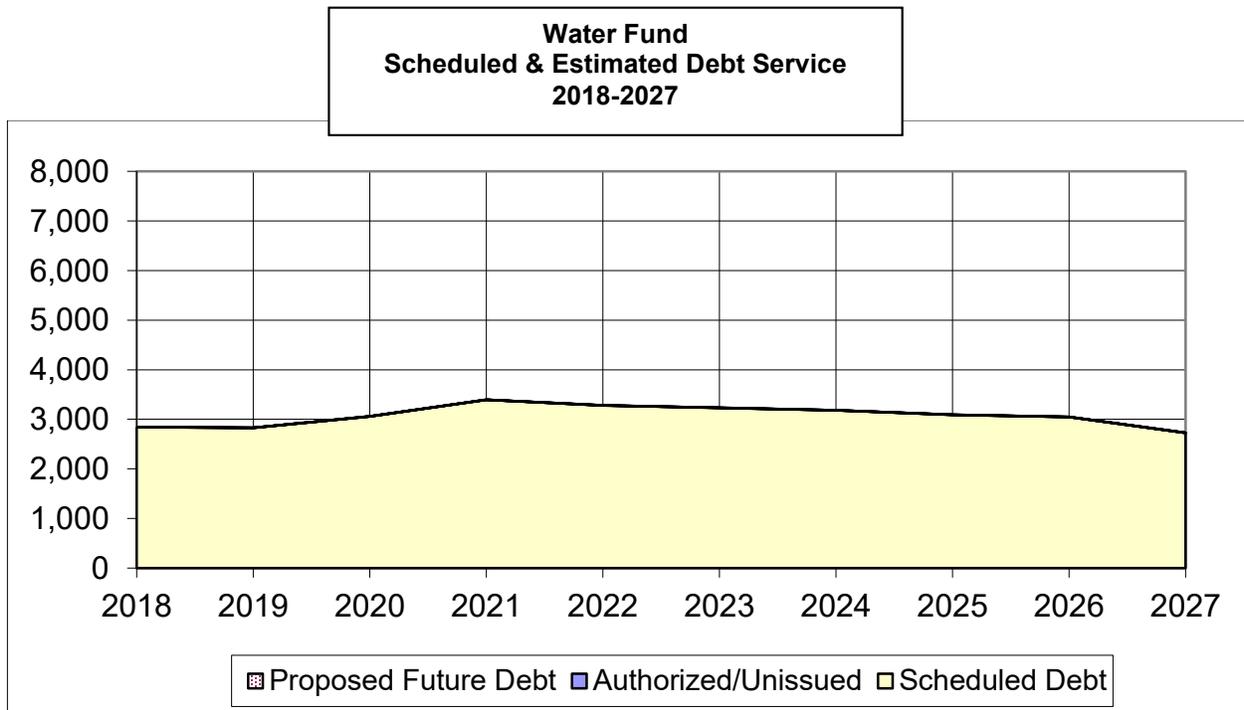
Special Districts

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

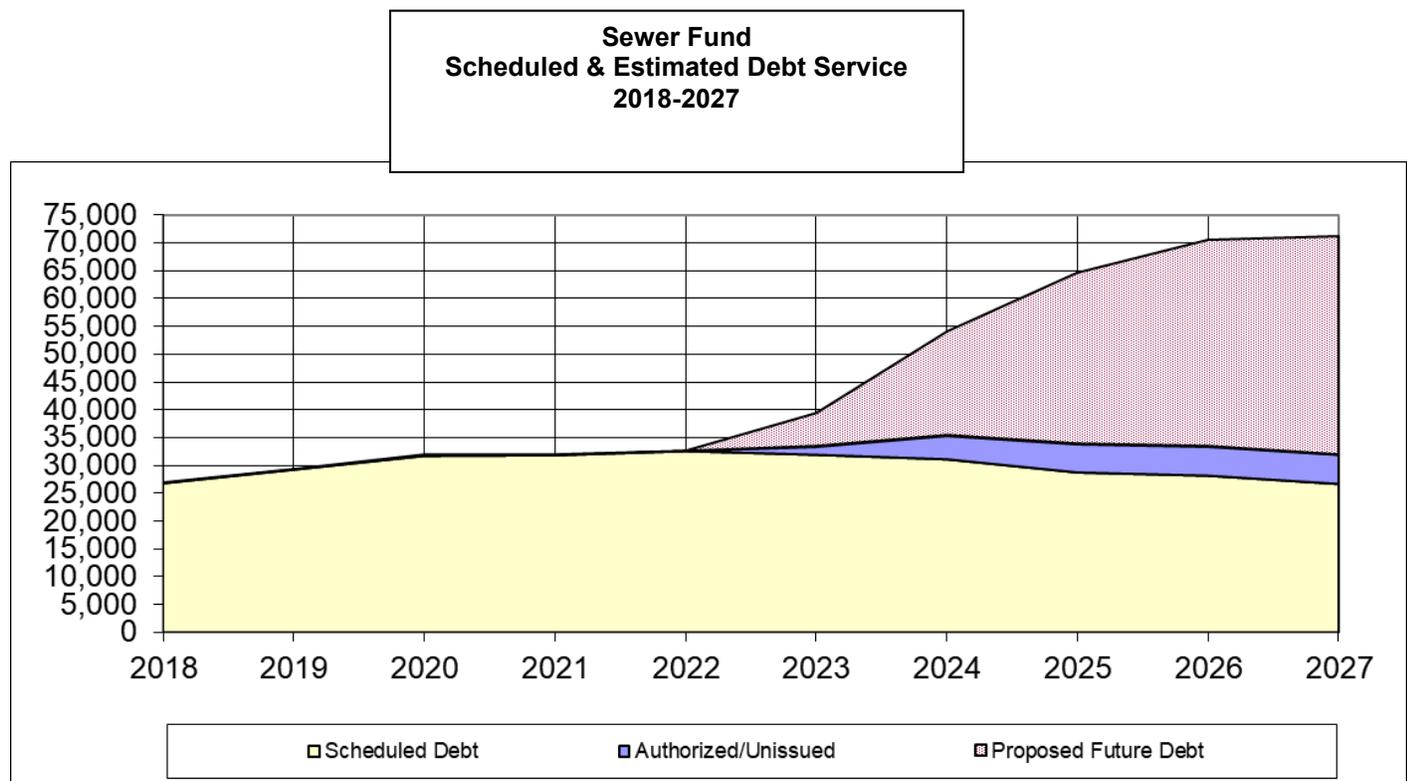
<i>Payments in (\$000's)</i>	2017	2018	2019	2020	2021	2022	2023	2024
Principal & Interest								
<u>Scheduled Debt</u>	2,729	2,844	2,829	3,058	3,395	3,282	3,231	3,183
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	2,729	2,844	2,829	3,058	3,395	3,282	3,231	3,183
	2025	2026	2027	2028	2029	2030	2031	2032
Principal & Interest								
<u>Scheduled Debt</u>	3,091	3,048	2,728	2,526	2,543	2,457	2,351	2,306
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	3,091	3,048	2,728	2,526	2,543	2,457	2,351	2,306
	2033	2034	2035	2036	2037	2038	2039	2040
Principal & Interest								
<u>Scheduled Debt</u>	2,057	1,259	1,022	640	570	403	261	103
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	0	0
<i>Proposed Future Debt</i>								
Total	2,057	1,259	1,022	640	570	403	261	103
	2041	2042	2043	2044	2045	2046	2047	TOTAL
Principal & Interest								
<u>Scheduled Debt</u>	103	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	103	0	0	0	0	0	0	37,164

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>	2017	2018	2019	2020	2021	2022	2023	2024
Principal & Interest <u>Scheduled Debt</u>	29,794	26,802	29,245	31,720	31,831	32,583	31,925	31,110
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	0	0	0	0	0	0	1,418	4,190
<i>Proposed Future Debt</i>	0	0	0	0	0	0	5,935	18,762
Total	29,794	26,802	29,245	31,720	31,831	32,583	39,278	54,062
	2025	2026	2027	2028	2029	2030	2031	2032
Principal & Interest <u>Scheduled Debt</u>	28,735	28,161	26,670	24,852	23,834	23,504	22,751	21,670
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	5,058	5,183	5,242	4,712	4,513	4,381	4,314	4,314
<i>Proposed Future Debt</i>	30,972	37,271	39,405	41,184	41,459	40,541	39,625	38,710
Total	64,765	70,615	71,317	70,748	69,806	68,426	66,690	64,694
	2033	2034	2035	2036	2037	2038	2039	2040
Principal & Interest <u>Scheduled Debt</u>	21,087	20,181	19,254	17,658	15,184	14,258	10,038	7,667
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	4,314	4,314	4,314	4,314	4,314	4,314	4,314	4,314
<i>Proposed Future Debt</i>	37,790	36,875	35,956	35,038	34,120	33,203	32,284	31,367
Total	63,191	61,370	59,524	57,010	53,618	51,775	46,636	43,348
	2041	2042	2043	2044	2045	2046	2047	TOTAL
Principal & Interest <u>Scheduled Debt</u>	7,606	5,350	5,278	5,210	0			
<u>Estimated Debt</u>								
<i>Authorized & Unissued</i>	4,314	4,314	1,201	0	0			
<i>Proposed Future Debt</i>	30,449	29,534	28,617	22,048	12,609	5,773	3,085	742,612
Total	42,369	39,198	35,096	27,258	12,609	5,773	3,085	1,274,844

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.

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

Special Funds

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

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 - 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)

Special Funds

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

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)

Special Funds

- Onondaga Creek FCF (5/1/01-7/31/02 for \$.7M)
- West Street Sewer Separation (5/1/99-12/15/99 for \$2.7M)
- Erie Boulevard Storage (3/1/01-7/31/02 for \$2.7M)
- Biosolids Handling Improvements (1/1/04-6/30/07 for \$14.8M)
- Harbor Brook In-stream FCF (10/31/00-7/31/02 for \$.9M)
- Advanced Phosphorous Removal Pilot phase I, II & III (2/1/00 for \$4.1M)
- Clinton Storage
- Lower Harbor Brook Conveyances and Storage
- Sewer Separation 022/045
- Midland 044 Conveyances.
- 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 (11/18/01-12/31/18 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.

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

Special Funds

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

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 Solvay.

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

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.

Special Funds

SPECIAL DISTRICTS PROPOSED PROJECTS SUMMARY

Special Funds

Department	STATUS	PROJECT	2022 - 27 Total
Drain & San			
WATER ENVIRONMENT PROTECTION			
	new	Baldwinsville Seneca Knolls and Oak Orchard WWTP Oxygen System Replacement (NEW)	10,000
		Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	27,720
		Camillus Force Main Replacement	10,000
	new	Comprehensive Asset Renewal at Baldwinsville WWTP (NEW)	4,236
	new	Comprehensive Asset Renewal at Brewerton WWTP (NEW)	3,120
	new	Comprehensive Asset Renewal at Meadowbrook Limestone WWTP (NEW)	13,576
	new	Comprehensive Asset Renewal at Metro WWTP (NEW)	2,545
	new	Comprehensive Asset Renewal at Oak Orchard WWTP (NEW)	1,727
	new	Comprehensive Asset Renewal at Wetzell Rd. WWTP (NEW)	1,605
		Davis Rd Pump Station and Forcemain Improvements	16,000
	new	Department Wide Building and Site improvements (NEW)	13,819
	new	Department Wide Mechanical, Electrical and Process Improvements (NEW)	17,849
		Harbor Brook Miscellaneous Culvert and Channel Improvements	400
		Ley Creek/Liverpool Force Main Rehabilitation/Replacement Project	29,230
	new	Meadowbrook Limestone & Brewerton WWTP - Drum Replacement (NEW)	2,396
	new	Meadowbrook-Limestone WWTP Fine Screen Replacement (NEW)	1,000
	new	Meadowbrook-Limestone WWTP Large Scale Upgrade (NEW)	4,600
		Metro WWTP 1978 Plant Annex Asset Renewal - Phase I	30,712
		Metropolitan (Metro) Wastewater Treatment Plant - Thickener Rehabilitation	1,000
		Oak Orchard Wastewater Treatment Plant Major Upgrade Project	250,000
		Oak Orchard WWTP Secondary Clarifier Rehabilitation	7,273
	new	Route 81, Sanitary Sewer Betterments (NEW)	15,400
		Sewer Consolidation	105,350
		Wastewater Transportation System Improvements	15,085
		White Pine Industrial Park Conveyances	16,000
Sewer Total			\$ 600,643

SPECIAL DISTRICTS FUNDING SOURCES

Sewer

SOURCE OF FUNDS	2022	2023	2024	2025	2026	2027	6yr Total
Special District Tax	5,831	8,394	8,464	8,729	9,067	10,280	50,765
Authorized Borrowing	18,516	7,022	118				25,656
Borrowing to be Authorized	113,005	174,374	128,426	49,985	23,649	34,783	524,222
TOTALS	\$137,352	\$189,790	\$137,008	\$58,714	\$32,716	\$45,063	\$600,643

SPECIAL DISTRICTS ESTIMATED DEBT SERVICE

Estimated Debt Service

Payment Schedule (\$ in 000's)

WATER ENVIRONMENT PROTECTION

	2022	2023	2024	2025	2026	2027
Harbor Brook Miscellaneous Culvert and Channel	0	0	11	17	17	16
Baldwinsville Seneca Knolls WWTP Disinfection and	0	0	131	444	582	570
Ley Creek/Liverpool Force Main	0	0	379	1,099	1,900	2,188
Metropolitan (Metro) Wastewater Treatment Plant -	0	53	85	83	82	80
Davis Rd Pump Station and Forcemain Improvements	0	252	692	1,163	1,334	1,306
Metro WWTP 1978 Plant Annex Asset Renewal - Phase	0	0	72	861	1,836	2,128
Sewer Consolidation	0	192	1,187	2,773	4,490	6,257
Oak Orchard Wastewater Treatment Plant Major	0	4,043	12,583	19,230	20,779	20,342
Route 81, Sanitary Sewer Betterments (NEW)	0	578	935	916	1,128	1,251
White Pine Industrial Park Conveyances	0	420	1,100	1,346	1,318	1,290
Wastewater Transportation System Improvements	0	66	316	444	435	426
Camillus Force Main Replacement	0	0	368	753	838	820
Meadowbrook Limestone WWTP Fine Screen	0	53	85	83	82	80
Department Wide Building and Site improvements (NEW)	0	124	201	197	193	189
Department Wide Mechanical, Electrical and Process	0	112	181	178	174	170
Baldwinsville Seneca Knolls and Oak Orchard WWTP	0	0	0	263	688	841
Comprehensive Asset Renewal at Baldwinsville WWTP	0	0	0	0	0	0
Comprehensive Asset Renewal at Brewerton WWTP	0	0	0	139	225	220
Comprehensive Asset Renewal at Meadowbrook	0	0	100	161	158	241
Meadowbrook Limestone & Brewerton WWTP - Drum	0	0	105	170	166	163
Comprehensive Asset Renewal at Metro WWTP (NEW)	0	42	89	101	99	96
Comprehensive Asset Renewal at Oak Orchard WWTP	0	0	0	32	52	51
Comprehensive Asset Renewal at Wetzel Rd. WWTP	0	0	0	76	124	121
Oak Orchard WWTP Secondary Clarifier Rehabilitation	0	0	142	443	571	559
Department Total	0	5,935	18,762	30,972	37,271	39,405

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Baldwinsville Seneca Knolls and Oak Orchard WWPT Oxygen System Replacement (NEW)

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

Level of Development: Intermediate

Project Description:

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-2022	2022	2023	2024	2025	2026	2027	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 Waste Water 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 eliminate the existing on-site PSA oxygen generation systems and associated infrastructure (piping and valves) at both the Baldwinsville Seneca Knolls WWTP and Oak Orchard WWTP and replace them with liquid oxygen delivered to and stored in tanks on site. The project will evaluate the possibility of contracting with a third party supplier that will be responsible for owning, operating and maintaining the liquid oxygen storage tanks. This project will also replace the 40 year old oxygen piping and valves as well as replace the original analog instruments and controls which are difficult to maintain with modern digital controls. 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 authorization for \$10,000,000 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		2,500	4,400				6,900	6,900
Pay as You Go	1,150							0	1,150
Authorized Borrowing	16,760	15,600	5,220					20,820	37,580
TOTALS	17,910	15,600	7,720	4,400				27,720	45,630

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. It is anticipated that the design and regulatory approval for the odor control component will be completed circa April 2021, with construction to start September 2021. For the second component, asset renewal, it is anticipated that design and regulatory approval will be completed circa October 2021 with construction starting in February 2022.

It is anticipated that legislative approval will be sought in winter 2022 for approximately \$6.9 million in bonding for construction of the 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		7,000	3,000				10,000	10,000
Authorized Borrowing	3,500							0	3,500
Pay as You Go	600							0	600
TOTALS	4,100		7,000	3,000				10,000	14,100

Project Detail and Status:

The 7 mile long 24 inch diameter Camillus force main conveys wastewater from the Town of Camillus and Village of Camillus to the Westside pump station located on the shore of Onondaga Lake. The force main has failed several times over the past 4 years releasing raw sewage to the ground and Nine Mile creek which is a recreational resource in Onondaga County. The length of the force main and the chemical make-up of the wastewater has accelerated the degradation of this asset. An internal assessment of the pipe line using "Smart ball" technology indicated numerous pipe line anomalies that may indicate that the pipe line has a high probability of failure.

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.

Phase II is anticipated for design in 2021, with a subsequent bonding authorization request anticipated in October 2022 for construction in 2023-2024.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Baldwinsville WWTP (NEW)

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0					646		646	646
Borrowing to be Authorized	0						3,590	3,590	3,590
TOTALS	0					646	3,590	4,236	4,236

Project Detail and Status:

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

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

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

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

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

In fall 2025 we intend to seek legislative authorization for \$646,000 in cash to fund the 2026 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Brewerton WWTP (NEW)

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0		476					476	476
Borrowing to be Authorized	0			2,644				2,644	2,644
TOTALS	0		476	2,644				3,120	3,120

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 \$476,000 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 \$2,644,000 (subject to update after the engineering is done) for construction on the following scope:

1. Clarifier Rehabilitation Project.

In fall 2022 we intend to seek legislative authorization for \$476,000 in cash to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Meadowbrook Limestone WWTP (NEW)

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0			128	709			837	837
Borrowing to be Authorized	0		1,897			1,649	9,193	12,739	12,739
Cash on Hand	400								400
TOTALS	400		1,897	128	709	1,649	9,193	13,576	13,976

Project Detail and Status:

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

In 2022 we plan to spend \$400,000 for study and engineering on the following scope:

1. Aeration System Improvements and Asset Renewal.

We will pay the cost of this component (\$400,000 in cash) with existing funds and we are not asking for new funds.

In 2023 we plan to spend \$1,897,000 (subject to update after the engineering is done) for construction on the following scope:

1. Aeration System Improvements and Asset Renewal.

In 2024 we plan to spend \$128,000 for engineering 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 2025 we plan to spend \$709,000 (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.

Special Funds

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

1. Influent Building & Grit System Improvements and Rehabilitation.

In 2027 we plan to spend \$9,193,000 (subject to update after the engineering is done) on the following scope:

1. Influent Building & Grit System Improvements and Rehabilitation (\$9,158,000 construction).
2. Secondary Clarifier Electrical & Control Improvements (\$35,000 engineering).

In fall 2022 we intend to seek legislative authorization for \$1,897,000 in bonds to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Metro WWTP (NEW)

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0			345	100	900		1,345	1,345
Borrowing to be Authorized	0	800	400					1,200	1,200
Cash on Hand	30								30
TOTALS	30	800	400	345	100	900		2,545	2,575

Project Detail and Status:

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

In 2022 we plan to spend \$830,000 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 in hand.
2. Aeration Air flow 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 # 1 (\$250,000 in debt)
3. Rehabilitation of Secondary Effluent Pump # 4 (\$250,000 in debt)

In 2023 we plan to spend \$400,000 for construction on the following scope:

1. Rehabilitation of Secondary Effluent Pump # 3 (\$250,000)
2. Mixer replacement in sludge blend building (\$100,000)
3. Aeration air flow replacement (\$50,000)

Special Funds

In 2024 we plan to spend \$345,000 on the following scope:

1. Chemical B - Building and Chemical System Improvements (\$53,000 for engineering and \$292,000 for construction)

In 2025 we plan to spend \$100,000 on the following scope:

1. Centrifuge evaluation study.

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 2021 we intend to seek authorization for \$800,000 in bonds to fund the 2022 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Oak Orchard WWTP (NEW)

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Intermediate

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0		111				1,000	1,111	1,111
Borrowing to be Authorized	0			616				616	616
Cash on Hand	425								425
TOTALS	425		111	616			1,000	1,727	2,152

Project Detail and Status:

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

In 2022 we plan to spend \$425,000 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. **We will pay the cost of this component (\$425,000 in cash) with existing funds and we are not asking for new funds.**

In 2023 we plan to spend \$111,000 for engineering on the following scope:

1. Thickener tanks improvements. The rehabilitation will generally include miscellaneous concrete repair and replacement of all mechanical and electrical equipment.

In 2024 we plan to spend \$616,000 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.

In 2027 we plan to spend \$1,000,000 for engineering on the following scope:

1. Influent Area improvement.

In fall 2022 we intend to seek authorization for \$111,000 (in cash) to fund the 2023 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Comprehensive Asset Renewal at Wetzel Rd. WWTP (NEW)

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go				152				152	152
Borrowing to be Authorized				1,453				1,453	1,453
Cash on Hand	225								225
TOTALS	225			1,605				1,605	1,830

Project Detail and Status:

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

In 2022 we plan to spend \$225,000 (in cash) 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)

We will pay the cost of this component (\$225,000 in cash) with existing funds and we are not asking for new funds.

In 2024 we plan to spend \$1,605,000 on the following scope:

1. Primary clarifier and chemical bulk improvements (\$152,000 in cash for engineering and \$1,293,000 in bonds for construction)
2. Cloth Disc Media Filter (CDMF) cloth replacement (\$160,000 in bonds for construction)

In fall 2023 we intend to seek authorization for \$152,000 (in cash) and \$1,453,000 in bonds to fund the 2024 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

Budget Impact: (\$120,000)

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	774							0	774
Borrowing to be Authorized	0	4,800	5,400	5,800				16,000	16,000
TOTALS	774	4,800	5,400	5,800				16,000	16,774

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.

Special Funds

Cash funding was previously procured for the engineering portion of this project.

The first phase of this project will be the improvements at the Davis Rd. Pump Station site. This phase will be implemented in 2022 and 2023.

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 2024.

It is anticipated that legislative approval for bonding for the first phase will be sought in October 2021 for construction in the amount of \$10.2 million.

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 Waste Water Treatment Plants (WWTP) Regional Treatment Facilities (RTF), Pump Stations (PS) 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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0	2,506	1,743	1,415	1,046	495	4,244	11,449	11,449
Borrowing to be Authorized	0	2,370						2,370	2,370
TOTALS	0	4,876	1,743	1,415	1,046	495	4,244	13,819	13,819

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 in Confined Spaces
7. HVAC Systems
8. Network and Communication Systems
9. Site Security Systems
10. Paved Surfaces
11. Drainage systems.

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 plant level.

The following describes the scope and cost estimates for each of the six years of this Capital Improvement Plan.

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

Special Funds

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).

In 2023 we plan to spend \$1,743,000 (in cash) on the following scope:

1. Building rehabilitations on the 1st and 2nd floors of administration building at Metro WWTP (\$350,000 Construction).
2. Paving repairs and construction in the driveway and parking area at (HCMF) (\$350,000 construction)
3. Roofing repair and replacements at control building in Baldwinsville WWTP and existing gallery access

Special Funds

building at Metro WWTP (\$525,000 construction).

4. Fire suppression and safety alarm systems repairs, replacements and upgrades at MBLS and Wetzel Rd WWTP's server rooms and carbon monoxide alarm systems in various locations (\$150,000 construction).
5. HVAC systems replacements, upgrades and repairs at Metro (\$50,000 study) and Baldwinsville, Brewerton WWTP's (\$23,000 construction).
6. Safety systems in confined spaces will be upgraded and replaced in various locations (\$295,000 engineering and construction)

In 2024 we plan to spend \$1,415,000 (in cash) on the following scope:

1. Building rehabilitations and modifications related to consolidation needs, at HCMF. This work will include large scale HVAC upgrades (\$500,000 construction).
2. Overhead door replacement at I Building, Oak Orchard WWTP (\$30,000 construction)
3. Roofing repair and at Oak Orchard's B building east and west , Metro's gallery access building #2, Brewerton raw sewage PS and Hill Crest PS Building (\$605,000 construction).
4. 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 (\$280,000 construction).

In 2025 we plan to spend \$1,046,000 (in cash) on the following scope:

1. Overhead Doors replacements at Metro's Administration building (\$260,000 construction).
2. Roofing repair and replacements in various pump stations and Brewerton's chemical storage building (\$493,000 construction).
3. HVAC systems replacements, upgrades and repairs at Metro's low lift PS and various locations at Brewerton WWTP (\$293,000 construction).

In 2026 we plan to spend \$495,000 (in cash) on the following scope:

1. Overhead Doors replacements in various locations at Metro WWTP (\$90,000)
2. Roofing repair and replacements in various pump stations and Metro vehicle maintenance building (\$405,000 construction).

Special Funds

In 2027 we plan to spend \$4,244,000 (in cash) on the following scope:

1. Overhear Doors replacements in various locations at Metro and Oak Orchard WWTP's (\$300,000)
2. Roofing repair and replacements in various pump stations and various buildings at Metro WWTP (\$3,944,000 construction).

In 2021 we intend to seek legislative authorization for \$2,370,000 in cash and \$2,506,000 in bonds to fund the 2022 plan as indicated above.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Department-Wide Mechanical, Electrical & 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) Regional Treatment Facilities (RTF), Pump Stations (PS) 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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0	2,925	4,989	2,464	2,249	1,401	1,686	15,714	15,714
Borrowing to be Authorized	0	2,135						2,135	2,135
TOTALS	0	5,060	4,989	2,464	2,249	1,401	1,686	17,849	17,849

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)

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 we plan 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 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

Special Funds

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 \$4,989,000 (in cash) on the following scope:

1. Analytical Equipment replacement at the Henry Clay Laboratory. This scope will include Flow Injection Mercury System, Microwave Digestive System, and other equipment. (\$70,000 construction).

2. CBS and PBS systems replacements will include Burnet Ferrous Chloride Tanks Replacement and Baldwinsville West PS PBS Replacement (\$557,000 engineering and construction).

3. Electrical Equipment repairs and replacements in various locations at Baldwinsville, Brewerton and Oak Orchard (\$2,198,000 construction).

4. SCADA System renovations and upgrades at Baldwinsville, Oak Orchard and Metro WWTP's (\$925,000 engineering and construction).

5. Mechanical Equipment maintenance and replacements in various buildings at Baldwinsville, Metro, and various PS. (\$809,000 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 the cost of Procore Construction Management software and Expand Technology Application & Integration of SCADA Devices with Maximo - Phase 3 (\$130,000 construction).

Special Funds

In 2024 we plan to spend \$2,463,500 (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. (\$41,000 construction).
2. CBS and PBS systems replacements will include Baldwinsville Ferrous Chloride Tanks Replacement (\$265,500 engineering and construction).
3. Electrical Substation - transformers replacement at Baldwinsville WWTP (\$357,000 construction).
4. SCADA System renovations and upgrades at MBLS WWTP (\$945,000 engineering and construction).
5. Mechanical Equipment maintenance and replacements in Gaskin Rd PS as well as replacements of activated carbon filters in various facilities (\$400,000 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 the cost of Procore Construction Management software and Brewerton Service Area AM Update (\$155,000 construction).

In 2025 we plan to spend \$2,249,000 (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, 923Reagent Pump for Lachat, Spectrophotometer, UV-Visible, and other equipment. (\$148,000 construction).
2. CBS and PBS systems replacements will include Tanks Replacements at MBLS WWTP (\$126,000 engineering and construction).
3. Electrical Equipment repairs and replacements will include Influent pump VFD's, (1, 2, 3 and 4) at MBLS WWTP (\$120,000 construction).
4. SCADA System renovations and upgrades at Oak Orchard and Wetzel WWTP's (\$700,000 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 (\$700,000 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 the cost of Procore Construction Management software and Baldwinsville Service Area AM Update (\$155,000 construction).

Special Funds

In 2026 we plan to spend \$1,401,000 (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 (\$71,000 construction).
2. SCADA System renovations and upgrades will include the SCADA professional services contract and various equipment replacements in various facilities (\$475,000 engineering and construction).
3. Mechanical Equipment maintenance and replacements will include Clinton Storage Dewatering, Midland RTF Dewatering, and replacement of activated carbon filters in various facilities (\$400,000 construction).
4. Miscellaneous Engineering activities in various facilities will be funded this year (\$300,000 engineering).
5. Asset Management activities that will be funded this year include the cost of Procore Construction Management software and MBL Service Area AM Update (\$155,000 construction).

In 2027 we plan to spend \$1,686,000 (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 (\$55,000 construction).
2. Electrical Equipment repairs and replacements will include Influent pump VFD's, at Wetzel WWTP (\$200,000 construction).
3. SCADA System renovations and upgrades will include the SCADA Service Project and various equipment replacements in various facilities (\$475,000 engineering and construction).
4. Mechanical Equipment maintenance and replacements will include Henry Clay PS and replacement of activated carbon filters in various facilities (\$500,000 construction).
5. Miscellaneous Engineering activities in various facilities will be funded this year (\$300,000 engineering).
6. Asset Management activities that will be funded this year include the cost of Procore Construction Management software and Oak Orchard Service Area AM Update (\$155,000 construction).

In fall 2021 we intend to seek legislative authorization for \$2,925,000 in cash and \$2,135,000 in bonds to fund the 2022 plan as indicated above.

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:

Repair and rehabilitation of 110 year old culvert and channel sections within the Harbor Brook Drainage District. Project would include rehabilitation of the concrete wing walls near Delaware and Amy Streets and rehabilitation of selected culvert sections.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		200					200	200
Pay as You Go	0					200		200	200
Authorized Borrowing	400							0	400
TOTALS	400		200			200		400	800

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. This project will target the most deficient areas for rehabilitation.

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 continue doing more work on the Harbor Brook Dam, other culverts and channels that will be determined and prioritized in 2023.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	1,300	650	350					1,000	2,300
Borrowing to be Authorized	0		7,210	9,260	9,760			26,230	26,230
Pay as You Go	0					2,000		2,000	2,000
TOTALS	1,300	650	7,560	9,260	9,760	2,000		29,230	30,530

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.

A consulting engineer was hired in March of 2019.

It is anticipated that legislative approval for construction will be sought in October 2022, in the amount of \$26.3 million in debt.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Meadowbrook Limestone & Brewerton WWTP - Drum Replacement (NEW)

Purpose: Public/Employee Safety/Health, 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0	400						400	400
Borrowing to be Authorized	0		1,996					1,996	1,996
TOTALS	0	400	1,996					2,396	2,396

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.

At this point we intend to start with engineering design in 2022 (\$400,000) and continue with construction in 2023. As of now we have estimated the cost of construction to be \$1,996,000 but this cost will be updated after the engineering design is completed.

In fall 2021 we intend to seek authorization for \$400,000 (in cash) for engineering design.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Meadowbrook Limestone WWTP Fine Screen Replacement (NEW)

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

Level of Development: Advanced

Project Description:

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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Cash on Hand	750							0	750
Borrowing to be Authorized	0	1,000						1,000	1,000
TOTALS	750	1,000						1,000	1,750

Project Detail and Status:

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 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 on hand but we need more funds for construction and in fall 2021 we intend to seek legislative authorization for \$1,000,000 in debt.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Meadowbrook-Limestone WWTP Large Scale Upgrade (NEW)

Purpose: Public/Employee Safety/Health, 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Pay as You Go	0					2,300	2,300	4,600	4,600
Cash on Hand	300								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 storm water, known as infiltration and inflow (I/I) entering the sewer system. Groundwater (infiltration) seeps into sewer pipes through holes, cracks and faulty connections. Storm water (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.

We will pay the cost of this component (\$300,000 in cash) with existing funds and we are not asking for new funds.

In fall 2025 we intend to seek authorization for \$4,600,000 (in cash) 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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0		1,365	14,189	9,825			25,379	25,379
Authorized Borrowing	667	2,000	1,333					3,333	4,000
Pay as You Go					2,000			2,000	2,000
TOTALS	667	2,000	2,698	14,189	11,825			30,712	31,379

Project Detail and Status:

WEP is currently finalizing a comprehensive assessment and evaluation of Metro's 1978 annex infrastructure. 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.

It is anticipated that legislative approval will be sought in October 2022 for construction in the approximate amount of \$25.4 million in debt and \$2 million in cash.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Metropolitan (Metro) Wastewater Treatment Plant - Thickener Rehabilitation

Purpose: Maintain Existing Investment

Level of Development: Advanced

Project Description:

The project includes the replacement of mechanical and electrical equipment within the thickeners, concrete repair, hand railing systems and access platforms, and provides for the other ancillary improvements.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	3,729							0	3,729
Borrowing to be Authorized	0	1,000						1,000	1,000
TOTALS	3,729	1,000						1,000	4,729

Project Detail and Status:

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:

- 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 has been completed. It is expected that the project will be advertised for construction bids in September 2021 and that construction will be completed circa March 2023.

Due to COVID we will need \$1,000,000 more than anticipated in order to complete this project. We will seek authorization for this funds in fall 2021.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized		77,000	115,000	58,000				250,000	250,000
TOTALS		77,000	115,000	58,000				250,000	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.

It is anticipated that legislative approval for bonding will be pursued in second half of 2021 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 engineering design, in the amount of \$30 million, in fall 2021.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Authorized Borrowing	447	266	119	118				503	950
Borrowing to be Authorized	0		2,706	4,064				6,770	6,770
TOTALS	447	266	2,825	4,182				7,273	7,720

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 2022. It is anticipated that legislative approval will be sought in October 2022 for construction in the approximate amount of \$6.8 million.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	11,000			4,400			15,400	15,400
TOTALS	0	11,000			4,400			15,400	15,400

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 2022. 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 Storm Sewer. Construction of the Phase 1 portion of the I-81 project is expected to start construction in 2022. WEP betterment work that falls under Phase 2 of the I-81 project is the Burnet Trunk Sewer and CSO 080A Regulator Replacement Project. Construction of the Phase 2 portion of the I-81 project is expected to start construction in 2025.

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 \$15M for betterments that make sense to be done in this circumstance (ground is open, pipes are exposed, workforce and machinery is in place). The county was planning to do the work that now will cost \$15M anyhow, even if the I-81 project was not going to take place. The extra scope that will cost \$15M 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

Special Funds

Metro for treatment, saving the County approximately \$265,500 annually.

It is anticipated that legislative approval for \$11,000,000 will be sought in fall 2021. Most of these funds will be used for the phase 1 of construction and a small part for project oversight. The funds for phase 2 (\$4,400,000) will be requested in fall 2024.

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-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	0	3,650	16,700	20,000	21,000	22,000	22,000	105,350	105,350
Cash on Hand	1,450								1,450
TOTALS	1,450	3,650	16,700	20,000	21,000	22,000	22,000	105,350	106,800

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 plan to spend \$5,100,000 (in cash and debt), but we will only ask for \$3,650,000 (in debt) of new funds since we plan to use \$1,450,000 (in cash) of existing funds. The 2022 funds will be 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. The total project is estimated at \$5.5 million and will be spent from 2022-2024. 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 are not asking 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. Construction is anticipated for 2023-2024. The total project is estimated at \$6.8 million and will be spent from 2022-2024. 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 we are not asking 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 are not asking 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).

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 \$3,650,000 will be sought in fall 2021 to fund the projects planned for 2022

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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Borrowing to be Authorized	46,028	1,250	4,000					5,250	51,278
Pay as You Go	69,674		1,075	3,960	2,625	1,125	1,050	9,835	79,509
Authorized Borrowing		28,540						0	28,540
Cash on Hand		1,200						0	1,200
TOTALS	145,442	1,250	5,075	3,960	2,625	1,125	1,050	15,085	160,527

Project Detail and Status:

This project consists of three primary or categorical assets:

1. Pump station improvements,
2. Trunk sewer improvements, and
3. Facility maintenance improvements - including asset renewal measures/projects.

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.

In 2022 we plan to spend \$2,450,000, but we will only ask for \$1,250,000 (in debt) of new funds since we plan to use \$1,200,000 of existing funds. The 2022 funds will be spent on the following scope:

Pump Station Upgrade Program Assets:

Richmond Street, Sackett Street, Taylor Street engineering design. **We will pay the cost of this component (\$300,000) with existing funds (Cash on Hand) and we are not asking for new funds.**

Woodard Pump Station engineering design. **We will pay the cost of this component (\$600,000) with existing funds (Cash on Hand) and we are not asking for new funds.**

Belgium Pump Station Site Improvements, phase 1. **We will pay the cost of this component (\$300,000) with**

Special Funds

existing funds (Cash on Hands) and we are not asking for new funds.

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining - (\$1,000,000)

Manhole Repair (\$250,000)

In 2023 we plan to spend \$5,075,000 on the following scope:

Pump Station Upgrade Program Assets:

Lakeside Pump Station (\$1,000,000 in debt)

Woodard Pump Station Construction (\$3,000,000 in debt)

Belgium Pump Station Site Improvements, phase 2. (\$50,000 in cash)

Rehab / Painting (\$75,000 in cash)

Force Main Air Relief and Cathodic Protection

The project will involve the repair and/or replacement of air relief valves and cathodic protection equipment at various county owned pump station Force Mains. (\$150,000 in cash)

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining (\$500,000 in cash)

Manhole Repair (\$300,000 in cash)

In 2024 we plan to spend \$3,960,000 (in cash) on the following scope:

Pump Station Upgrade Program Assets:

Lakeside Pump Station (\$1,000,000)

Woodard Pump Station Construction (\$1,335,000)

Richmond Street, Sackett Street, Taylor Street (\$550,000)

Baldwinsville North, Baldwinsville South, Baldwinsville West, and Belgium

Rehab / Painting (\$75,000)

Force Main Air Relief and Cathodic Protection:

The project will involve the repair and/or replacement of air relief valves and cathodic protection equipment at various county owned pump station Force Mains. (\$150,000)

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining (\$500,000)

Manhole Repair (\$350,000)

Special Funds

In 2025 we plan to spend \$2,625,000 (in cash) on the following scope:

Pump Station Upgrade Program Assets:

Lakeside Pump Station (\$1,000,000)

Richmond Street, Sackett Street, Taylor Street (\$550,000)

Baldwinsville North, Baldwinsville South, Baldwinsville West, and Belgium Rehab / Painting (\$75,000)

Force Main Air Relief and Cathodic Protection:

The project will involve the repair and/or replacement of air relief valves and cathodic protection equipment at various county owned pump station Force Mains. (\$150,000)

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining - (\$500,000 in cash)

Manhole Repair (\$350,000 in cash)

In 2026 we plan to spend \$1,125,000 (in cash) on the following scope:

Pump Station Upgrade Program Assets:

Rehab / Painting (\$75,000)

Force Main Air Relief and Cathodic Protection:

The project will involve the repair and/or replacement of air relief valves and cathodic protection equipment at various county owned pump station Force Mains. (\$150,000)

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining - (\$500,000)

Manhole Repair (\$400,000)

In 2027 we plan to spend \$1,050,000 (in cash) on the following scope:

Force Main Air Relief and Cathodic Protection:

The project will involve the repair and/or replacement of air relief valves and cathodic protection equipment at various county owned pump station Force Mains. (\$150,000)

Trunk Sewer Network Upgrade Program Assets:

Sewer Lining - (\$500,000)

Manhole Repair (\$400,000)

In fall 2021 we will seek legislative authorization for \$1,250,000 in debt to fund the projects planned for 2022.

Special Funds

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: White Pine Industrial Park Conveyances

Purpose: Community/Economic Development

Level of Development: Advanced

Project Description:

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.

Project Cost Summary:

FUNDING SOURCE:	Pre-2022	2022	2023	2024	2025	2026	2027	6yr Total	Total:
Cash on Hand	1,600								1,600
Borrowing to be Authorized	0	8,000	8,000					16,000	16,000
TOTALS	1,600	8,000	8,000					16,000	17,600

Project Detail and Status:

The White Pine Industrial Park is a 450+ -acre industrial zoned site located along Route 31 and Caughdenoy Road in the Town of Clay, northern Onondaga County. Its size, location, and significant utility capacity (rail, water, gas, electric, and telecom) position the site as the preferred location for manufacturing and technology fabrication production. Provision of public sewer service is one of the projects necessary to be completed before the site can receive formal "Shovel-Ready Certification" from the State of New York. "Shovel-Ready" is a national pre-permitting standard, widely recognized by national site selectors and corporate real estate executives as the reliable third-party verification of a site's readiness for significant investment. Other requirements, such as the completion of the NYS Draft Environmental Impact Statement and on-site wetland mitigation and betterment, are being managed by the property owner, the Onondaga County Industrial Development Agency, concurrently with the design and installation of the sewer infrastructure. The sewer conveyance system will also prepare adjacent properties for future development.

The sanitary sewer service project is estimated to cost \$17.6 million and will consist of an 8 MGD pumping station and approximately 20,500 feet in length, 24" PVC sanitary forced pressure main that will be routed to the Oak Orchard Wastewater Treatment Plant that is located along the Oneida River in the Town of Clay. The project was initiated under OCIDA, with a consultant completing the preliminary design of the proposed force main routing.

Legislative approval for \$1,600,000 for the remainder of engineering services, including final force main and pump station design, was requested and obtained in summer 2020. Construction is anticipated in 2022-2023 to support economic development plans.

In fall 2021 we plan to seek legislative authorization, in the amount of \$16M, for construction.

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.

Glossary

Capital Notes On all borrowings, except WEP and Water Fund, where the P.P.U. exceeds five years the county is required, by Finance Law, to fund five percent of the total cost in the form of cash prior to the issuance of debt. The county is allowed to borrow this amount in the form of short-term notes known as Capital Notes. Capital Notes may be issued for up to twelve months and can be renewed once (by resolution). Capital Notes are also occasionally issued for emergency sewer repairs.

Capital Outlay Expenditures for equipment, vehicles, or machinery that results in the acquisition of or addition to fixed assets.

Cash Capital See 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.

Glossary

Onondaga County Legislature The County Legislature consists of seventeen elected members and constitutes the legislative, appropriating, policy determining, and governing body of the County of Onondaga.

Operating Budget The portion of the budget that pertains to daily operations and provides basic governmental services. The operating budget contains appropriations for such expenditures as personnel, supplies, utilities, materials, travel, and fuel.

Other Sources The financing of projects from sources other than tax supported, Federal and/or State Aid (i.e. private funds, fees).

Pay-As-You-Go The strategic use of tax revenues to finance projects in an effort to reduce the issuance of debt and the related interest costs, i.e. use of tax revenues to finance annually recurring projects.

Period of Probable Usefulness (PPU) The maximum period of time available, by law, to repay indebtedness. PPU's for various types of projects are mandated by Local Finance Law, and range between 3 and 40 years.

Principal The par value or face value of a bond, note, or other fixed amount security, excluding accrued interest.

Renewals Bond Anticipation Notes (BANs) and Capital Notes are short-term borrowings, one year or less, that have to be renewed or paid off at maturity. A renewal is the 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.

Glossary

State Aid The financing of eligible projects through the use of state funds.

Tax Levy The total amount to be raised by property taxes for the purpose stated in the county's financial plan for various funds.

User Fees The payment of a fee for direct receipt of a public service by the party benefiting from the service.