ONONDAGA COUNTY
NEW YORK

2017 – 2022
TENTATIVE
CAPITAL IMPROVEMENT PLAN

Joanne M. Mahoney
County Executive

William P. Fisher
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Chief Fiscal Officer, Secretary, CPC

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Deputy Director of Planning

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William P. Fisher

Chester Dudzinski, Jr.

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Rustan Petrela
Coordinator, Management & Budget

Tara Venditti
Management & Budget

Don M. Jordan
Planning

Onondaga County Planning Board

Onondaga County Planning Board Resolution Concerning the 2016 to 2021 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 2016 – 2021 Tentative Capital Improvement Plan; and

WHEREAS, debt management remains a high priority in the 2016 – 2021 Tentative Capital Improvement Plan; and

WHEREAS, the projects proposed in the 2016 – 2021 Tentative Capital Improvement Plan emphasize the maintenance of existing county facilities and transportation assets, stewardship of the natural environment, and sound fiscal management; and

TO BE UPDATED

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 2016 – 2021 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 2016–2021 Tentative Capital Improvement Plan.

Douglas B. Morris

Douglas Morris, Chairman
Onondaga County Planning Board
September 30, 2015

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 2017-2022 CIP contains four major sections. The first provides an understanding of the capital planning process and its relationship to development and land use planning. It also describes revenue sources and the county's debt management policy. The second section contains debt service narrative and summary information, as well as program summary analysis. A location map also appears at the end of section two. Section three contains narrative description and financing plans for proposed projects, as well as narrative description of completed and ongoing projects. This section is subdivided by the funds that support it. Section four contains a glossary of terms.

The Capital Planning Process

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

1 In March, department heads begin preparation of project proposals in accordance with executive guidelines.

2 In May, proposals are submitted to the Division of Management & Budget (DMB). The proposals are analyzed by DMB in conjunction with the Syracuse-Onondaga County Planning Agency. The Law Department is consulted as needed.

3 By September, the County Executive has approved a tentative CIP. It is presented to the Capital Program Committee (a committee made up of legislators and representatives from the executive branch of county government) and 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 critiqued. Revisions to forms and instructions are completed.

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

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

The final product of this process is a six-year plan to improve or construct those facilities or components of county infrastructure considered necessary to provide or maintain an adequate level of public service. Approval by the County Legislature is not a commitment to fund every project in the plan, but rather it is an indication of support for the plan as a whole. Projects that require borrowing must be presented to the Legislature individually in order to secure authorization to incur debt.

THE COUNTY'S INFRASTRUCTURE

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

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

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

Water

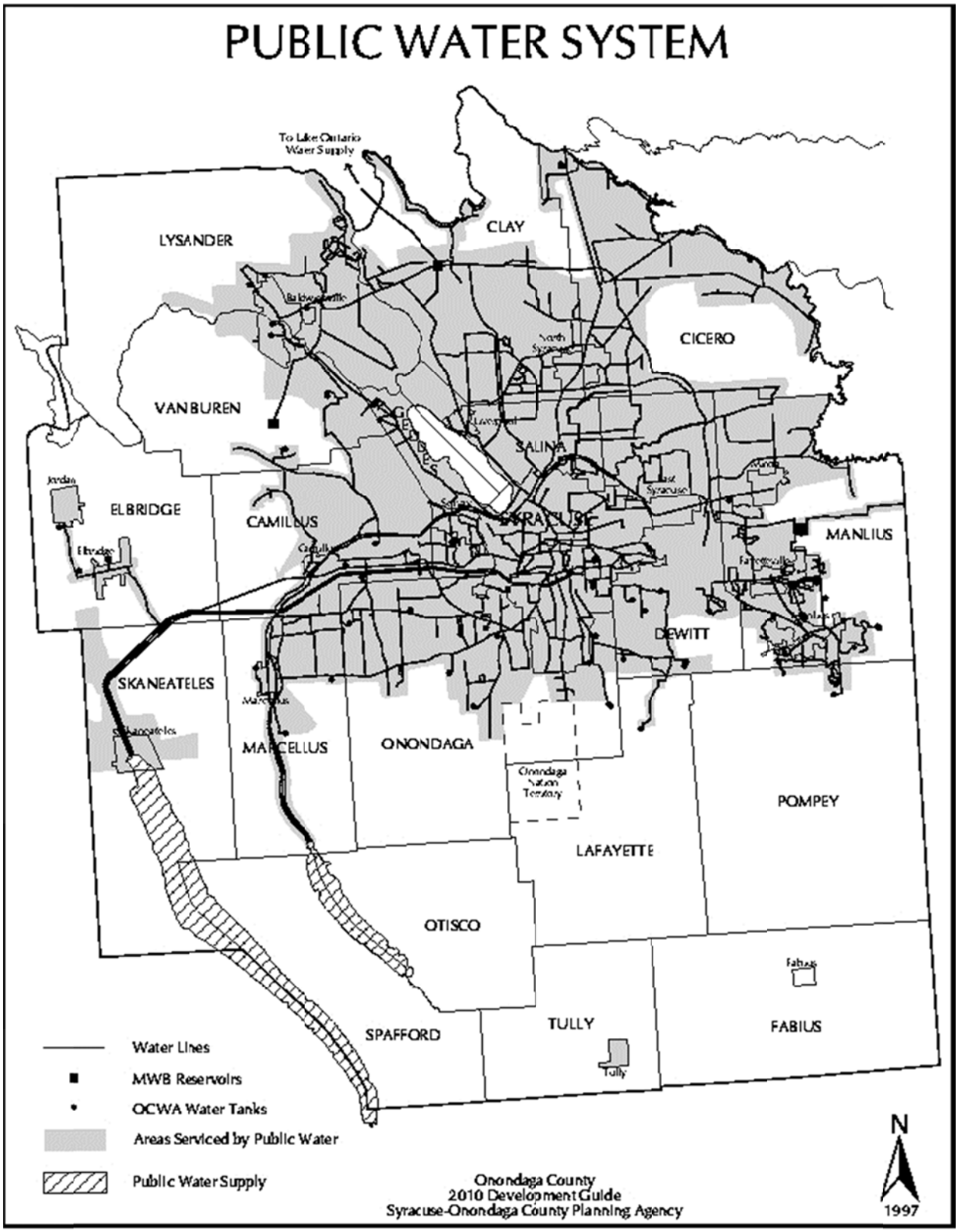
The Metropolitan Water Board (MWB) is the administrative body of the Onondaga County Water District (OCWD). Its mission is to provide clean, safe, reliable, sustainable, and cost-efficient wholesale drinking water from Lake Ontario to the Central Upstate New York region. Integral to this mission is the MWB's role as an essential public health resource and economic development asset for the community.

The MWB was created to convey wholesale drinking water from Lake Ontario, regionally, to municipal corporations and public authorities, and to supplement the limited capacity of the area's primary retail water utilities: Onondaga County Water Authority (OCWA - Otisco Lake supply) and The City of Syracuse (Skaneateles Lake supply). Through its distribution partners, MWB provides water to homes and industry, hospitals and schools, located in forty municipalities in Onondaga, Oswego, Madison, Oneida and Cayuga counties. The Lake Ontario system has the capacity to sustain production of up to sixty million gallons/day and store in excess of one hundred ten million gallons of water for emergencies, including fire protection and periods of drought.

Currently, the MWB draws an average of twenty million gallons (20 MG) per day from Lake Ontario through an intake structure shared between the City of Oswego and MWB's lakeside Raw Water Pump Stations. The raw water is pumped to the MWB Water Treatment Plant in the Town of Oswego where it is filtered, chlorinated, fluoridated, and tested prior to the transmission of treated water through the Clear Water Pump Station and Clear Wells. Finished water is then conveyed through twenty-four miles of transmission pipeline to the Terminal Tanks in the Town of Clay. With the completion of the Terminal Tanks, MWB has completed its water Storage Master Plan and is in full compliance with the United States Environmental Protection Agency (EPA) Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR2 or LT2 rule).

From Terminal, water is pumped through the Farrell Pump Station to the Western Tank in Van Buren; to the Central Branch pipeline into the City of Syracuse; and to the Eastern Tanks and the Salt Springs Tank in Fayetteville and Manlius, respectively. In addition to treatment, pumping, and storage facilities, MWB owns and maintains its own electrical substations and approximately one hundred miles of transmission pipeline within Onondaga and Oswego Counties.

To fund major capital improvement projects, MWB collects ad valorem taxes from three Onondaga County zones of assessment and external (outside OCWD) customers. Operating and maintenance expenses are supported by sales revenue generated through wholesale water rates.


PUBLIC WATER SYSTEM
To Lake Ontario Water Supply
LYSANDER
CLAY
CICERO
VANBUREN
SALINA
ELBRIDGE
CAMILLUS
MANLIUS
DEWITT
SKANEATELES
MARCELLUS
ONONDAGA
Onondaga Nation Territory
POMPEY
LAFAYETTE
OTISCO
SPAFFORD
TULLY
FABIUS
Water Lines
MWB Reservoirs
OCWA Water Tanks
Areas Serviced by Public Water
Public Water Supply
Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency
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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-sixteen thousand residential units of service, and approximately sixty-five thousand units of commercial/industrial service, based on a unit volume equivalent of one-hundred-forty thousand gallons per unit. The unit charge is only charged to properties in the district with a sewer connection. Industrial users are required to remove non-compatible pollutants, such as heavy metals, at the source. Certain high strength wastes, meeting strict local parameters, are also allowed by permit and with industrial waste surcharges.

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

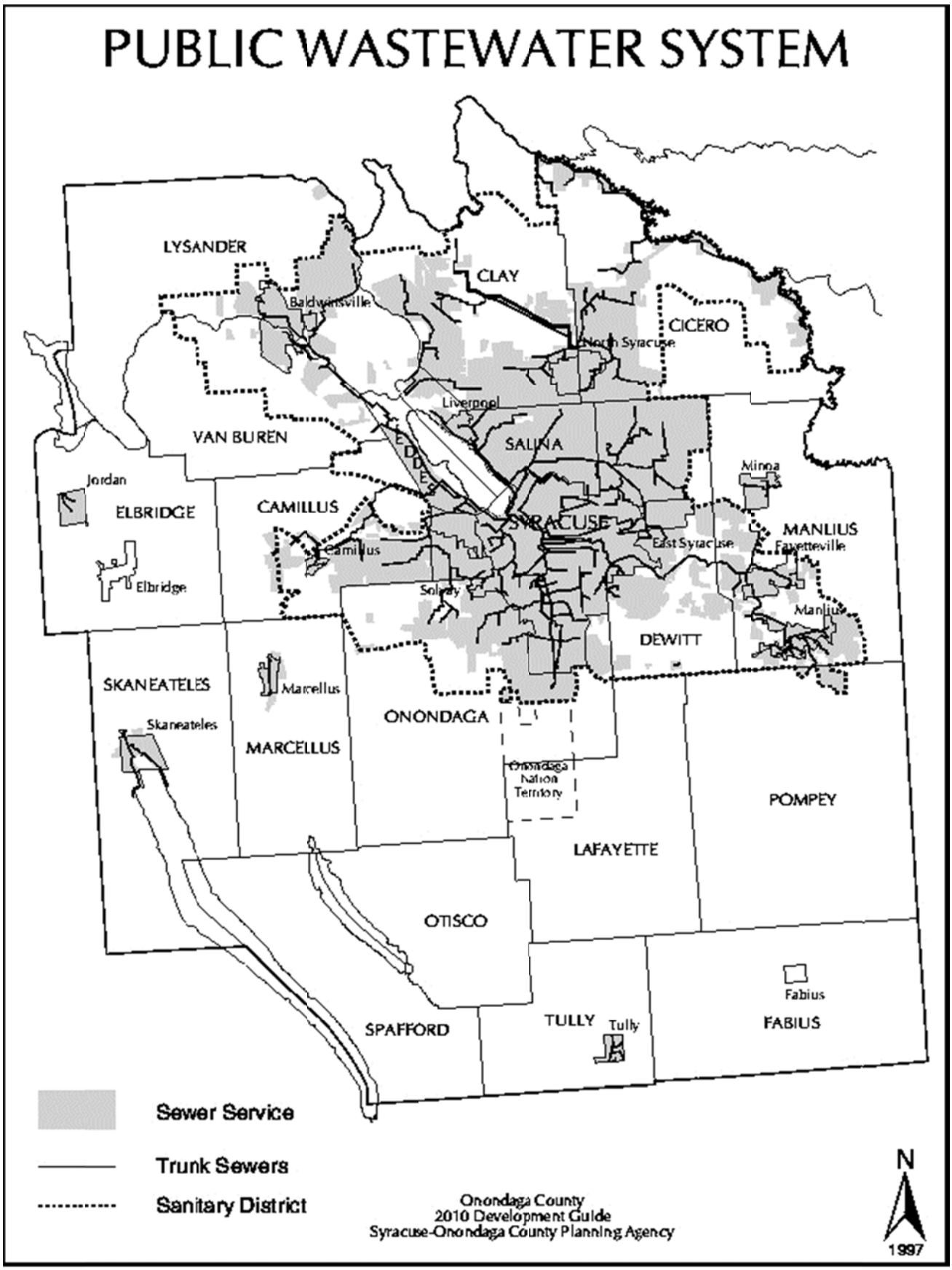
Transportation

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

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

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

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


PUBLIC WASTEWATER SYSTEM
LYSANDER
CLAY
CICERO
Baldwinsville
North Syracuse
Liverpool
VAN BUREN
SALINA
Jordan
ELBRIDGE
CAMILLUS
Minoa
SYRACUSE
MANLIUS
Camillus
East Syracuse
Fayetteville
Elbridge
Solvay
Manlius
DEWITT
SKANEATELES
Marcellus
ONONDAGA
Skaneateles
MARCELLUS
Onondaga Nation Territory
POMPEY
LAFAYETTE
OTISCO
Fabius
SPAFFORD
TULLY
Tully
FABIUS
Sewer Service
Trunk Sewers
Sanitary District
Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency
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PATTERN OF COUNTY ROAD JURISDICTION
LYSANDER
Baldwinsville
CLAY
CICERO
VAN BUREN
North Syracuse
Liverpool
SALINA
Jordan
CAMILLUS
Solvay
Minoa
East Syracuse
MANLIUS
ELBRIDGE
Camillus
SYRACUSE
DEWITT
Fayetteville
Elbridge
Manlius
ONONDAGA
SKANEATELES
Marcellus
Skaneateles
MARCELLUS
Onondaga Nation Territory
POMPEY
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County Roads
Onondaga County
2010 Development Guide
Syracuse-Onondaga County Planning Agency

ONONDAGA COUNTY 2010 DEVELOPMENT GUIDE

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

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

Background

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

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

Employment Trends

According to the New York State Department of Labor's Quarterly Census of Employment and Wages (QCEW), annual average employment by place of work in Onondaga County grew slightly from 239,704 in 2010 to 241,671 in 2015. The number of firms increased slightly from 12,690 to 12,916 over the same period, with wages experiencing steady modest increases from $43,199 in 2010 to $48,054 in 2015 (QCEW). The New York State Department of Labor Local Area Unemployment Statistics (LAUS) program reported that employment by place of residency in Onondaga County increased from 218,000 in 2010 to 213,400 in 2015. The annual unemployment rate decreased from 8.0% in 2010 to 5.0% in 2015.

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	2015
Annual Average Employment (by Place of Work in Onondaga County)	252,378	248,278	239,704	241,671
Annual Average Establishments (# of Firms)	12,238	12,655	12,690	12,916
Average Annual Wages	$32,499	$37,641	$43,199	$48,054
Employment (by Place of Residency in Onondaga Co.)	221,400	223,300	218,000	213,400
Annual Unemployment Rate	3.5%	4.5%	8.0%	5.0%
Source: NYS Dept. of Labor QCEW and LAUS Programs				

Demographic Trends

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

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

Demographic Statistics in Onondaga County

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

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

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

The Land Use Plan

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

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

Land Use Plan and the CIP

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

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

2017 - 2022 Capital Plan Priorities

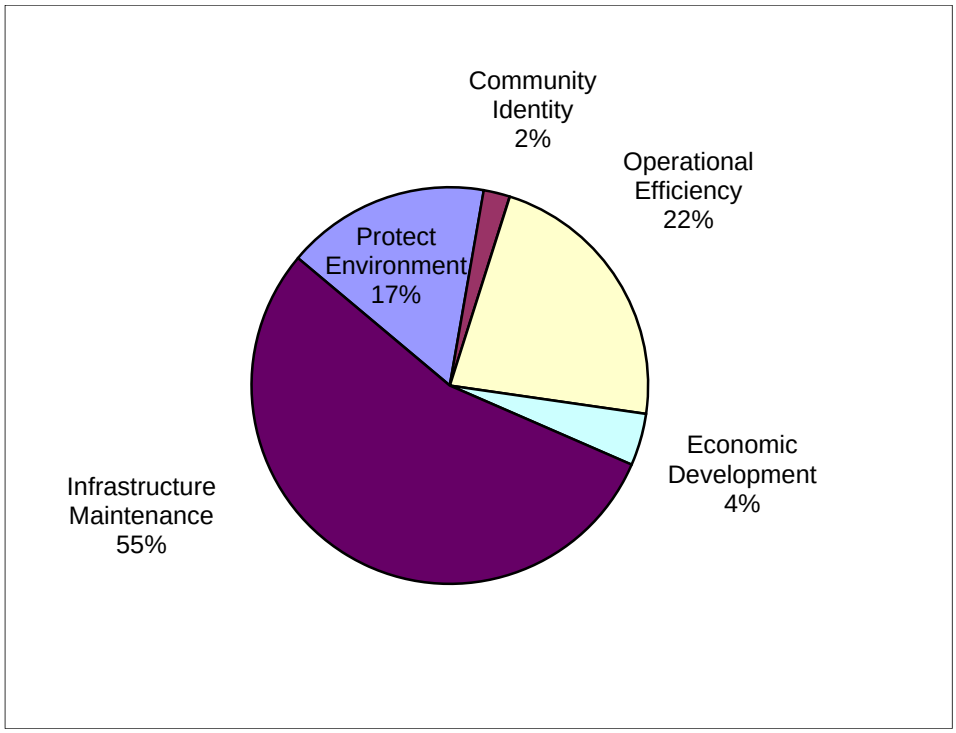
The 2017-2022 Capital Plan places high priority on projects that are consistent with the goals of the 2010 Development Guide. Most of our investments will be in the areas of infrastructure maintenance, environmental protection, and operational efficiency. Water supply and wastewater treatment projects account for 52% of the Capital Program. Mandated projects drive 42% of the proposed projects in this plan.

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

The highway program includes ten capital construction projects through 2022 in various locations throughout the urban and suburban parts of the county. Some of these projects represent reconstruction projects to address major rehabilitation of facilities, roads, bridges as well as drainage and shoulders, which will enhance safety. None of these projects are designed to increase capacity.

The graph that follows illustrates the percentage breakdown of the 2017-2022 Capital Plan priorities.

2017-2022
CAPITAL PRIORITIES



FUNDING SOURCES FOR CAPITAL PROJECTS

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

Federal Monies

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

State Aid

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

Pay as You Go

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

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

Debt

Authorized

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

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

To Be Authorized

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

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

Other Sources

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

Operating Funds

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

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

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

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

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

ONONDAGA COUNTY DEBT MANAGEMENT PLAN

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

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

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

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

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

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

Local Finance Law prohibits the county from issuing debt in excess of the Debt Limit. The Debt Limit is defined as 7% of the five-year average full valuation of Taxable Real Property within the county. The county's use of its constitutional debt limit is 16.5% of its total capacity.

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

Debt Management - Department of Water Environment Protection

For 2017, the County Executive is continuing the commitment to the current debt management efforts. While taking advantage of the current favorable interest rates we also utilize resources in the Department's operating budget to fund recurring capital needs. The main components of the plan call for greater investment in preventive maintenance, rapid retirement of debt that is issued, and the strategic use of the Water Environment Protection (WEP) designated fund balance and reserve for bonded. Many WEP authorized projects have been financed through the New York State Environmental Facilities Corporation (EFC). The EFC's no-interest construction loans and subsidized-interest long-term bonds have eased the interest rates the Department pays. The County Executive is committed to continued optimization of funding sources for the implementation of the plan.

FINANCIAL SUMMARIES

Section 2

ESTIMATED DEBT SERVICE

Borrowing Funds

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

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

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

In 2000, Onondaga County defeased $10.7 million of debt using its fund balance. The County Legislature had passed a resolution in November 1999 that established a fund balance target of 10% of General Fund revenues. Any excess would be used to avoid or reduce debt and provide property tax relief. The defeasance had a benefit to taxpayers of $11.7 million in 2000-2004. In August 2001, the county participated in a pooled financing with five other New York counties to sell its rights to the tobacco revenues guaranteed under the Master Tobacco Settlement Agreement with the four major tobacco companies. This resulted in defeasing $95 million in Onondaga County General Obligation debt, lowering total debt service by $130 million during the years 2002-2021. Again, in 2005, the county participated in another pooled financing with twenty-three other New York counties. With the proceeds, $19.9 million of scheduled debt was defeased, benefiting the years 2007-2025. An additional $11.6 million was set aside to finance energy saving initiatives, thereby avoiding debt. Taking advantage of the lowest interest rate environment in forty years, the county refunded $18.5 million of ten year old bonds in 2003, saving $1.8 million through 2014. In 2007, $8 million in cash was used to fund capital projects, avoiding debt and maintaining the county's 10% fund balance target. In 2009 and 2012, successful refunding issues resulted in savings of $3.3 and $1.2 million respectively. In 2014 the county issued $19.6 million of refunding bonds saving over $1.1 million and in 2015 the county issued 11.4 million in refunding bonds saving 0.66 million. The county actively monitors its outstanding debt, reviewing candidates for refunding opportunities, which will provide a target NPV of 3% savings. In 2010, the county maximized its interest savings by issuing a mix of tax-exempt, Build America (35% interest subsidy), and Recovery Zone (45% interest subsidy) bonds. During the 2013 budget process, the Legislature passed a resolution committing $5 million of fund balance to offset future debt service.

As evidenced on page 21, the county's net indebtedness is currently at 16.5% of its total borrowing capacity.

Borrowing Criteria

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

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

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

Methodology

County departments' capital projects are organized alphabetically in this book. Each project includes a brief description, the cost summary and cash flow schedule for each of the years 2017-2022, the project detail, tentative financing plan, and status. Estimated debt service is calculated based on the cash flow schedule for those projects indicating the use of borrowing to finance the project in whole or in part.

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

1 Interest rates are based on length and type of instrument used. While actual payments are determined by market conditions at the time of issuance, for planning purposes in this document, estimated payments were calculated using level debt payment schedules for a maximum of twenty years, at a 4% interest rate (certain Sewer Fund estimated payments are calculated at 2.5% interest, anticipating the use of State revolving funds).

2 No principal payment is assumed in the first year.

Market Factors Affecting Bonds

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

Debt Limits

Local Finance Law permits the county to issue General Obligation debt up to a statutory Debt Limit. The Statutory Debt Limit is seven percent of the five-year average full valuation of Taxable Real Property within the county. Total Net Indebtedness is calculated by adding the county's short and long-term debt and subtracting the legal exclusions. As of September 13, 2016 the county had utilized 16.50% of its Statutory Debt Limit, due to the use of tobacco bond revenues to defease $95 million of General Fund debt in 2001 and $20 million in 2005. Should all Authorized and Unissued debt be issued this would represent 1.6% of the debt limit. If the entirety of the projects proposed in the 2017 CIP advance and the corresponding debt be issued by the county in 2017 to fund said projects, this debt would represent 1.03% of the debt limit but combined with the debt that will retire in 2017 the net effect is a 0.31% reduction 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	$26,982,767,318
Debt Limit (7% of 5-year average) **(1)**	$1,888,793,712

Outstanding Indebtedness	Scheduled Debt as of August 11, 2016	Authorized and Unissued Debt	Proposed Debt for 2017	Total Debt as of Dec 31, 2017
Bonds	$630,662,344			
Bond Anticipation Notes	$10,009,415			
Outstanding Gross Indebtedness	$640,671,759	$198,946,009	$ 38,629,000	$878,246,768
Less Exclusions (Sewer, Water, Defeased Debt)	($328,967,414)	($168,676,757)	$ (19,256,000)	($516,900,171)
Less Retired Debt			($25,274,794)	($25,274,794)
Total Net Indebtedness	$311,704,345	$30,269,252	$ (5,901,794)	$336,071,803
Debt Limit Margin	$1,577,089,367			$1,552,721,909
Percentage of Debt Limit Exhausted	16.50%	1.60%	-0.31%	17.79%

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

CAPITAL PROJECT CLASSIFICATIONS

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

1 *Completed Projects*: Those capital projects previously scheduled that have been completed in the preceding year.

2 *Authorized Projects:* Those projects which have been authorized by the County Legislature and are in varying stages of progression, ranging from bonds being authorized but not yet issued to anticipated project completion in the current year.

3 *Proposed Projects:* Those projects at a sufficient level of development to be scheduled in the CIP for legislative consideration. Each proposed capital project in this document has received a Level of Development rating. The rating was determined by the development phase of the project as outlined in the project application. These ratings and their descriptions are as follows:

- Advanced: A project assigned an advanced rating is ready to be presented for Legislative authorization; the capital project application is complete and information is reliable.
- Intermediate: A project is assigned an intermediate rating when the problems and causes have been identified, possible alternative solutions have been examined, and a plan has been selected. An intermediate rating is also assigned to projects that have established or are in the process of establishing project scope, and/or maintenance and operations estimates.
- Preliminary: A project is assigned a preliminary rating when project definition is being established or an in-depth needs assessment is being conducted in order to determine any of the following: in-depth identifications, examination, selection and description or alternative solutions to the problem.

PROJECT ACTIVITY BY DEPARTMENT

Department	Completed Projects	Authorized Projects	Proposed Projects	Fund
COUNTY CLERK (RECORDS	0	1	0	General Fund
DEPARTMENT OF	5	0	0	General Fund
ELECTIONS BOARD	1	0	0	General Fund
EMERGENCY	10	9	7	General Fund
FACILITIES MANAGEMENT	10	7	7	General Fund
FINANCE DEPT	0	1	0	General Fund
HILLBROOK DETENTION HOME	1	0	1	General Fund
INFORMATION TECHNOLOGY	0	1	0	General Fund
METROPOLITAN WATER	2	1	1	Water
OFFICE OF ENVIRONMENT	0	0	1	General Fund
ONONDAGA COMMUNITY	32	1	6	Community College
ONONDAGA COUNTY PUBLIC	1	2	0	Library
PARKS & RECREATION DEPT.	6	4	11	General Fund
SHERIFF CUSTODY	1	0	0	General Fund
SHERIFF POLICE/CIVIL	1	1	0	General Fund
TRANSPORTATION	0	0	10	County Road
TRANSPORTATION	3	0	0	General Fund
VAN DUYN EXTENDED CARE	6	0	0	Van Duyn
WATER ENVIRONMENT	18	10	11	Drain & San
Total	**97**	**38**	**55**	

PROPOSED CAPITAL PROJECT SUMMARY (2017-2022)

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	2017 - 22 Total
General Fund			
EMERGENCY COMMUNICATIONS			
		Auxiliary Power Systems Replacement	622
		Computer Aided Dispatch (CAD) System Hardware Refresh	975
	new	E911 Center Roof Replacement (NEW)	303
		Next Generation 911 (NG-911) Telephone System Replacement/refresh	3,659
		Oblique Aerial Digital Imagery Refresh	394
		Public Safety Radio Tower Replacement	604
		Trunked Land Mobile Radio Network Backup Prime Site	1,964
		Subtotal	$ 8,521
FACILITIES MANAGEMENT			
		Carnegie Library Rehabilitation	3,957
		Civic Center Office and Masonry Improvements	1,487
		Community Plaza Garage	1,299
		Courthouse - HVAC Renovations	10,400
		Facilities Various Capital Improvements	7,100
		Oncenter Rehabilitations	2,000
		Remodeling TA Intake	2,503
		Subtotal	$ 28,746
HILLBROOK DETENTION HOME			
	new	Hillbrook Detention Facility Improvements (NEW)	394
		Subtotal	$ 394
OFFICE OF ENVIRONMENT			
		Ash Tree Management	4,500
		Subtotal	$ 4,500
PARKS & RECREATION DEPT.			
		Beach Development at Onondaga Lake Park	300
	new	Building an AZA Required Animal Medical Care Center with African Savannah Exhibit (NEW)	14,100
	new	Carpenters Brook Fish Hatchery Pond Repair (NEW)	402
		Lights on the Lake Storage Facility	330
		Long Branch Park Improvements	1,950
	new	Onondaga Lake Park Shoreline Stabilization (NEW)	756
		Park Buildings	720
		Park Improvements/Willow Bay	2,720
		Park Roads, Parking Areas, and Trail Paving	3,750
		Park Roofs	569
		Salt Museum Rehabilitation	310
		Subtotal	$ 25,907
		General Fund Total	**$ 68,068**

Community College

ONONDAGA COMMUNITY COLLEGE			
		Allyn Hall Upgrades and Improvements	2,780
		Critical roof maintenance	3,254

	Elevator Replacement and Upgrades/ Protection of the Campus E-mail and Phone Servers	646
	Infrastructure - Campus Wide	10,488
	Site Improvements	2,718
	Student Center Renovation and Redesign	3,950
	Community College Total	**$ 23,836**

County Road

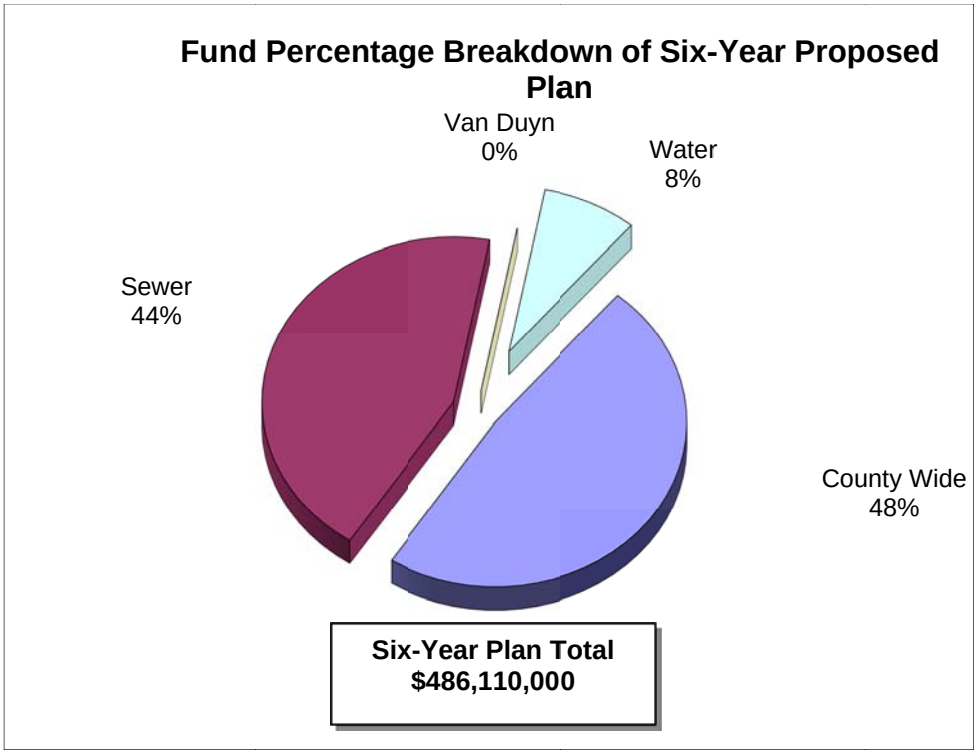
TRANSPORTATION

	Bituminous Surface Treatment	9,376
	Bridges	12,198
	Capital Highway Construction	29,127
	Caughdenoy Road / NYS Route 31 Road Improvements	4,120
	Cold Mix Bituminous Paving	20,406
	Guide Rail	3,060
	Rehabilitation of North Area and Camillus Highway Maintenance Facilities	17,000
	Repaving Program (Hot Mix Bituminous)	39,447
	Testing, Drainage and Facilities Repair	5,820
	Traffic Systems Management	2,010
	County Road Total	**$ 142,564**
	County Wide Total	**$ 234,468**

Special Funds

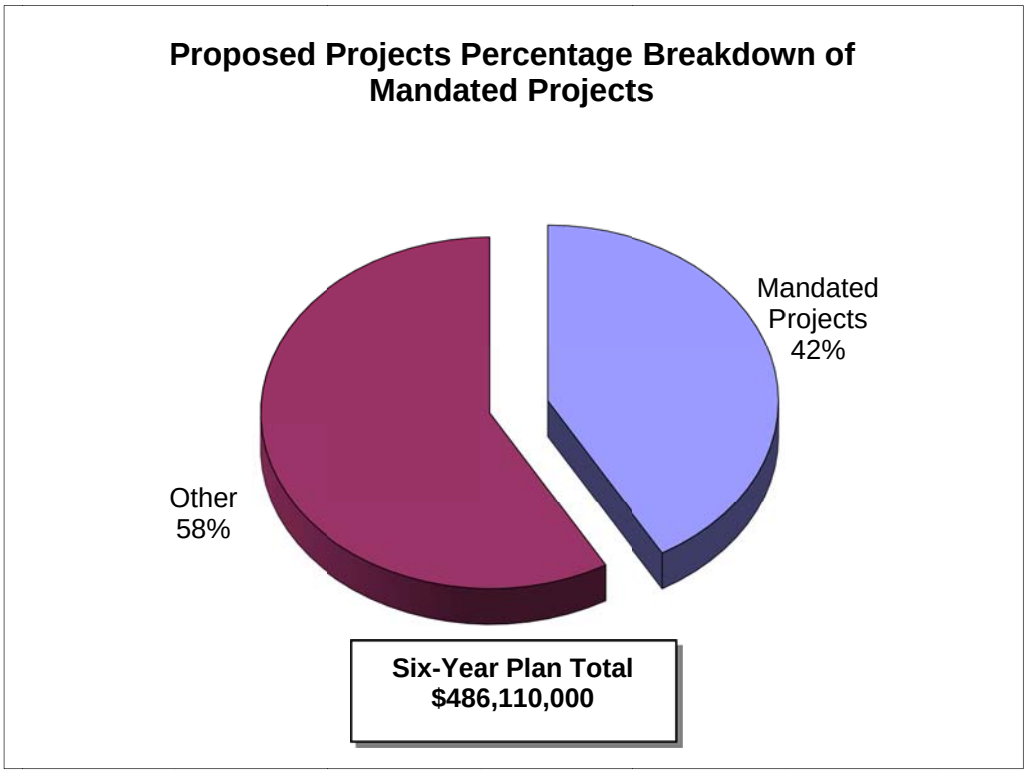
Department	STATUS	PROJECT	2017 - 22 Total
Sewer			
WATER ENVIRONMENT PROTECTION			
		Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	20,186
	new	Bear Trap - Ley Creek North Midler Culvert Repair Project (NEW)	130
		Brewerton WWTP Asset Renewal Improvements	7,400
	new	Camillus Force Main Replacement (NEW)	10,000
		Energy Efficiency Improvements/Performance Contracting	26,300
	new	Harbor Brook Miscellaneous Culvert and Channel Improvements (NEW)	800
	new	Meadowbrook-Limestone WWTP Disinfection System and Collection System Improvements (NEW)	18,725
		Metro WWTP Phosphorus Treatment System Optimization	22,005
	new	Oak Orchard Disinfection and Lagoon Cleaning (NEW)	6,024
	new	Oak Orchard WWTP Secondary Clarifier Rehabilitation (NEW)	7,150
		Wastewater Transportation System Improvements	95,323
		Sewer Total	**$ 214,043**
Water			
METROPOLITAN WATER BOARD			
		Water Treatment Plant Comprehensive Improvements	37,599
		Water Total	**$ 37,599**
		Special Funds Total	**$ 251,642**
		Grand Total	**$ 486,110**

Out of the 55 projects proposed in this plan, 43 are in the Countywide Funds, and they account for 48% of the costs, as illustrated by the graph below.



MANDATES

Of the $486,110,000 in proposed projects, 42% are the result of environmental and other mandates established by either federal or state law. These are projects that the county is compelled to do by legal requirement, and in some cases, as a result of court order. Failure to place a high priority on projects addressing mandated requirements could result in fines, license restrictions, and loss of aid. Within the confines and challenges that mandates have placed on the county's capital planning efforts, 58% 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

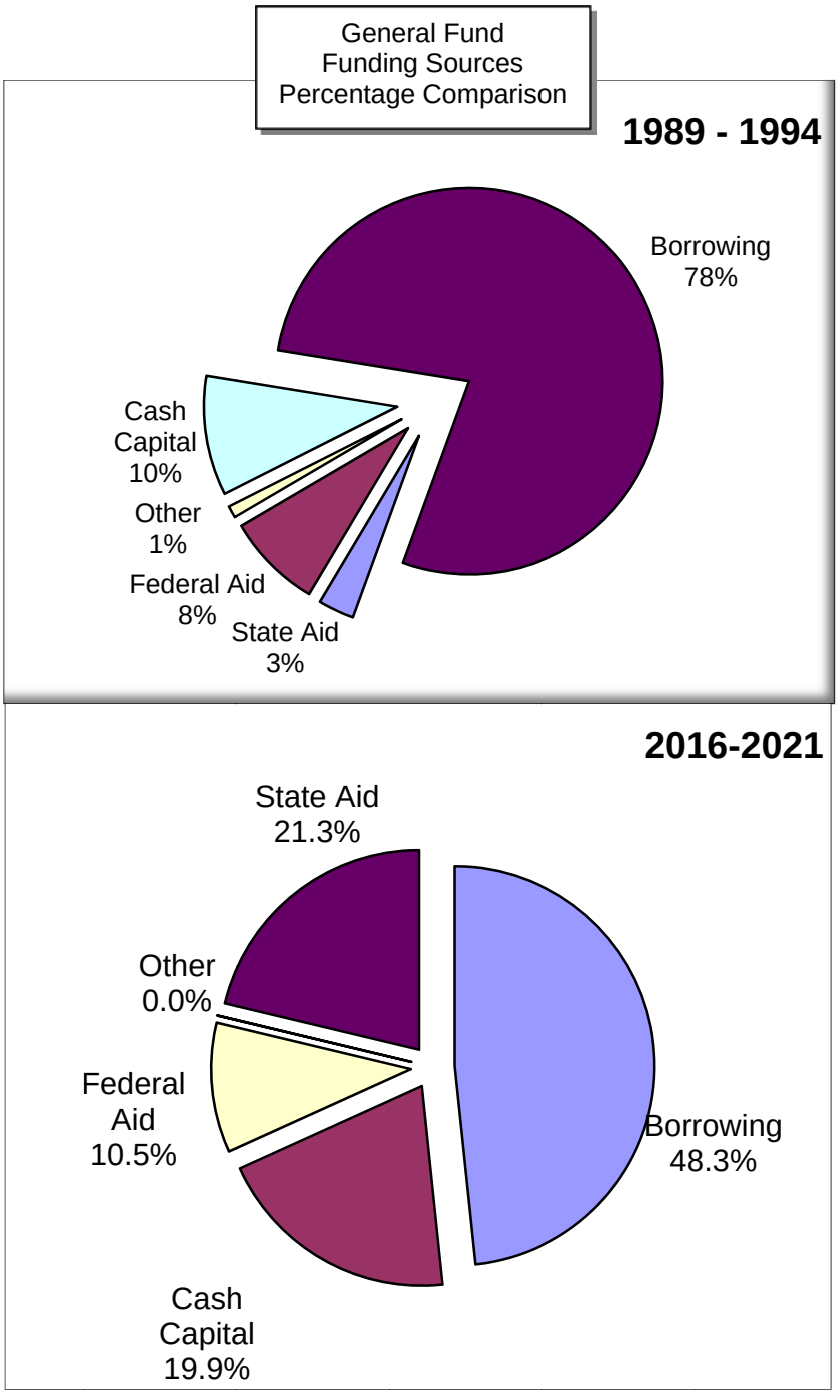
To achieve a balanced program that effectively serves the community's needs, careful attention must be given to the methods or sources of funding for capital projects. Customarily, projects are funded through the issuance of debt, cash capital, federal and state aid, and to a lesser degree other sources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

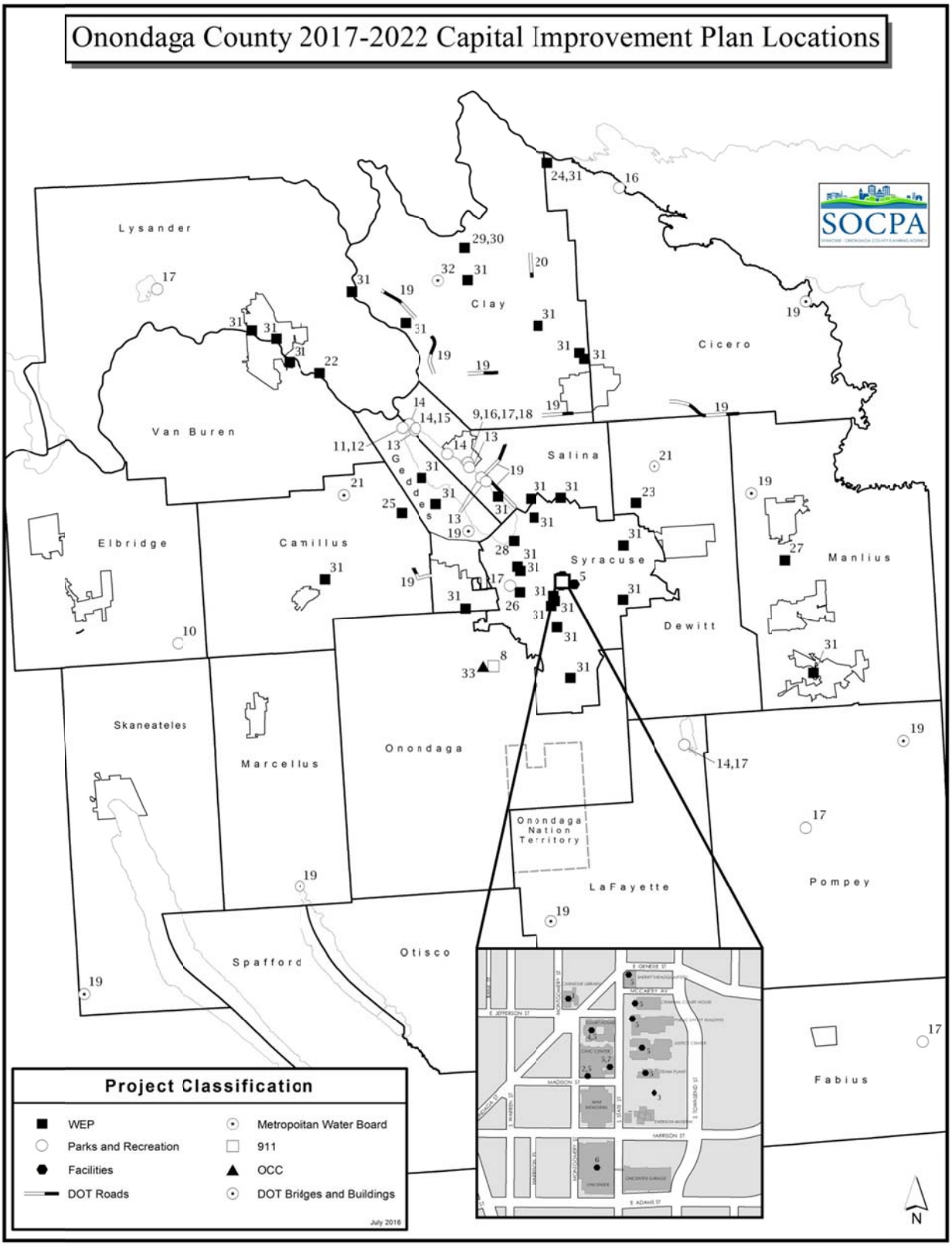
FUNDING SOURCES OF PROPOSED PROJECTS

County Wide	2017	2018	2019	2020	2021	2022	6yr Total
General Fund							
Pay as You Go		1,000	1,000	1,000	1,000		**4,000**
Authorized Borrowing	2,801	500	500				**3,801**
Borrowing to be Authorized	2,153	14,982	18,639	10,593	12,300	1,250	**59,917**
State Aid		350					**350**
SUB TOTALS	**$4,954**	**$16,832**	**$20,139**	**$11,593**	**$13,300**	**$1,250**	**$68,068**
County Road							
Pay as You Go	2,121	8,100	8,100	8,100	8,100	8,100	**42,621**
Borrowing to be Authorized	17,220	10,900	2,400	2,400	2,400	2,400	**37,720**
Federal Aid	8,080	13,025	1,130	2,400			**24,635**
State Aid	6,405	8,083	5,730	6,090	5,640	5,640	**37,588**
SUB TOTALS	**$33,826**	**$40,108**	**$17,360**	**$18,990**	**$16,140**	**$16,140**	**$142,564**
Community College							
Borrowing to be Authorized		2,677	3,072	6,169			**11,918**
State Aid		2,677	3,072	6,169			**11,918**
SUB TOTALS		**$5,354**	**$6,144**	**$12,338**			**$23,836**
County Wide TOTALS	**$38,780**	**$62,294**	**$43,643**	**$42,921**	**$29,440**	**$17,390**	**$234,468**

Special Funds	2017	2018	2019	2020	2021	2022	6yr Total
Water							
Authorized Borrowing	3,472						**3,472**
Borrowing to be Authorized		3,127	13,000	13,000	5,000		**34,127**
SUB TOTALS	**$3,472**	**$3,127**	**$13,000**	**$13,000**	**$5,000**		**$37,599**
Sewer							
Pay as You Go	7,250	7,042	5,277	3,947	4,047	4,027	**31,590**
Authorized Borrowing	5,064	4,898	3,387	577	110		**14,036**
Borrowing to be Authorized	19,256	24,246	43,063	45,187	27,665	9,000	**168,417**
SUB TOTALS	**$31,570**	**$36,186**	**$51,727**	**$49,711**	**$31,822**	**$13,027**	**$214,043**
Special Funds TOTALS	**$35,042**	**$39,313**	**$64,727**	**$62,711**	**$36,822**	**$13,027**	**$251,642**
GRAND TOTAL	**$73,822**	**$101,607**	**$108,370**	**$105,632**	**$66,262**	**$30,417**	**$486,110**

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 48.3% funding through borrowing.




Onondaga County 2017-2022 Capital Improvement Plan Locations
SOCPA
Lysander
Van Buren
Clay
Cicero
Salina
Elbridge
Camillus
Syracuse
Manlius
Dewitt
Skaneateles
Marcellus
Onondaga
Onondaga Nation Territory
LaFayette
Pompey
Spafford
Otisco
Fabius
Project Classification
WEP
Parks and Recreation
Facilities
DOT Roads
Metropolitan Water Board
911
OCC
DOT Bridges and Buildings
July 2016
N

FACILITIES MANAGEMENT

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

EMERGENCY COMMUNICATIONS (E-911)

8. Auxiliary Power Systems Replacement
8. Computer Aided Dispatch (CAD) System Hardware Refresh
8. E-911 Center Roof Replacement
8. Next Generation 911 (NG-911) Telephone System Replacement/Refresh
8. Oblique Aerial Digital Imagery Refresh
8. Public Safety Radio Tower Replacement
8. Trunked Land Mobile Radio Network Back-up Prime Site

PARKS AND RECREATION

9. Beach Development at Onondaga Lake Park
10. Carpenters Brook Fish Hatchery Pond Repair
11. Lights on the Lake Storage Facility
12. Long Branch Park Improvements
13. Onondaga Lake Park Shoreline Stabilization
14. Park Buildings
15. Park Improvements/Willow Bay
16. Park Roads, Parking Areas, and Trail Paving
17. Park Roofs
18. Salt Museum Rehabilitation

TRANSPORTATION

19. Capital Highway Construction
20. Caughdenoy Road/NYS Route 31 Road Improvements
21. Rehabilitation of North Area and Camillus Highway Maintenance Facilities

WATER ENVIRONMENT PROTECTION

22. Baldwinsville-Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements
23. Bear Trap - Ley Creek North Midler Culvert Repair Project
24. Brewerton WWTP Asset Renewal Improvements
25. Camillus Force Main Replacement
26. Harbor Brook Miscellaneous Culvert and Channel Improvements
27. Meadowbrook-Limestone WWTP Disinfection System and Collection System Improvements
28. Metro WWTP Phosphorous Treatment System Optimization
29. Oak Orchard Disinfection and Lagoon Cleaning
30. Oak Orchard WWTP Secondary Clarifier Rehabilitation
31. Wastewater Transportation System Improvements

METROPOLITAN WATER BOARD

32. Water Treatment Plant Comprehensive Improvements

ONONDAGA COMMUNITY COLLEGE

33. Allyn Hall Upgrades and Improvements
33. Critical Roof Maintenance
33. Elevator Replacement and Upgrades/Protection of the Campus E-mail and Phone Servers
33. Infrastructure - Campus Wide
33. Site Improvements
33. Student Center Renovation and Redesign

CAPITAL PROJECTS

Section 3

Countywide Funds

General

Community College

County Roads

Special Funds

Water District

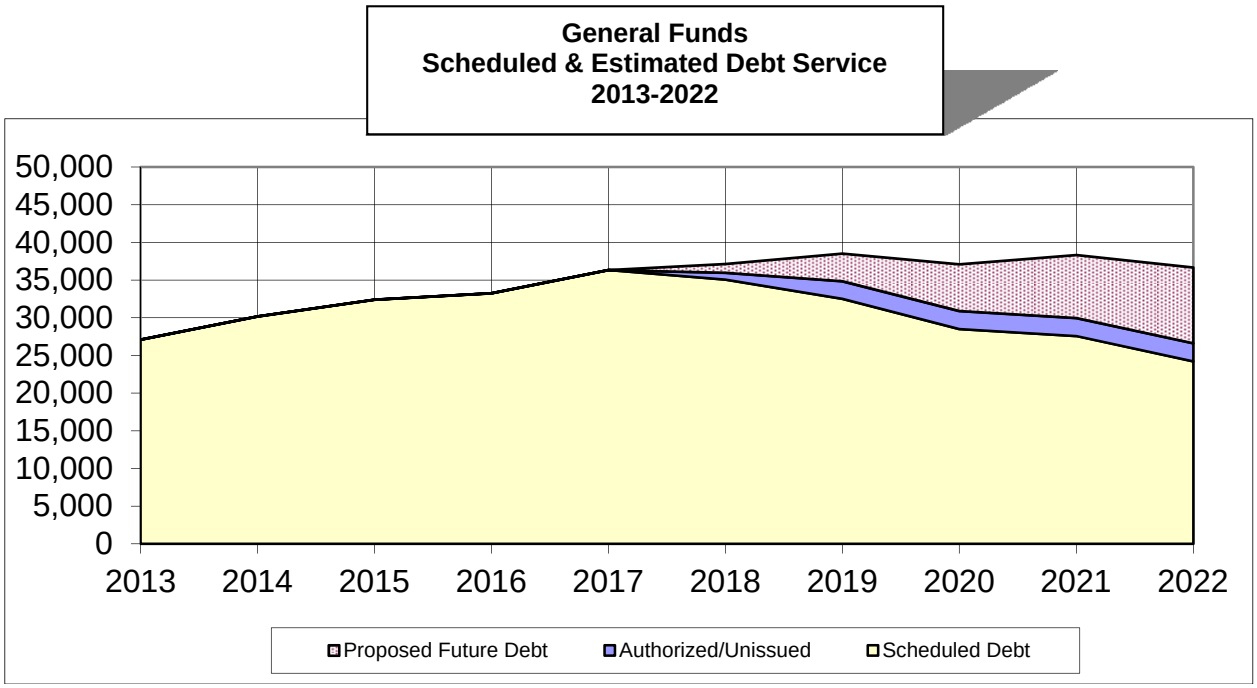
Sewer District

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.

County Wide Funds
Debt Service Summary

Payments in ($000's)

	2012	2013	2014	2015	2016	2017	2018	2019
Principal & Interest								
Scheduled Debt	26,143	27,102	30,187	32,399	33,251	36,334	35,058	32,515
Estimated Debt								
Authorized & Unissued	0	0	0	0	0	0	909	2,339
Proposed Future Debt	0	0	0	0	0	0	1,177	3,679
Total	**26,143**	**27,102**	**30,187**	**32,399**	**33,251**	**36,334**	**37,144**	**38,533**

	2020	2021	2022	2023	2024	2025	2026	2027
Principal & Interest								
Scheduled Debt	28,506	27,575	24,220	22,841	19,919	17,666	15,263	12,855
Estimated Debt								
Authorized & Unissued	2,395	2,395	2,395	2,193	2,167	2,167	2,167	2,167
Proposed Future Debt	6,191	8,369	10,056	10,588	10,462	10,187	9,672	9,399
Total	**37,092**	**38,339**	**36,671**	**35,622**	**32,548**	**30,020**	**27,102**	**24,421**

	2028	2029	2030	2031	2032	2033	2034	2035
Principal & Interest								
Scheduled Debt	10,611	9,579	8,590	6,535	5,903	5,216	4,526	3,900
Estimated Debt								
Authorized & Unissued	1,869	1,870	1,870	1,870	1,870	1,014	960	960
Proposed Future Debt	9,133	8,788	8,446	7,920	7,246	6,939	6,109	5,398
Total	**21,613**	**20,237**	**18,906**	**16,325**	**15,019**	**13,169**	**11,595**	**10,258**

	2036	2037	2038	2039	2040	2041	2042	TOTAL
Principal & Interest								
Scheduled Debt	3,036	2,666	2,652	2,635	2,621	2,601	2,578	**346,401**
Estimated Debt								
Authorized & Unissued	960	960	0	0	0	0	0	**35,497**
Proposed Future Debt	4,682	4,101	3,550	2,753	1,628	942	465	**157,880**
Total	**8,678**	**7,727**	**6,202**	**5,388**	**4,249**	**3,543**	**3,043**	**539,778**

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 2016. A brief summary of most of them follows.

COUNTY CLERK (RECORDS)

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

EMERGENCY COMMUNICATIONS

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

E9-1-1 Center Console Furniture Replacement
Project On-going
In June 4, 2013, by resolution # 91, the County Legislature authorized borrowing of $648,840 to replace thirty-six call taking, dispatch, and training room console furniture workstations that were installed in 2003 and are not compliant with the most recent computer workstation standards. This replacement took place simultaneously with the installation of the radio system replacement to minimize operational interruption and was completed in August 2014. We are still working on some minor updates on carpeting.

E9-1-1 Center Facility Rehabilitation
Project On-going
To engage 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/repairs, improvements, and adjustments required to accommodate advancements in technology. This project will study the current E911 Center, the former Hillbrook/Fire Control/OCSO South Station building and the campus area (parking lot, fences, etc.).

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. In June 2016 we issued a bid for construction. We expect the contract to be awarded by the end of summer 2016 with construction to begin in fall 2016 and to be completed by the end of spring 2017.he 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 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.

Onondaga County Interoperable Communications System (OCICS)
Project On-going
Police, fire, and emergency medical service agencies in Onondaga County were operating with outdated equipment on different radio systems using various frequencies. This made communication between public safety agencies difficult. Additionally, other local government agencies operated on their own radio systems, which were incompatible with each other. In a major emergency, such as a weapon of mass destruction event, communication between crucial government agencies would have been very difficult. his project replaced the various radio systems used countywide with a single system with interoperability. This enables agencies to better communicate with each other and to better serve the public. The OCICS system became operational in February 2010. Various entities were integrated into the system over the course of the next eighteen months. We are currently fine tuning the system to ensure that it is operating at maximum capability.

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

Replace E9-1-1 Radio Consoles
Project On-going
In April 4, 2013, by resolution # 049, the County Legislature accepted $4,959,000 in NY State grant funds to replace twenty-three Motorola Gold Elite radio consoles including integrated radio recorders at the E9-1-1 Center, and twelve Motorola Gold Elite radio consoles including integrated radio recorders at the E9-1-1 back-up site. Consoles and associated back room equipment are computer based and were originally installed in 2003 (Main Center) and 2005 (back-up site), and are not fully compatible with future functionality improvements. The consoles have been replaced but there are still several on-going adjustments to the system which are being addressed with the remaining balance of the project.

Replacement of Cooling Tower & Computer Room Cooling
Project On-going
The E9-1-1 Center computer room is currently cooled by two 5-ton cooling units designed to be operated in main and alternate configuration. The air conditioners cannot adequately keep up during hot weather and there is no headroom in the event that one fails. It is necessary to protect critical public safety computer systems by replacing the cooling units with two 12-ton units that can be operated in main/alternate configuration. These new cooling units will be independent of the building’s cooling tower. A catastrophic failure of the cooling tower would likely result in the evacuation of the E9-1-1 Center and possible shut down.

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

FACILITIES MANAGEMENT

Center for Forensic Sciences Building Rehab./Renovations (NEW)
Project On-going
On June 7, 2016 the County Legislature authorized borrowing $335,000 to finance this project which will provide for various improvement in the Center for Forensic Sciences. The scope of these improvements includes:

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

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

Civic Center Re-roof
Project On-going
In June 7, 2016 the County Legislature authorized $1,383 to re-roof the Civic Center.
The built-up IRMA roofs on the Civic Center Office Tower and theaters are, substantially, the original roofs installed in 1975, making them forty years old and beyond their expected life. Lately, we have experienced acceleration in leak conditions above the IT department. This project will require replacement of all insulation, wood blocking, walk path pavers, stone ballast, coping covers, brick veneer repointing, restoration of the integrity of the davit bases and associated flashings. An improvement in the thermal insulation value is required by code, which will offset some of the capital cost with ongoing added energy savings. Due to emergencies experienced during 2014 we used 500,000 cash in hand to replace the theatre roofs. The rest of the scope of this project will be completed in 2017.

Civic Center Windows Systems Replacement
Project On-going
In October 2011 the County Legislature approved $7,000,000 to fund this project, which will replace the existing thirty-six year old deteriorated, failed, and damaged window wall system, single pane glazing and integral components in the John H. Mulroy Civic Center Office Tower with a new double pane glazing system with a forty-plus year life expectancy. This new system will provide an energy savings payback estimated to be less over fifteen to twenty years (the payback is tied to the cost of natural gas and electricity and the savings would be realized at the DH&C plant). The replacement of the curtain wall system is complete. The department of Facilities Management is in process of restoring the interior work areas. Selective improvements are introduced as restorations are performed.

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

Courthouse Sidewall Copper Flashing Replacement
Project On-going
New copper flashing has been installed and has been successful on the north elevation of the building. With this proven success, the Department of Facilities will continue to replace the existing, out dated flashing to complete the repairs specified with this project. We expect to bid this work in September and have the project performed between early October and early December of this year. This project was delayed while another season of investigation could be completed. Preliminarily observations indicate it may be relative to the joints in the ornamented stonework at the parapet.

Edward Kochian County Office Building Rehab./Renovation
Project On-going
This project entails the continued renovation of the Edward Kochian County Office Building, giving it an extended useful life of forty-five to fifty years with improved fire safety, reduced maintenance, and energy cost savings. As a result of the asbestos abatement we will continue upgrading finishes, mechanical systems, fire protection, lighting, furniture and improve energy management. Three of the eight floors (3, 7, and 8), as well as the basement, were completed in the past 10 years. We now have also renovated 6,5 and 1st floors. Our rehabilitations include ADA compliance and security enhancements. The asbestos abatement in the Edward Kochian County Office Building (County Office Building) was completed in May 2013. As result of

this abatement, the basement, first, second, fourth, fifth, and sixth floors as well as seventh and eighth floor lobbies, and the mechanical penthouse were made ready for renovation. We replaced air handlers, pumps, exhaust fans, drives, piping, chiller and controls. We provided specific climate control for new data closets. We added fire protection to the renovated floors. We completed the renovations of the first, fifth and sixth floors by fall of 2014 and this work included upgrades to the bathrooms on these floors. This allowed the Probation Department to move to the 1st and 5th floors before the end of 2014.The additional funds authorized in 2015 will be used to continue to carry this project to completion, which means renovations of 4th floor, as well as the elevator lobbies on floors 2, 7 and 8, including bathrooms. The rehabilitation of the County Office Building will include HVAC systems and controlling upgrades, FA, FP, managed electrical service, water use reduction in plumbing, safety and security provisions, audio and visual technologies, lighting enhancement with programmable technology, as well as ergonomics and ADA improvements. We expect energy use reduction and savings, department staff performance improvements, and increased useful life and security of our asset upon completion of this project.

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

Justice Center Roof Replacement
Project On-going
The Onondaga County Justice Center is sixteen years old. The original roof, a Firestone single ply ballasted membrane, has a life expectancy of ten years and is warranted by the manufacturer for that time. The roof system was selected during the "value engineering" phase of the design process to cut construction costs. The warranty expired on November 11, 2004. The roof membrane is weather worn and has shrunk considerably. We experience almost constant leaks and repair costs continue to rise as they become more complex. This project will allow for the replacement of the roof with a design that will last longer and provide a "green" roofing solution. For budgeting, we estimate 50,000 square feet of roofing at an average cost of $20 per square foot. This includes all removals and disposal of old roofing with the exception of the stone ballast, which we propose to re-use if required. This project has begun, with completion expected in early October.

FINANCE DEPT

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

INFORMATION TECHNOLOGY

Enterprise Resource Planning (ERP)
Project On-going
The new system will integrate the payroll, financial and other systems into one, providing the ability to enter time, track leave

balances, enter benefits information, view and process payroll and budget information, in one county wide system. This system will be flexible and robust enough to provide shared services. The end users will be provided with real time data and the ability to inquire into specific transactional information. The various number of platforms supported by IT and the in-house applications written around the current systems, which cost time and money to create and maintain, will be reduced. In June 2010 the County Legislature authorized $9,887,416 (BR-127) which was amended in May 2014 by issuing another $988,741.Under the initial investment of $9,887,416, the County implemented PeopleSoft Financials and Hyperion modules which now support Budgets, Purchasing and Payables for all departments within the County. The amended amount of $988,741 is currently being used to implement PeopleSoft Human Capital Management which will support all processes associated with HR, Payroll and Benefits. Here are 3 projects we need to support to enhance our enterprise systems for PeopleSoft financials. All three projects need professional services and expertise to implement. The total funding needed for three projects is $775,000. The county Legislature Authorized this amount in February 2, 2016.

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

ONONDAGA COMMUNITY COLLEGE

Campus Wide Energy Projects
Project Completed
Various upgrades across campus took place to enhance performance and energy efficiency within our facilities. Boiler upgrades, and HVAC control upgrades are complete.

Other Improvements - Technology and Administrative Offices
Project Completed
This project involves on-going initiatives to address administrative office needs and expand computer labs, update Smart classrooms, and provide adequate training facilities for both internal and external usage.

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

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

West Quad Renovation: Ferrante/Coulter Project
Project On-going

On June 2, 2015 the County Legislature authorized this project in the amount of $8,800,000. The total project was approved at $17,600,000, 50% funded from Onondaga County and 50% from the State. This project consists of major repairs and redesign for the campus quad area as well as two (2) of the College's main academic buildings, Ferrante and Coulter. All of these fundamental areas of the College's physical plant are in need of repairs as all, or parts, have not been renovated for years. Exterior quad work consisting of major repairs and redesign to eliminate excessive "hardscape", empty plaza, deteriorating retaining walls, pavements and steps is complete. This area is now a major hub of activity on campus and is far more accessible for those traversing on campus. The Coulter building is currently under construction. The College library, a critical component of the learning landscape on campus, occupies the majority of the Coulter building. This structure has not been renovated since its construction in 1969. The new vision for the renovation of Coulter, a collaborative effort developed among departments, will transform 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 needed student gathering space. These services will be centered around a mission of improving retention and completion for our full "community of learners" embracing all students from those needing to build skills to honors. Work in this building includes 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 will clearly define and separate the library function from student gathering/study spaces. This piece of the project has an early 2017 anticipated completion. Ferrante, the home of Onondaga's Nursing and key science programs will be the final component of this project. This project will include major renovations to primarily the first floor including life safety upgrades (sprinklers, elevator), abatement, elevator refurbishments, classroom upgrades and entranceway repairs. In addition, the building's roof system is over 30 years old and in need of replacement. The overall project is anticipated to be complete by December 2017.

ONONDAGA COUNTY PUBLIC LIBRARY

Central Library Reconstruction

Project Completed

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

A major renovation of the Central Library began in 2014 and in addition to space considerations other programmatic goals surfaced that would help make our community more resilient and allow the library to continue to grow right along with the community. These goals included: repositioning the library as a vital part of our downtown, meeting 21st century user needs, providing spaces for community engagement and education, helping to grow economic and community infrastructure, and reducing the library's carbon footprint by upgrading mechanical systems.

The first and second floors were expanded to provide improved access, the third floor was retained and renovated and the fourth and fifth floors were removed from the library's footprint. The county was quickly able to lease the space on the 4th and 5th floors to another tenant. The total square footage for the newly renovated Central Library is 80,000 square feet. The largest overall reduction in square footage was in staff areas as new technologies and workflows require less space and more efficient spaces with better adjacencies were central to the design.

New public spaces were created, including a public meeting room (with an after-hours entrance), a new children's area focused on early literacy skill development, a high tech makerspace providing 21st Century job skills training, a young adult area with academic and recreational spaces, group study rooms to house students and tutors as well as public meetings, and expanded restrooms to severe patrons and downtown visitors. The renovation also included a new climate controlled archive for our extensive collection of local history and genealogy materials as well as more efficient ways to travel between spaces which include a new centrally located elevator and communicating stairway.

The library renovation is nearly complete with a projected completion date of October 1, 2016 and all project goals have been met.

PARKS & RECREATION DEPT.

Highland Forest Parking Improvements
Project On-going
Under this project the Skyline Lodge parking lot will be reconstructed and expanded adding 90 spaces and installing parking lot lights. After the design for this project was recently the County Legislature authorized $805,000 in February 2, 2016 to fund the construction. The project will be complete in Fall 2016.The Skyline Lodge at Highland Forest has become a major destination for weddings, events, and recreation. Due to its popularity the parking lot needs to be expanded. Recreation: Highland Forest offers over 50 miles of incredible trails that are ideal for hiking, biking, and cross country skiing. The winter recreation program features cross country skiing, snowshoeing, season passes, day passes, rentals, and sleigh rides. The park attendance is extremely high on winter weekends. Every year 250 events are held at the Skyline Lodge, with the majority of these being weddings. Visitors particularly enjoy the new 80 by 100 deck which provides a breathtaking view of the valley. In fact, total bookings are up from 200 to 250 since the addition of the deck. Due to the popularity of the winter recreation program and the events at the Skyline Lodge, the current parking lot needs to be expanded. Additionally, better lighting is necessary for night events.

Onondaga Lake West Shore Revitalization Project
Project On-going
This project is an important component of a significant community revitalization initiative for the western shore of Onondaga Lake, the Village of Solvay and Town of Geddes. The project is fully authorized and funded through a combination of State Grants and County funds received as part of New York State’s settlement agreement with Oneida Nation. Construction of the amphitheater began in the late fall of 2014 and was completed in late summer of 2015. The Lakeview Amphitheater is on park land owned by Onondaga County, and the entire site will remain in public ownership.

Rosamond Gifford Zoo Boardwalk Replacement
Project On-going
The goal of this project is to replace the elevated boardwalk at the Rosamond Gifford Zoo, most of which was built in the early 1980's, is about 300 linear feet in length. Most of the structure is concrete and over time, has deteriorated. The boardwalk may be re-routed and the new design will consider service vehicles. In the August 2016 the County Legislature authorized $1,005,000 for design and construction of this project.

Veteran's Cemetery Expansion
Project On-going
In order to address future needs for veteran burials a master plan was initiated in 2014 and completed in 2015. We have already started the implementation of this plan with a phase one expansion and current need requires an expanded roadway to access future burial sites and the addition of a maintenance building for operational equipment and supplies. The phase one of this project consisted in preparing additional burial sites that will accommodate the needs for the next three years. As a result we need to create accessibility to these new burial sites, through road expansions, and at the same time we need to improve our capacity to serve to the rest of the cemetery. This requires more equipment which presents the need for a structure that will shelter and serve as a maintenance facility for the additional equipment. In February 2, 2016 the County Legislature authorized $480,000 to fund this project. The road will be completed in fall 2016 and we will break ground on the maintenance facility project in spring 2017.

Zoo HVAC Rehabilitation
Project Completed
The Onondaga County Legislature authorized the funding of this project in November of 2012. A part of this funding was used to rehabilitate and replace the major components of the HVAC system at the Zoo. The remaining component of this project concerns the chiller lines. In spring 2016, the chilled water lines were rehabilitated. The design and construction of this project used the remaining funding.

SHERIFF POLICE/CIVIL

Special Operations Facility Renovation
Project On-going
This project will relocate the Sheriff's special operations facility, which houses the Sheriff's Office Special Enforcement Section. This section is made up of Aviation, Navigation, K-9, Snowmobile, Underwater Search & Recovery, Hazardous Device Disposal, SWAT, Firearms Training and the Armorer. The aviation will be relocated to 174th Hancock Field , whereas the rest of the

special enforcement section will be relocated in an existing facility on Commerce Boul. East Syracuse. These new facilities will serve as the base of operations for these units and will house a variety of Sheriff's Office vehicles and equipment. This project will also provide for additional space to consolidate the property and evidence facility and provide space for an impound lot. The funds for preliminary planning for this project have already been authorized.

PROPOSED CAPITAL PROJECT SUMMARY

County Wide

Department	STATUS	PROJECT	2017 - 22 Total
General Fund			
EMERGENCY COMMUNICATIONS			
		Auxiliary Power Systems Replacement	622
		Computer Aided Dispatch (CAD) System Hardware Refresh	975
	new	E911 Center Roof Replacement (NEW)	303
		Next Generation 911 (NG-911) Telephone System Replacement/refresh	3,659
		Oblique Aerial Digital Imagery Refresh	394
		Public Safety Radio Tower Replacement	604
		Trunked Land Mobile Radio Network Backup Prime Site	1,964
		Subtotal	$ 8,521
FACILITIES MANAGEMENT			
		Carnegie Library Rehabilitation	3,957
		Civic Center Office and Masonry Improvements	1,487
		Community Plaza Garage	1,299
		Courthouse - HVAC Renovations	10,400
		Facilities Various Capital Improvements	7,100
		Oncenter Rehabilitations	2,000
		Remodeling TA Intake	2,503
		Subtotal	$ 28,746
HILLBROOK DETENTION HOME			
	new	Hillbrook Detention Facility Improvements (NEW)	394
		Subtotal	$ 394
OFFICE OF ENVIRONMENT			
		Ash Tree Management	4,500
		Subtotal	$ 4,500
PARKS & RECREATION DEPT.			
		Beach Development at Onondaga Lake Park	300
	new	Building an AZA Required Animal Medical Care Center with African Savannah Exhibit (NEW)	14,100
	new	Carpenters Brook Fish Hatchery Pond Repair (NEW)	402
		Lights on the Lake Storage Facility	330
		Long Branch Park Improvements	1,950
	new	Onondaga Lake Park Shoreline Stabilization (NEW)	756
		Park Buildings	720
		Park Improvements/Willow Bay	2,720
		Park Roads, Parking Areas, and Trail Paving	3,750
		Park Roofs	569
		Salt Museum Rehabilitation	310
		Subtotal	$ 25,907
		General Fund Total	**$ 68,068**

Community College

ONONDAGA COMMUNITY COLLEGE			
		Allyn Hall Upgrades and Improvements	2,780
		Critical roof maintenance	3,254
		Elevator Replacement and Upgrades/ Protection of the Campus E-mail and Phone Servers	646
		Infrastructure - Campus Wide	10,488
		Site Improvements	2,718
		Student Center Renovation and Redesign	3,950
		Community College Total	**$ 23,836**

County Road

TRANSPORTATION

Bituminous Surface Treatment	9,376
Bridges	12,198
Capital Highway Construction	29,127
Caughdenoy Road / NYS Route 31 Road Improvements	4,120
Cold Mix Bituminous Paving	20,406
Guide Rail	3,060
Rehabilitation of North Area and Camillus Highway Maintenance Facilities	17,000
Repaving Program (Hot Mix Bituminous)	39,447
Testing, Drainage and Facilities Repair	5,820
Traffic Systems Management	2,010
County Road Total	**$ 142,564**
County Wide Total	**$ 234,468**

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

County Wide
SOURCE OF FUNDS

	2017	2018	2019	2020	2021	2022	6yr Total
Pay as You Go	2,121	9,100	9,100	9,100	9,100	8,100	**46,621**
Authorized Borrowing	2,801	500	500				**3,801**
Borrowing to be Authorized	19,373	28,559	24,111	19,162	14,700	3,650	**109,555**
Federal Aid	8,080	13,025	1,130	2,400			**24,635**
State Aid	6,405	11,110	8,802	12,259	5,640	5,640	**49,856**
TOTALS	**$38,780**	**$62,294**	**$43,643**	**$42,921**	**$29,440**	**$17,390**	**$234,468**

Estimated Debt Service
Payment Schedule ($ in 000's)

County Wide

General Fund

FACILITIES MANAGEMENT

	2017	2018	2019	2020	2021	2022
Facilities Various Capital Improvements	0	0	30	75	119	162
Carnegie Library Rehabilitation	0	0	116	275	321	314
Courthouse - HVAC Renovations	0	0	60	227	497	869
Remodeling TA Intake	0	0	90	195	222	217
Community Plaza Garage	0	0	78	117	114	112
Oncenter Rehabilitations	0	0	0	0	30	45
Civic Center Office and Masonry Improvements	0	0	41	62	60	59
Department Total	**0**	**0**	**415**	**951**	**1,363**	**1,778**

EMERGENCY COMMUNICATIONS

	2017	2018	2019	2020	2021	2022
Auxiliary Power Systems Replacement	0	0	0	37	66	65
E911 Center Roof Replacement (NEW)	0	23	30	30	29	28
Computer Aided Dispatch (CAD) System Hardware	0	11	46	91	231	223
Next Generation 911 (NG-911) Telephone System	0	0	0	13	236	511
Oblique Aerial Digital Imagery Refresh	0	0	0	24	95	91
Public Safety Radio Tower Replacement	0	0	20	46	54	52
Trunked Land Mobile Radio Network Backup Prime Site	0	0	118	209	204	199
Department Total	**0**	**34**	**214**	**450**	**915**	**1,169**

OFFICE OF ENVIRONMENT

	2017	2018	2019	2020	2021	2022
Ash Tree Management	0	45	150	252	351	447
Department Total	**0**	**45**	**150**	**252**	**351**	**447**

PARKS & RECREATION DEPT.

	2017	2018	2019	2020	2021	2022
Beach Development at Onondaga Lake Park	0	0	18	27	26	26
Building an AZA Required Animal Medical Care Center	0	0	38	541	741	1,227
Onondaga Lake Park Shoreline Stabilization (NEW)	0	18	38	52	69	73
Carpenters Brook Fish Hatchery Pond Repair (NEW)	0	0	30	40	39	38
Salt Museum Rehabilitation	0	0	19	28	27	27
Park Roofs	0	17	43	51	50	48
Long Branch Park Improvements	0	0	57	161	205	200
Park Roads, Parking Areas, and Trail Paving	0	0	63	184	267	315
Park Buildings	0	0	28	65	76	74
Park Improvements/Willow Bay	0	0	13	101	234	285
Lights on the Lake Storage Facility	0	0	20	35	34	33
Department Total	**0**	**35**	**367**	**1,285**	**1,768**	**2,346**

HILLBROOK DETENTION HOME

	2017	2018	2019	2020	2021	2022
Hillbrook Detention Facility Improvements (NEW)	0	30	39	38	37	36
Department Total	**0**	**30**	**39**	**38**	**37**	**36**
General Fund Total	**0**	**144**	**1,185**	**2,976**	**4,434**	**5,776**

County Road

TRANSPORTATION

	2017	2018	2019	2020	2021	2022
Bridges	0	53	132	209	285	360
Repaving Program (Hot Mix Bituminous)	0	129	251	269	272	274
Cold Mix Bituminous Paving	0	0	0	0	0	0
Guide Rail	0	0	0	0	0	0
Capital Highway Construction	0	75	183	283	394	501
Rehabilitation of North Area and Camillus Highway	0	510	1,275	1,513	1,479	1,445
Caughdenoy Road / NYS Route 31 Road Improvements	0	247	439	428	417	407
Traffic Systems Management	0	19	54	88	122	156
Department Total	**0**	**1,033**	**2,334**	**2,790**	**2,969**	**3,143**

Community College

ONONDAGA COMMUNITY COLLEGE

	2017	2018	2019	2020	2021	2022
Site Improvements	0	0	0	82	190	185
Critical roof maintenance	0	0	42	63	117	144
Infrastructure - Campus Wide	0	0	0	0	315	472
Allyn Hall Upgrades and Improvements	0	0	0	83	125	122
Student Center Renovation and Redesign	0	0	118	178	174	170
Elevator Replacement and Upgrades/ Protection of the	0	0	0	19	45	44
Department Total	**0**	**0**	**160**	**425**	**966**	**1,137**
County Wide Total	**0**	**1,177**	**3,679**	**6,191**	**8,369**	**10,056**

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: Auxiliary Power Systems Replacement

Purpose: Public/Employee Safety/Health

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0			622				622	622
TOTALS	**0**			**622**				**622**	**622**

Project Detail and Status:

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

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

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: Computer Aided Dispatch (CAD) System Hardware Refresh

Purpose: Public/Employee Safety/Health

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	191		784				975	975
TOTALS	**0**	**191**		**784**				**975**	**975**

Project Detail and Status:

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

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

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

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

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: E911 Center Roof Replacement (NEW)

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

Level of Development: Preliminary

Project Description:

To replace the roof at the E911 Center. The roof is the original which was installed when the building was constructed in 1991 and was rated for 20 years. The roof is now 25 years old roof and significantly past the end of its useful life. The roof has already begun to leak. A leak in the roof could cause costly damage to the electrical, telephone, radio, and other equipment at the E911 Center.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	303						303	303
TOTALS	**0**	**303**						**303**	**303**

Project Detail and Status:

This project will engage the services of Onondaga County's contracted roofing vendor to replace the 18,408 square foot roof at the Onondaga County E911 Center with a Thermoplastic polyolefin (TPO) roof in September 2016. This will include additional R-20 insulation, flashing, roof drains, and refilling existing pitch pockets.

DEPARTMENT: EMERGENCY COMMUNICATIONS

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

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

Level of Development: Intermediate

Project Description:

This project will involve the replacement of Next Generation 911 (NG-911) call taking solution that was originally installed in 2015 at both the main 911 Center and the Backup Operations Center (BOC). Equipment was originally leased under contract (5 years) with Verizon and will need to be replaced through a private vendor in 2020.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0			212	3,447			3,659	3,659
TOTALS	**0**			**212**	**3,447**			**3,659**	**3,659**

Project Detail and Status:

The Vesta 4x call taking solution that was installed in 2016 will need to be replaced/refreshed in 2021 as system hardware (i.e., computer workstations and servers) will be at the end of its useful service life based on 24x7 critical public safety service. At least 43 workstations (27 at the Main E911 Center and 16 at the Backup Operations Center) will need to be replaced along with other peripheral hardware, software and interfaces as necessary. Considerable labor will be expended to ensure continuity of public safety operations. Installation will need to be coordinated based on call volume activity and cannot occur at the main Center between June and August.

The current Vesta 4x call taking solution has been provided through a lease with Verizon. Since Verizon is phasing out of the business of providing customer premise equipment (CPE), it will be necessary to consider other purchase options that may include migrating from the Vesta system that has been in use at E911 for many years. Consultant services will be necessary to assist the County in developing an RFP, evaluating proposals, and in implementation. In addition, if there are significant differences in the CPE acquired, the budgeting of overtime for the training of approximately 140 employees who call take will be necessary.

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: Oblique Aerial Digital Imagery Refresh

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

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0			394				394	394
TOTALS	**0**			**394**				**394**	**394**

Project Detail and Status:

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

The most recent oblique aerial imagery was secured in May 2014. Refreshes must be done periodically 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.

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: Public Safety Radio Tower Replacement

Purpose: Public/Employee Safety/Health

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		339	265				604	604
TOTALS	**0**		**339**	**265**				**604**	**604**

Project Detail and Status:

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

In the summer of 2019, the existing 200' self-supporting Makyes (MAK) radio tower, located at 4050 Makyes Road in the Town of Onondaga, will be replaced with a new 165' self-supporting SSV type radio tower meeting TIA-222 public safety communications tower standards. Once the new tower is constructed adjacent to the old tower, and antennas and feed line are installed, the old radio tower will be decommissioned and removed from the site. The Makyes tower was inherited by Onondaga County and the age or origin is unknown. It is not of public safety communications grade. The first legislative authorization for $339,000 will be requested in fall 2017

DEPARTMENT: EMERGENCY COMMUNICATIONS

Project: Trunked Land Mobile Radio Network Backup Prime Site

Purpose: Public/Employee Safety/Health

Level of Development: Advanced

Budget Impact: $25,000

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		1,964					1,964	1,964
TOTALS	**0**		**1,964**					**1,964**	**1,964**

Project Detail and Status:

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

DEPARTMENT: FACILITIES MANAGEMENT

Project: Carnegie Library Rehabilitation

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

Level of Development: Advanced

Budget Impact: ($600,000)

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		1,938	1,669				3,607	3,607
State Aid	0		350					350	350
TOTALS	**0**		**2,288**	**1,669**				**3,957**	**3,957**

Project Detail and Status:
OCFM will design and manage this project from concepts that have been developed over the last year. We will undertake a facelift to the finishes, keeping in kind with the historical character of the building. We will deliver open floor office environments for strategic departments we would relocate into this property. We will need to expand on the HVAC system, the fire protection system, introduce a wireless network, and enhance security.

The plan will be designed in-house, saving money and time, and maintaining concept continuity. Structural modifications will not be needed. We intend to start construction in early 2017 and finish in 2018. Therefore we would like to request the authorization for construction funds during 2017.

DEPARTMENT: FACILITIES MANAGEMENT

Project: Civic Center Office and Masonry Improvements

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

Level of Development: Advanced

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		686					686	686
Authorized Borrowing	3,730	801						801	4,531
Pay as You Go	400							0	400
TOTALS	**4,130**	**801**	**686**					**1,487**	**5,617**

Project Detail and Status:

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

Masonry repair of lower brick veneer - This eliminated structural issues and potential safety hazards that could occur by bricks falling off the building. It also eliminated water infiltration into basement and subbasement levels. Moisture in the brick veneered columns that has caused lighting fixture failures was also addressed. In 2012 we successfully repointed many areas of brick veneer at ground level. We replaced almost half of the recessed lights in the exterior columns.

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

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

In June 7, 2016 the County Legislature authorized $801,000 which will fund the continuation of construction in 2016 and 2017 of space renovations on floors 7 and 8 as well as HVAC upgrades, ADA upgrades, and security provisions in floors 7, and 8. The funds allocated in 2017 will be used to continue and finish the above projects. We plan to seek legislative authorization for it in fall 2017.

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-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	250							0	250
Borrowing to be Authorized	0		1,299					1,299	1,299
TOTALS	**250**		**1,299**					**1,299**	**1,549**

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 2017 cost of $1.299 million. If we use the same escalation factor on the initial estimate of $2.85 million this figure would have been $3.2 million in 2017 money in this the savings are $1.9 million.

We intend to seek legislative approval for construction funds in Fall 2017.

DEPARTMENT: FACILITIES MANAGEMENT

Project: Courthouse - HVAC Renovations

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

Level of Development: Advanced

Budget Impact: ($160,000)

Project Description:
This project is designed to address the aging, 50+ year old HVAC systems in this important 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-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		1,000	2,000	3,000	4,000		10,000	10,000
Authorized Borrowing	0	400						400	400
TOTALS	**0**	**400**	**1,000**	**2,000**	**3,000**	**4,000**		**10,400**	**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.

In June 7, 2016 we the County Legislature approved $400,000 to fund the engineering design for this project. We plan to seek legislative approval for construction funds in fall 2017.

DEPARTMENT: FACILITIES MANAGEMENT

Project: Facilities Various Capital Improvements

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

Level of Development: Advanced

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		500	500	500	500		2,000	2,000
Pay as You Go	380		1,000	1,000	1,000	1,000		4,000	4,380
Authorized Borrowing	5,305	1,100						1,100	6,405
TOTALS	**5,685**	**1,100**	**1,500**	**1,500**	**1,500**	**1,500**		**7,100**	**12,785**

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 WAM 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. Engineering expected in 2015.

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 plan ADA improvements at the theaters. ($275,000). Studies and designs have begun, and we expect to begin improvements in fall of 2015.

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

ASSET MANAGEMENT SYSTEM: $650,000
The County has an immediate need to assess benchmark and input data pertaining to the condition of all County's assets. With an Asset Management System, we will have the tools necessary to analyze and review building conditions and systems in order to determine capital planning, prioritize investments, and protect the County's assets. AW 4/16 the first step in the asset management system was deployed in 2016 with the application of Que Ware work order system.

VARIOUS IMPROVEMENTS IN CIVIC CENTER $180,000
This project provided for renovations of the Onondaga room for the use by the general public, county employees and the theatre 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 objects:
- Replacement of Everson Garage fire alarm system. ($270,000)
- Concrete work on East Garage stairs/entrances, including new bunker glazing and access control. ($50,000)

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

VARIOUS IMPROVEMENTS IN CIVIC CENTER $1,000,000
The main focus of this project is to continue the renovation efforts in the Civic Center, which include ADA enhancements in restrooms and security provisions for employees related to modifications of front entrances, key access doors and surveillances cameras.

MULTIPLE BUILDINGS/EXTERIOR COMPLEX: $946,000
This sub-project will address the following objects:
- Asbestos removals. We will continue removals and cleanups in various buildings and tunnels. ($350,000)
- Sidewalk panel replacement - miscellaneous areas ($100,000)
- Replace and enhance public address systems in compliance with PESH, Codes and Emergency Management reports ($150,000)
- Repair Terrazzo flooring and drains at Civic Center entries. Replacement of the existing vestibule flooring with Pedigrid systems at entries.($60,000)
- Steam trap replacements in various buildings. This project has a 5 year payback due to savings in maintenance and energy ($300,000 with $99,000 NYSERDA incentive leaving a local cost of $201,000)

- Justice Center. Modify and correct controlling for the booster pumps and domestic hot water. Replace hot water storage tanks including master mixing valves. Balance the domestic hot water recirculation (circuit setters) and replace solenoid valves that control the individual towers. A&E and construction - $85,000

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-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	1,500	500	500	500				1,500	3,000
Borrowing to be Authorized	0				500			500	500
State Aid	100							0	100
TOTALS	**1,600**	**500**	**500**	**500**	**500**			**2,000**	**3,600**

Project Detail and Status:

In December 2012 the County Legislature authorized $1,500,000 for reconstruction/construction of improvements at the Oncenter, including equipment and furnishings, for projects planned in 2013, 2014, and 2015.

The following projects have been completed or are planned:

- Replaced a part of the Convention Center roof, specifically the lower west side roof over the loading dock ($153,000). The east side of the lower roof will be replaced at an estimated cost of ($125,000).

- Reinforced and secured Oncenter Garage safety cable fencing ($78,000).

- Replaced of dasher boards for ice hockey and indoor soccer events ($345,000)

- Replaced the War Memorial laundry facility equipment ($20,000)

Construction is under way for renovations and repairs to door systems:
- State St. door system ($144,000)
- Harrison St. door system ($72,000)
- Montgomery St. door system ($20,000)

- Planned replacement of the ballroom lights ($141,000). The work is expected to begin in 2015

- Planned and executed expansion of War Memorial of ice surface ($676,000). The work was completed in October 2015.

In June 7, 2016, the County Legislature authorized $1,500,000, which will be spent in 2017-2019. In fall 2019 we will seek legislative authorization for the remainder of funds. With these funds we plan to accomplish the following projects in the period 2017-2020:

- Entry doors to the theater will be replaced with those meeting new attenuation standards and silent hardware ($75,000).

- Replace the existing marquees with new digital marquees ($875,000)

- Replace the inefficient high wattage lighting and controlling systems ($500,000)

- Insulation repairs, Convention Center ($250,000)
We have many areas of disrepair and disturbance, mostly in the mechanical, kitchen, and basement areas. They need to be restored to their original integrity. Leaking condensation is causing damage to assets and the loss of heating and cooling radiating away from our systems is costing money.

- Metasys system expansion ($95,000)
We will extend the connections and interface into the DH&C plant where 24/7 monitoring is available. An expansion of network cabling and programming is needed.

- Replace CCTV cameras (Security Cameras) at War Memorial ($205,000)

DEPARTMENT: FACILITIES MANAGEMENT

Project: Remodeling TA Intake

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

Level of Development: Advanced

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		1,500	1,003				2,503	2,503
Authorized Borrowing	378							0	378
TOTALS	**378**		**1,500**	**1,003**				**2,503**	**2,881**

Project Detail and Status:

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

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

We received authorization of $378,000, which will be spent for the study and design for construction. We will have this task completed by December 2016.

We intend to seek authorization for the construction funds in fall of 2017.

DEPARTMENT: HILLBROOK DETENTION HOME

Project: Hillbrook Detention Facility Improvements (NEW)

Purpose: Public/Employee Safety/Health

Level of Development: Intermediate

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	394						394	394
TOTALS	**0**	**394**						**394**	**394**

Project Detail and Status:
The scope of this project will include the following elements:

- Adding pole mounted IP cameras to the parking lot, access drive, fence line and service dock areas.
- Installing vinyl privacy slats at perimeter fence where lacking. Replacing the mobile duress response system.
- Install security glass and doors in four unit lounge offices, which serve as counselor stations.
- Replacing six gymnasium doors.
- Replacing existing outdated control panel in the control room with updated touchscreen technology.
- Replacement of existing surveillance system hardware and software.

All the items mentioned above are outdated and at the end of their life. It is hard and costly to maintain them and keep them functioning appropriately
.
We plan to seek legislative authorization for this project in fall 2016

DEPARTMENT: OFFICE OF ENVIRONMENT

Project: Ash Tree Management

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

Level of Development: Intermediate

Project Description:

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

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	750	750	750	750	750	750	4,500	4,500
Pay as You Go	250							0	250
Authorized Borrowing	750							0	750
TOTALS	**1,000**	**750**	**750**	**750**	**750**	**750**	**750**	**4,500**	**5,500**

Project Detail and Status:

The County owns approximately 300 parcels of land covering roughly 8,000 acres (including parkland, water supply and wastewater treatment plants, drainage districts, pumping stations, radio towers, institutional campuses for uses including administration, correctional facilities, emergency response operations and more) and nearly 800 miles of highway rights-of-way. These properties are home to tens of thousands of ash trees.

Steps must be taken by the County to ensure that the threat of harm to humans and/or damage to County-owned property is minimized, that the public cost of managing affected trees on County-owned property is minimized and that overall disruption in the community is minimized (including tree replacement needs). To this end the County has taken the following steps:

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

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

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

1) Preemptive removal of approximately 95% of inventoried ash trees over a period of 19 years (a littleover 44,000 trees).

2) Replacement of approximately 10% of removed trees, phased over 19 years, primarily in the County’s parks, with non-invasive, non-host tree species (a little over 4,400 replacement trees).

3) Preservation of approximately 5% of inventoried ash trees. These will be carefully chosen, high value ash trees that provide significant amenities for up to 25 years (approximately 2,300 ash trees).

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

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

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

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-2017	2017	2018	2019	2020	2021	2022	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. A facility master plan was completed in 2013 and this project is part of that master plan. We plan to request legislative authorization on June 2018.

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Critical roof maintenance

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Preliminary

Project Description:
Installation of new roof systems on multiple campus buildings

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
State Aid	0		702		925			1,627	1,627
Borrowing to be Authorized	0		702		925			1,627	1,627
TOTALS	**0**		**1,404**		**1,850**			**3,254**	**3,254**

Project Detail and Status:
Many campus buildings will be in need of new roof systems as they will be outside of their normal expected life. A facility master plan was completed in 2013 and this project is part of that master plan. We plan to request legislative authorization on June 2017.

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

Budget Code: ***Budget Impact:*** $0

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	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. A facility master plan was completed in 2013 and this project is part of that master plan.
We plan to request legislative authorization on June 2018.

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-2017	2017	2018	2019	2020	2021	2022	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.
A facility master plan was completed in 2013 and this project is part of that master plan.
We plan to request legislative authorization on June 2019.

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-2017	2017	2018	2019	2020	2021	2022	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. A facility master plan was completed in 2013 and this project is part of that master plan. We plan to request legislative authorization on June 2018.

DEPARTMENT: ONONDAGA COMMUNITY COLLEGE

Project: Student Center Renovation and Redesign

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Preliminary

Project Description:

Redesign and renovate the Gordon Student Center to optimize space and enhance the delivery of services to Onondaga students.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
State Aid	0		1,975					1,975	1,975
Borrowing to be Authorized	0		1,975					1,975	1,975
TOTALS	**0**		**3,950**					**3,950**	**3,950**

Project Detail and Status:

The lower level and first floor northwest section of the building, primarily housing the College's Hospitality program, needs to be redesigned and renovated to better meet the needs of students. A facility master plan was completed in 2013 and this project is part of that master plan.
We plan to request legislative authorization on Fall 2017.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Beach Development at Onondaga Lake Park

Purpose: Community/Economic Development, Addition Capacity

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		300					300	300
TOTALS	**0**		**300**					**300**	**300**

Project Detail and Status:

At this point it appears that water cleanliness levels support the study of a potential beach along the shores of Onondaga Lake. It is now appropriate for the Parks Department to assess the feasibility for alternative types of water based recreation at Onondaga lake Park.

The funds we are seeking now will serve to conduct a study which will determine possible locations of a beach and related amenities as well as cost estimates. Legislative authorization for funds will be requested in fall 2017.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Building an AZA Required Animal Medical Care Center with African Savannah Exhibit (NEW)

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

Level of Development:

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		500	6,550	500	6,550		14,100	14,100
TOTALS	**0**		**500**	**6,550**	**500**	**6,550**		**14,100**	**14,100**

Project Detail and Status:

Presently the zoo has a animal medical clinic which does not meet the requirements specified by the American Zoological Association (AZA). Therefore the existing clinic will be decommissioned. This space will be converted to program space for elementary school education and the housing for the outreach animal collection. New adequate facilities will be designed and constructed to meet the required standards, 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. We plan to start the engineering and design in early 2018 and begin construction in 2019.

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

The other component of this project is a large hoof-stock savannah exhibit. The current configuration limits our ability to bring more varieties of larger species of animals in our zoo. Once we build this exhibit we will bring new animals to the zoo. This will cause increases in park visitation and revenues and will improve the identity of our zoo in our community. We plan to start the engineering and design in early 2020 and begin construction in 2021.

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

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

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Carpenters Brook Fish Hatchery Pond Repair (NEW)

Purpose: Reduce Operating Costs/Efficiency, Maintain Existing Investment

Level of Development: Advanced

Project Description:

This project will provide funding to patch & resurface the current 18 circular and 12 raceway ponds at Carpenters Brook Fish Hatchery.

Problem that Exists: The original concrete ponds were constructed in 1934. These ponds have been exposed to over 80 years of harsh environments. The ponds are leaking more water than is coming in and are difficult to raise fish in.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		402					402	402
TOTALS	**0**		**402**					**402**	**402**

Project Detail and Status:

•This price includes having the vendor ready the ponds' surfaces for proper fiberglass application and adherence by sandblasting loose particles off all ponds, then fill any cracks and crevices in the concrete to make the surface sturdy and level. Vendor will then clean and dry all surfaces to meet the specifications of product(s) being used.

•Once dry, the surface will be top coated with an aqua gel coat with an ultra violet inhibitor.

•The tanks will be primed, and then have 3/16" fiberglass applied.

•All materials will be FDA approved.

•The temperature will need to be above 60° F, making our window to work on this project from late spring through early fall.

•The Parks will be seeking $402,000 in the fall 2017 to prepare and line eighteen(18) 25' diagonal and twelve(12) 45’X6’ concrete tanks with 3/16" thick fiberglass.

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 Code: 110604 ***Budget Impact:*** ($25,000)

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-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		330					330	330
TOTALS	**0**		**330**					**330**	**330**

Project Detail and Status:

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

The Parks Department does not intend to seek legislative authorization for funds until the fall of 2017.

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: Intermediate

Project Description:

Long Branch Park is one of the busiest areas of the Onondaga County Parks system. Located at the confluence of Onondaga Lake and the Seneca River, this park has been a recreation destination for many decades. This project proposes needed repairs and improvements that will greatly benefit all users of this park.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	350							0	350
Borrowing to be Authorized	0		950	1,000				1,950	1,950
TOTALS	**350**		**950**	**1,000**				**1,950**	**2,300**

Project Detail and Status:

Due to the age and the heavy use of Long Branch Park it has been determined that a number of facilities are in deteriorating conditions and in need of repair in order to better serve the public. These facilities include office space for parks management, storage space, and bathrooms, shelters, and parking lot, which needs expansion, as well as related pathways and roads.

For the above scope we have considered alternative solutions such as combining some facilities, keeping them in the locations where they are, using historic or modern representation, various materials such as cedar, metal or asphalt roofing.

A study, providing cost estimates for various scope elements, has been completed by the Parks Department.
The following are the scope elements determined by this study as well as their respective cost estimates which will be further refined by the engineering design and bids:

On February 2016 the County Legislature authorized borrowing $350,000 which are being used for engineering of the Long Branch Park Improvement project and reconstruction of 3 shelters by fall 2016.

1. Project engineering design ($100,000) - 2016
2. The reconstruction and expansion of the three existing shelters ($225,000) - 2016

In 2017 and 2018 we plan to construct the following:

1. Installation of a fishing dock and kayak launch on the shore of Seneca River. ($96,000) - 2017
2. Construction of a 16 stall ADA compliant comfort station to replace the existing facilities ($400,000) - 2018
3. Reconstruction of the office/storage building ($250,000) - 2018
4. Electrical improvements (Three phase upgrade) ($150,000) - 2018
5. Expansion and Improvements to the parking lot as well as related pathways and roads. ($1,000,000) - 2018
6. Main entry fencing ($68,000) - 2018

In fall 2017 the Parks Department intends to seek legislative authorization for $950,000 to continue the construction of the scope elements of this project planned for 2017-2018.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Onondaga Lake Park Shoreline Stabilization (NEW)

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

Level of Development: Advanced

Project Description:

The Onondaga Lake Park shoreline has areas that are in need of stabilization. This project provides funding of $756,000 to be authorized to complete 4 different phases of the project over the next 4 years. The goal of this project is to prevent the further erosion of the existing shoreline.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	235	195	130	196			756	756
TOTALS	**0**	**235**	**195**	**130**	**196**			**756**	**756**

Project Detail and Status:

The Onondaga Lake Park shoreline has areas that are in need of stabilization. This project provides funding of $756,000 to be authorized to complete 4 different phases of the project over the next 4 years. The goal of this project is to prevent the further erosion of the existing shoreline.

Phase 1 – 2017 ($235,000)
The shoreline North from Bloody Brook to the OLP Marina (About +/- 1800') appears to be susceptible to erosion. At $13,000/100' the cost to stabilize would be $235,000.

Phase 2 – 2018 ($195,000)
The shoreline south from Bloody Brook to the railroad bridge to the Hope Garden (About +/- 1500') appears to be susceptible to erosion. At $13,000/100' the cost to stabilize would be $195,000.

Phase 3 – 2019 ($130,000)
The shoreline south from the Hope Garden to the railroad bridge (About +/- 2000') appears to be moderately susceptible to erosion. If upland placement of 1/2 as much stabilization was done at a cost of $6,500/100', the cost to improve the existing stability would be $130,000.

Phase 4 – 2020 (2 Shorelines = $196,000)
#1 - The Lake Outlet shore (About +/-700') appears to be susceptible to erosion. At $13,000/100' the cost to stabilize would be $91,000.

#2 – The Willow Bay shoreline (About +/- 800') appears to be susceptible to erosion. At $13,000/100' the cost to stabilize would be $105,000.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Park Buildings

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

Level of Development: Intermediate

Project Description:

This project seeks to replace existing structures and build new ones to improve visitor experience and increase capacity in various parks. These improvements will consist in building new shelters in Onondaga Lake Park, Jamesville Beach Park, and Oneida Shores Park, as well and repurposing the Onondaga Lake Park Concession Stand Building The shelters in this project are utilized throughout much of the year and have hosted countless birthday parties, graduation celebrations, and other family gatherings. Where conditions allow, we are proposing to add three new areas that the public will be able to rent and enjoy.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	325							0	325
Borrowing to be Authorized	0		460	260				720	720
TOTALS	**325**		**460**	**260**				**720**	**1,045**

Project Detail and Status:

This project seeks to replace existing structures or build new ones in order to improve the quality of our parks. Shelters are a consistent revenue generator in Onondaga County Parks. The shelters at Onondaga Lake Park have the highest usage in the park system. During the summer months it is not uncommon to have every available shelter rented for picnics/events. Improved and additional shelters would lead to additional revenue and also provide extra space for residents to enjoy the park.

On 2/2/2016 the County Legislature authorized $325,000 which will be used to construct the 3 following shelters:

1. Willow Bay Shelter: Onondaga Lake Park (2016)
Problem that Exists: Stone wall and footers heaving & cracking; footers & support beans sinking/cracking; roof needs to be replaced; tarvia pad cracking; drainage issues.
Scope of Work: Remove old, replace with new, update electric distribution, new concrete pad, replace/reconfigure accessible entry, fix drainage issues in immediate area.
Estimated Cost: $150,000

2. Bay View Tent: Onondaga Lake Park (2016)
Problem that Exists: Tent frame and canopy are aging; stone pad is not accessible.
Scope of Work: Remove tent, replace with new shelter, update electric distribution, new concrete pad, configure accessible entry.
Estimated Cost: $85,000

3. New Shelter: Onondaga Lake Park (2016)
Problem that Exists: Shelter rentals are at capacity most weekends at Onondaga Lake Park. To increase shelter rental revenue a new shelter could be placed in the Willow Bay Loop area to the right of Bay View Tent.
Scope of Work: Establish new site, erect new shelter with new concrete pad, electric and an ADA accessible entry.
Estimated Cost: $85,000

The projects planned for 2017 and 2018 are:

1. Onondaga Lake Park Concession Stand Building Conversion: (2017) $300,000
On the north side of Onondaga Lake Park near Long Branch Road is a Parks building that was used to house food concessions, bicycle rentals, and restroom facilities. Concessions and the bicycle rental have been relocated to the

Griffin Visitor Center area of the park. This proposal is to convert the empty building into a reserved shelter space.

2. The Willow Bay Annex comfort station renovation (2017)
Estimated cost $80,000

3. Hiawatha Point comfort station renovation (2017)
Estimated cost $80,000

4. Point Tent: Jamesville Beach Park (2018)
Problem that Exists: Tent frame and canopy are aging; stone pad is not accessible;
Scope of Work: Remove tent, replace with new shelter, establish electrical distribution, new concrete pad, and configure accessible entry.
Estimated Cost: $85,000

5. New Shelter: Jamesville Beach Park (2018)
Problem that Exists: Shelter rentals are at capacity most weekends at Jamesville Beach Park. To increase shelter rental revenue a new shelter could be placed in the picnic area north of the Visitor Center. Parking would be in the main lot.
Scope of Work: Establish new site, erect new shelter with new concrete pad and add electric service and an accessible entry.
Estimated Cost: $85,000

6. Maples Tent: Oneida Shores Park (2018)
Problem that Exists: Tent frame and canopy are aging; placement could be better situated.
Scope of Work: Remove tent, establish best placement, erect new shelter with new concrete pad and accessible entry, establish electrical distribution.
Estimated Cost: $85,000

In fall 2017 the Parks Department plans to seek legislative authorization for $460,000 in funds to continue the construction of the scope elements of this project planned for 2018.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Park Improvements/Willow Bay

Purpose: Maintain Existing Investment, Community/Economic Development

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		220	1,300	1,200			2,720	2,720
TOTALS	**0**		**220**	**1,300**	**1,200**			**2,720**	**2,720**

Project Detail and Status:

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

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

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

In the fall of 2017, The Parks Department will seek legislative authorization for $220,000 to fund this project.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Park Roads, Parking Areas, and Trail Paving

Purpose: Maintain Existing Investment, Community/Economic Development

Level of Development: Advanced

Project Description:
This project proposes constructing, reconstructing and/or resurfacing of park roads, trails and parking

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0		1,050	1,200	500	500	500	3,750	3,750
Authorized Borrowing	6,165							0	6,165
TOTALS	**6,165**		**1,050**	**1,200**	**500**	**500**	**500**	**3,750**	**9,915**

Project Detail and Status:
The Onondaga County Parks system is one of the finest in the country. Residents and visitors alike are impressed and complimentary about the high quality product we offer. We have become a destination for recreational activity 12 months a year. In recent years, the Onondaga County Legislature has authorized funding for the purpose of improving parks roads, parking lots, and trails in the County Parks system.

This funding has been used to seal and resurface roads at the Veteran’s Cemetery, replace a deteriorating boardwalk and resurface a parking lot at Beaver Lake, install a culvert pipe at Jamesville Beach, repair masonry at the Salt Museum (stair case on the lake side) and much more.

Beaver Lake Nature Center's entryway has been upgraded, refurbished, and renovated and was completed in 2015.

Following the successful addition of 2.5 miles to the West Shore Trail, we are exploring the next phase to Loop the Lake. Today you can park at the Griffin Visitor's Center and follow the trail to the State Fairgrounds. Future plans are being created that will extend from the Fairgrounds to the Onondaga Creek walk.

Keeping our reputation as a world class park system requires innovative ideas and attention to details. With over 3 million visitors a year we must ensure our roads, parking lots and trails receive adequate repair and maintenance.

On 2/2/2016 the County Legislature authorized $700,000 which was used to improve the following roads and parking lots.

Oneida Shores:
- McKinley Entrance Road: $225,000 - 2016

Onondaga Lake Park:
- OLP Entryway/Expansion: $80,000 - 2016
- Salt Museum Lot: $130,000 - 2016
- Overlook area: $70,000 - 2016
- Skate Park Lot: $90,000 - 2016
- OLP Compound: $100,000 - 2016

The Parks Department intends to seek legislative authorization for $1,050,000 in funding in fall of 2016 to replace the 1.1 mile stretch of Ten Eyck Road starting at the concession stand parking lot off Long Branch Road running north to The Good Dog Park. Construction to start in early summer 2017.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Park Roofs

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

Level of Development: Intermediate

Project Description:
Many roofs throughout Onondaga County Parks are in dire need of replacement.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	261							0	261
Borrowing to be Authorized	0	280	289					569	569
TOTALS	**261**	**280**	**289**					**569**	**830**

Project Detail and Status:
Many roofs on Parks' buildings are beyond the point of repair and beyond their useful life and need replacing.

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

On 2/2/2016 the County Legislature authorized $261,000 which will be used in 2016 to replace the 5 following roofs:

Highland Forest
•Community House Restrooms $15,000 (2016)
•Community House Shelter $16,000 (2016)
•Valley Camp $18,250 (2016)
Rosamond Gifford Zoo
•Café Roof $160,000 (2016)
Park's Main Office
•Park's Administrative Office $45,000 (2016)

In 2017-2018, Parks will replace the remaining roofs of this capital project listed below.

Beaver Lake Nature Center
•Visitor Center $280,000 (2017)

Highland Forest
•Valley Camp Annex $6,250 (2018)
•Skyline Lodge $201,000 (2018)

Jamesville Beach
•Overlook restroom $11,000 (2018)

Pratt's Falls
•Tractor Bays $28,000 (2018)

Onondaga Lake Park
•Willow Bay Restroom $16,000 (2018)
•Marina Comfort Station $12,500 (2018)

In fall 2016 the Parks Department intends to seek legislative authorization for $569,000 to continue this project.

DEPARTMENT: PARKS & RECREATION DEPT.

Project: Salt Museum Rehabilitation

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

Level of Development: Intermediate

Project Description:
This project will provide needed envelope repairs to the Salt Museum at Onondaga Lake Parks

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	290							0	290
Borrowing to be Authorized	0		310					310	310
TOTALS	**290**		**310**					**310**	**600**

Project Detail and Status:
The Salt Museum is 82 years old and is a very important part of our historical heritage and identity. Due to it age and use it is now in need of comprehensive envelope repairs. These repairs will include total roof replacement with cedar shingles, chimney repointing, windows replacement, and siding repair and replacement with board and batten siding, as well as painting. The deck walkway will also be replaced together with asphalt side walk.

The Parks Department is proposing to make these improvements in 2017 and 2018. This project is in the planning phase and $290,000 to fund the construction of roof and chimney repairs were approved by the County Legislature in August 2016. The repair of roof and chimney will be completed in 2017. The rest of the work will be completed in 2018 and the respective funding will be requested in fall 2017.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
State Aid	65	450	450	450	450	450	450	2,700	2,765
Pay as You Go	1103	303	1,281	1,273	1,273	1,273	1,273	6,676	7,779
TOTALS	**1,168**	**753**	**1,731**	**1,723**	**1,723**	**1,723**	**1,723**	**9,376**	**10,544**

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.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Federal Aid	4528	1,168	3,185	480				4,833	9,361
Borrowing to be Authorized	880	880	880	880	880	900	900	5,320	6,200
Pay as You Go	185	180	194	199	203	203	213	1,192	1,377
State Aid	840	165	598	90				853	1,693
TOTALS	**6,433**	**2,393**	**4,857**	**1,649**	**1,083**	**1,103**	**1,113**	**12,198**	**18,631**

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.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	1180	1,255	815	1,090	1,090	1,090	1,090	6,430	7,610
State Aid	600	600	1,845		450			2,895	3,495
Federal Aid	5952	6,912	9,840	650	2,400			19,802	25,754
TOTALS	**7,732**	**8,767**	**12,500**	**1,740**	**3,940**	**1,090**	**1,090**	**29,127**	**36,859**

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 on a projection of traffic volumes 20 years in 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 rate 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 rapidly deteriorating due to high volume traffic.

5. - Right of Way Acquisitions - purchase of needed Rights of Way necessary to complete the programmed projects.

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

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

Traffic Signs Upgrades – This project is intended to replace roadway traffic regulatory, guide, and warning signs in the County in order to meet current reflectivity standards as promulgated by the Federal Highway Administration. Funding from 2017 through 2020 will be necessary to complete this project.

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

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-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	530							0	530
Borrowing to be Authorized	0	4,120						4,120	4,120
TOTALS	**530**	**4,120**						**4,120**	**4,650**

Project Detail and Status:

The scope of this project is to replace the existing two lane Caughdenoy Road with a three lane section from NYS Route 31 to the railroad crossing 0.61 miles north in conjunction with the development of the White Pines Business Park. As part of the project, the Caughdenoy/Route 31 intersection will be improved by adding dedicated left turn lanes on all legs and the addition of a new three colored traffic signal, and the railroad crossing itself will be replaced. The funding for engineering design of this project was authorized by Resolution #165 dated November 9, 2012. The construction, by contract forces, is anticipated to start in 2017 and be completed in 2017.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	1250							0	1,250
Pay as You Go		218	2,114	2,014	2,010	2,010	2,000	10,366	10,366
State Aid	340	1,640	1,640	1,690	1,690	1,690	1,690	10,040	10,380
TOTALS	**1,590**	**1,858**	**3,754**	**3,704**	**3,700**	**3,700**	**3,690**	**20,406**	**21,996**

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.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Pay as You Go	487	453	511	524	524	524	524	3,060	3,547
TOTALS	**487**	**453**	**511**	**524**	**524**	**524**	**524**	**3,060**	**3,547**

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

DEPARTMENT: TRANSPORTATION

Project: Rehabilitation of North Area and Camillus Highway Maintenance Facilities

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

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	8,500	8,500					17,000	17,000
Authorized Borrowing	2,124							0	2,124
TOTALS	**2,124**	**8,500**	**8,500**					**17,000**	**19,124**

Project Detail and Status:

The Department of Transportation's current North Area and Camillus maintenance facilities were both built in the 1960s. Neither site was designed or intended to be a highway maintenance facility. The North Area facility was originally a United Parcel Service distribution center, and the Camillus facility was built to serve as a small airport. The current layout and condition of the facilities result in significant operating inefficiencies and costs. There is a critical need for major structural renovations to both facilities. In addition, building systems in both facilities need complete rehabilitation (HVAC, electrical, plumbing). Current design and construction estimates for rehabilitation of both facilities range from $17 million to $19 million.

Preliminary feasibility studies have been made to compare the new construction versus rehabilitation for the two facilities with rehabilitation being the preferred alternative. Full design is anticipated to be completed in mid-2016 and construction to begin in late-2016. Completion of the project is expected by fall of 2017. Legislative authorization to fund this project will be sought in late 2016.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
State Aid	5235	3,550	3,550	3,500	3,500	3,500	3,500	21,100	26,335
Pay as You Go		237	3,070	3,050	3,050	3,050	3,050	15,507	15,507
Borrowing to be Authorized	3170	2,145	375	100	90	70	60	2,840	6,010
TOTALS	**8,405**	**5,932**	**6,995**	**6,650**	**6,640**	**6,620**	**6,610**	**39,447**	**47,852**

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.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Pay as You Go	730	730	930	1,040	1,040	1,040	1,040	5,820	6,550
TOTALS	**730**	**730**	**930**	**1,040**	**1,040**	**1,040**	**1,040**	**5,820**	**6,550**

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.

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:	2016	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	320	320	330	330	340	340	350	2,010	2,330
TOTALS	**320**	**320**	**330**	**330**	**340**	**340**	**350**	**2,010**	**2,330**

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

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

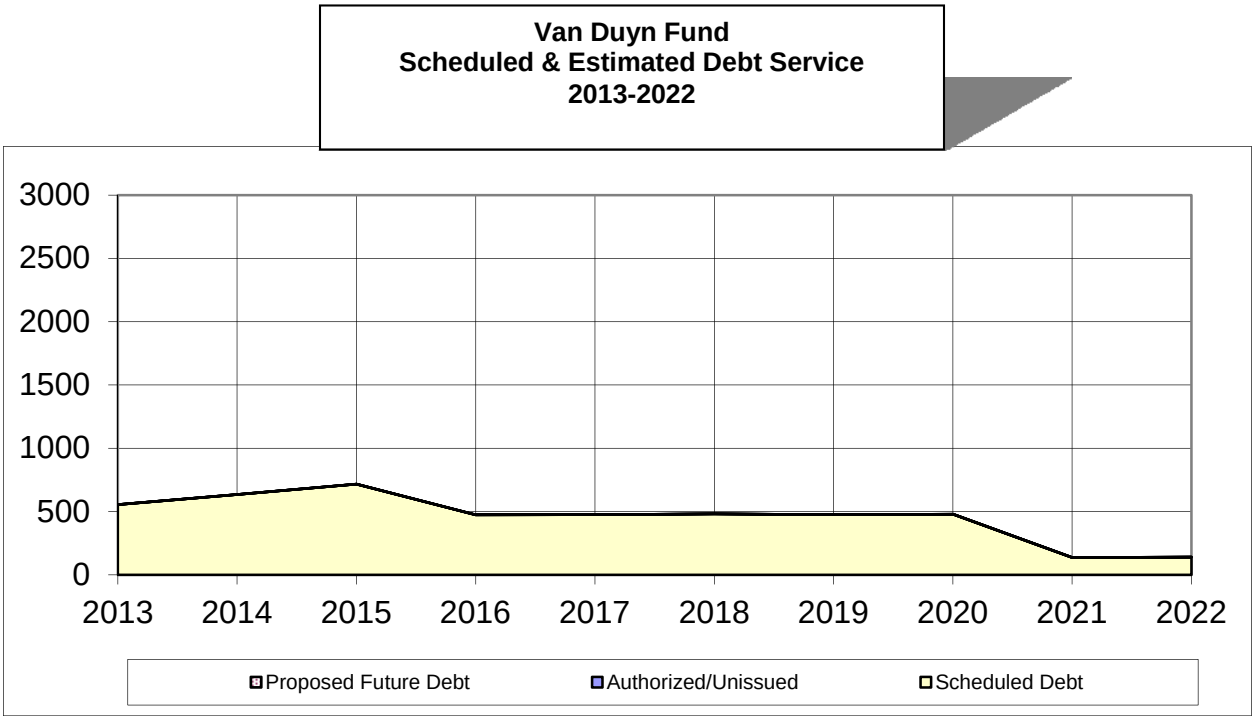
The Department is constantly working to acquire Federal and State funds to supplement this program.

SPECIAL FUNDS

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

Van Duyn Extended Care Fund

For the CIP 2016-2021 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



Van Duyn Fund
Debt Service Summary

Payments in ($000's)

	2012	2013	2014	2015	2016	2017	2018	2019
Principal & Interest								
Scheduled Debt	522	554	634	716	473	475	481	475
Estimated Debt								
Authorized & Unissued	0	0	0	0	0	0	0	0
Proposed Future Debt								
Total	**522**	**554**	**634**	**716**	**473**	**475**	**481**	**475**

	2020	2021	2022	2023	2024	2025	2026	2027
Principal & Interest								
Scheduled Debt	479	136	140	133	0	0	0	0
Estimated Debt								
Authorized & Unissued	0	0	0	0	0	0	0	0
Proposed Future Debt								
Total	**479**	**136**	**140**	**133**	**0**	**0**	**0**	**0**

	2028	2029	2030	2031	2032	2033	2034	2035
Principal & Interest								
Scheduled Debt	0	0	0	0	0	0	0	0
Estimated Debt								
Authorized & Unissued	0	0	0	0	0	0	0	0
Proposed Future Debt								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

	2036	2037	2038	2039	2040	2041	2042	TOTAL
Principal & Interest								
Scheduled Debt	0	0	0	0	0	0	0	**2,319**
Estimated Debt								
Authorized & Unissued	0	0	0	0	0	0	0	**0**
Proposed Future Debt								
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,319**

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.

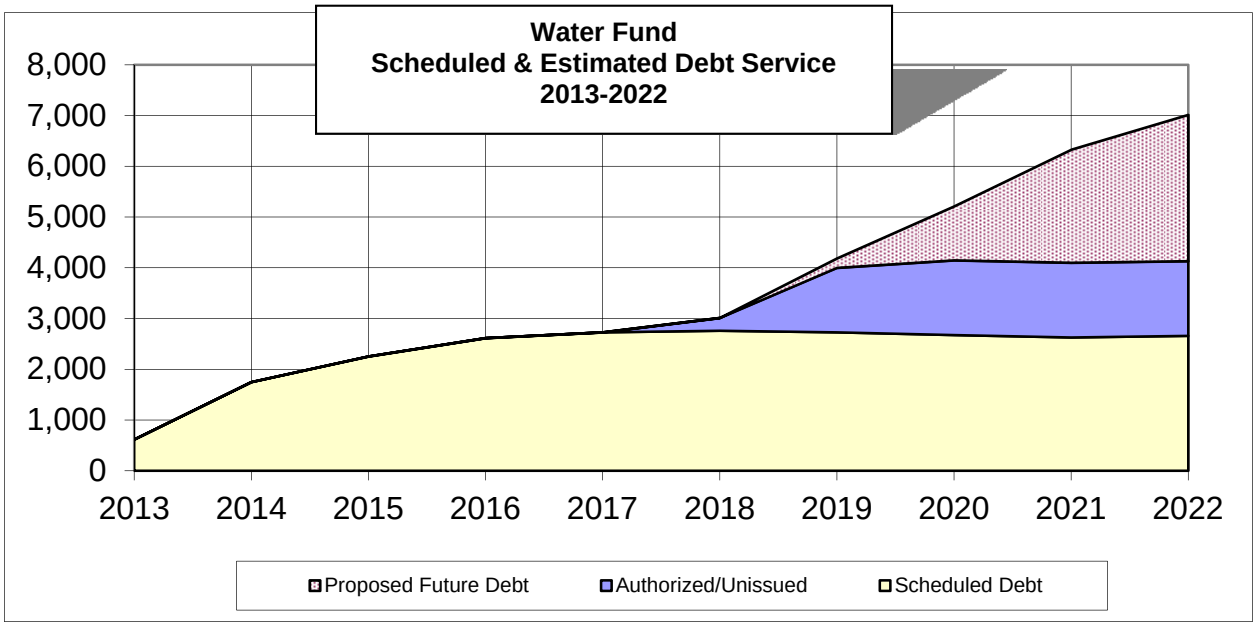
Water Fund

The Metropolitan Water Board is charged with building and operating the water plant and system that serves Onondaga County. The costs incurred are supported by revenues from the sale of water, and to the extent that these revenues are insufficient, by a special ad valorem levy assessed on real property within the Onondaga County Water District. Since 1976, water sales revenues have been adequate to permit raising the levy only the amount necessary to pay the annual cost of debt service for the construction of District improvements plus certiorari settlements. In an attempt to minimize the District impact on property owners who are not on Metropolitan Water Board's public water supplies, the cost of all system capital improvements undertaken between the periods of 1972-1992 were funded from water sales revenues. These improvements included the one hundred million gallon Western Reservoir ($3 million) and the Marcellus-Onondaga Water Supply System ($2.3 million).

By financing these improvements with revenues from the sale of water, the Metropolitan Water Board has been able to maintain or reduce the annual amount necessary to be raised through the special district property tax levy. It is important to note that improvements financed in this manner were relatively small in comparison to the original project phases.

The Onondaga County Water District comprises all real property within the County of Onondaga except for the Towns of Spafford and Skaneateles, and the Warners and Southwood-Jamesville County Water Districts, which were established prior to 1962.

The method of apportioning the District levy is based on the benefit received from system improvements, and is accomplished through Zones of Assessment established by the Onondaga County Board of Supervisors in 1962. Currently there are three assessment zones. Projects currently included in this Capital Plan for the Onondaga County Water District will require the continued use of the assessment zones for future system expansion. Below is a graph of scheduled and estimated debt service for the Metropolitan Water Board followed by the debt service summary.



Water Fund
Debt Service Summary

Payments in ($000's)

	2012	2013	2014	2015	2016	2017	2018	2019
Principal & Interest								
Scheduled Debt	222	616	1,746	2,253	2,613	2,729	2,759	2,728
Estimated Debt								
Authorized & Unissued	0	0		0			252	1,270
Proposed Future Debt	0	0	0	0	0	0	0	188
Total	**222**	**616**	**1,746**	**2,253**	**2,613**	**2,729**	**3,011**	**4,186**

	2020	2021	2022	2023	2024	2025	2026	2027
Principal & Interest								
Scheduled Debt	2,674	2,626	2,657	2,615	2,580	2,462	2,460	2,211
Estimated Debt								
Authorized & Unissued	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474
Proposed Future Debt	1,061	2,225	2,883	2,975	2,906	2,838	2,770	2,702
Total	**5,209**	**6,325**	**7,014**	**7,064**	**6,960**	**6,774**	**6,704**	**6,387**

	2028	2029	2030	2031	2032	2033	2034	2035
Principal & Interest								
Scheduled Debt	2,180	2,212	2,132	2,121	2,071	2,055	1,125	874
Estimated Debt								
Authorized & Unissued	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474
Proposed Future Debt	2,633	2,565	2,497	2,429	2,360	2,292	2,224	2,156
Total	**6,287**	**6,251**	**6,103**	**6,024**	**5,905**	**5,821**	**4,823**	**4,504**

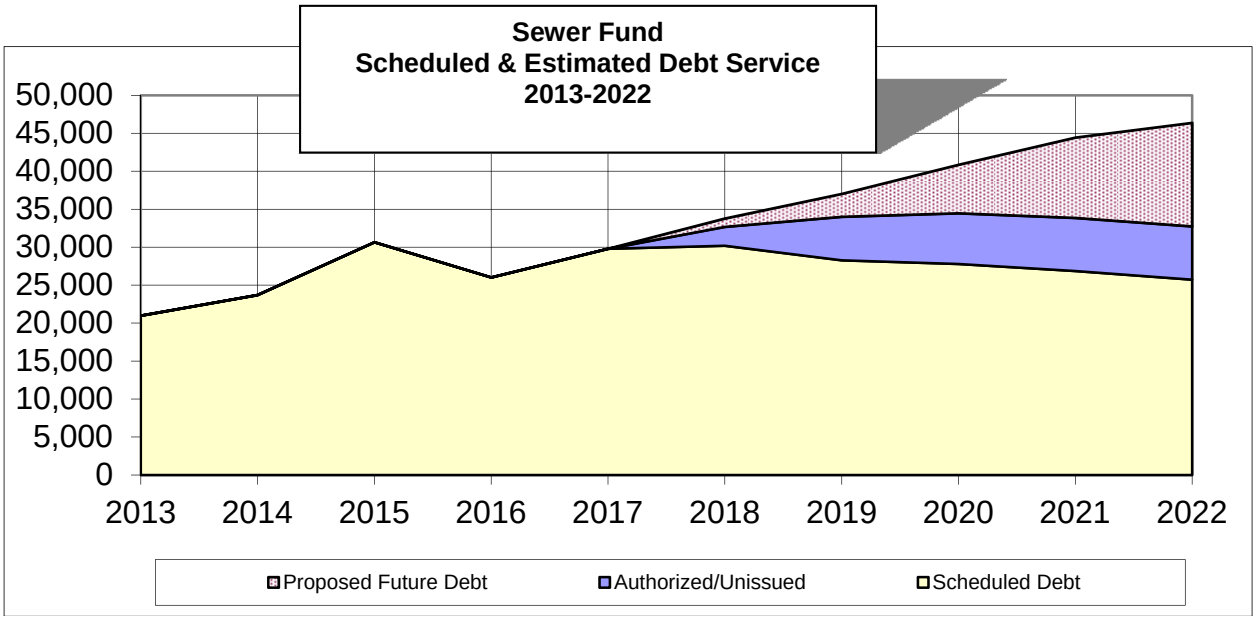
	2036	2037	2038	2039	2040	2041	2042	TOTAL
Principal & Interest								
Scheduled Debt	490	407	0	0	0	0	0	**44,168**
Estimated Debt								
Authorized & Unissued	1,474	1,474	398	0	0	0	0	**28,452**
Proposed Future Debt	2,087	2,019	1,951	1,883	1,658	946	260	**50,508**
Total	**4,051**	**3,900**	**2,349**	**1,883**	**1,658**	**946**	**260**	**123,128**

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.



Sewer Funds
Debt Service Summary

Payments in ($000's)

	2012	2013	2014	2015	2016	2017	2018	2019
Principal & Interest								
Scheduled Debt	20,727	20,981	23,703	30,644	26,008	29,794	30,181	28,272
Estimated Debt								
Authorized & Unissued	0	0	0	0	0	0	2,497	5,733
Proposed Future Debt	0	0	0	0	0	0	1,087	3,000
Total	**20,727**	**20,981**	**23,703**	**30,644**	**26,008**	**29,794**	**33,765**	**37,005**

	2020	2021	2022	2023	2024	2025	2026	2027
Principal & Interest								
Scheduled Debt	27,792	26,867	25,720	25,072	24,267	21,659	20,919	19,525
Estimated Debt								
Authorized & Unissued	6,671	6,995	7,022	7,028	7,028	7,028	7,028	7,028
Proposed Future Debt	6,393	10,560	13,637	14,909	15,036	14,668	14,300	13,930
Total	**40,856**	**44,422**	**46,379**	**47,009**	**46,331**	**43,355**	**42,247**	**40,483**

	2028	2029	2030	2031	2032	2033	2034	2035
Principal & Interest								
Scheduled Debt	17,712	16,521	15,973	14,766	13,553	12,625	11,500	10,504
Estimated Debt								
Authorized & Unissued	7,028	7,028	7,028	7,028	7,028	7,028	7,028	7,028
Proposed Future Debt	13,563	13,195	12,825	12,057	11,305	10,569	9,850	9,545
Total	**38,303**	**36,744**	**35,826**	**33,851**	**31,886**	**30,222**	**28,378**	**27,077**

	2036	2037	2038	2039	2040	2041	2042	TOTAL
Principal & Interest								
Scheduled Debt	9,521	6,316	6,172	6,024	5,902	5,754	5,599	**438,510**
Estimated Debt								
Authorized & Unissued	7,028	7,028	1,911	647	52	11	0	**136,959**
Proposed Future Debt	9,240	8,936	8,631	7,365	5,883	3,706	1,503	**245,693**
Total	**25,789**	**22,280**	**16,714**	**14,036**	**11,837**	**9,471**	**7,102**	**821,162**

AUTHORIZED PROJECTS

METROPOLITAN WATER BOARD

Comprehensive Asset Renewal and Energy (CARE) Program
Project On-going
This project addresses the need to replace aging infrastructure with innovative, integrated process and technology solutions that will reduce energy consumption and improve operational efficiency. The original equipment motors, pumps, drives and controls within the Raw Water, Clear Water and Farrell Pump Stations are predominately original 1960's equipment - approaching forty-five years of operation - with fixed-speed operability and limited automation. As part of Onondaga County's 2005 energy performance contract with Carrier Corporation, it was determined that 1,052,600 kilowatt hours of energy could be saved annually by replacing four of twelve units with variable frequency drives. The current Energy Efficiency and Conservation Block Grant Assessment being performed by Johnson Controls Incorporated (JCI) recommends a broader scope of work with additional operational and energy savings. These pump stations are an integrated system and the exclusive means of conveying water from the Lake Ontario intake to the water storage facilities for the region. This is a design-build project in accordance with New York State Energy Law. Technical Memoranda Describing the Basis of Design, have been completed and reviewed. Final design, procurement and installation will continue in 2016 and be completed in 2017.

WATER ENVIRONMENT PROTECTION

Hiawatha Trunk Sewer Service Area Improvement Project
Project On-going
The Hiawatha Trunk Sewer was installed by the City of Syracuse in the late 1920's and ownership was transferred to Onondaga County in the early 1970's. The original sewer was installed to provide service to the factories, businesses and homes located Inner Harbor area. The Hiawatha Trunk Sewer consists of approximately 4,600 linear feet of reinforced concrete sewer pipe ranging from 33 to 36 inch in diameter. This project will progressed to 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. Project was authorized on 12/02/2014 by the County Legislature. Grant funding in the amount of $960,000 was awarded to Onondaga County by New York State Empire State Development in December of 2014. In February 2015, the County Legislature authorized acceptance of grant funds. $4.8 million was authorized for construction spending. Approximately $2-3 million dollars will be spent in 2015 rehabilitating the Hiawatha Trunk Sewer using trenchless technology using the contractor selected under the blanket contract for these services. The sewer lining portion of the project was completed in November of 2015. We received authorization to proceed from Empire State Development to qualify for the grant funding. The remaining project balance will be used to construct the sanitary sewer force main over the NYS Barge

Ley Creek Pump Station
Project On-going
This project includes upgrades to the pump and control systems at the facility. The engineering investigation evaluated the most efficient and sustainable pumping configuration for the facility. Additional items that were evaluated and identified for replacement and/or rehabilitation include:
Pumps and motors
VFDs and pump controls
Substation and Electrical Upgrades
Flood Protection
Mechanicals
HVAC/Boiler Replacement
Water Service
Miscellaneous Building Repair
Health and Safety/Security Upgrades
Fencing and paving

Project bids were received on February 21, 2015. The project award letters are expected to be distributed by May of 2015

which will mark the commencement of construction. Project has been bid and awarded. Notice to proceed has been issued to the 4 prime contractors:
-CO Falter - General
-Patricia Electric - Electrical
-Syracuse Mechanical - plumbing
-King and King Mechanical - HVAC

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

Metro WWTP (002) Bypass Treatment

Project On-going

On March 21, 2012, the Onondaga County Department of Water Environment Protection's (WEP) State Pollutant Discharge Elimination System (SPDES) Permit renewal for the Metropolitan Syracuse Wastewater Treatment Plant (Metro WWTP) took effect. The permit includes new fecal coliform bacteria and total residual chlorine limits for the plant's secondary treatment bypass discharge outfall (Outfall 002). WEP must comply with these limits commencing on April 1, 2017. In addition, a SPDES Permit revision issued on June 4, 2014 includes requirements to disinfect tertiary treatment bypasses (designated as Outfall 001A). The existing infrastructure is inadequate to meet those new limits. To that end, this project will provide for larger process tankage and chemical systems with more capacity such that the applicable NYSDEC SPDES effluent limits can be met. Bonding of $20,200,000 was authorized in December 2012. Final design was completed in May 2015. Additional bonding, in the amount of $5,627,294, was approved in June 2015, due to increased anticipated construction costs (resolution #100). Construction began in September 2015 and is expected to be complete by March 2017. As of April 2016, approximately $8.6 million has been spent on this project.

Metro WWTP Grit Handling Improvements

Project On-going

Project authorization allows for the construction of various improvements to Metro Existing and New Screen & Grit buildings' grit handling equipment. The project includes installation of new screen rakes for Existing Screen & Grit Building, installation of a new divider wall for the New Screen & Grit Building, installations of turbo-type blowers, and other various associated equipment and mechanicals. This project will improve the operational efficiency and performance of grit collection and treatment. Bonding of $5,600,000 was authorized in October 2011. As of April 2016, approximately $5.0 million of total project monies have been spent. The last component project component, system optimization, is currently underway. The project is scheduled to be completed in July 2016.

Metro WWTP Primary and Thickener Pump Replacement

Project On-going

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

Oak Orchard Facilities Improvement

Project On-going

Project authorization provides for the construction of various infrastructure improvements/rehabilitation to the Oak Orchard Wastewater Treatment Plant including: replacement of existing influent screen rakes; installation of new primary clarification equipment; HVAC replacement; grit aeration blowers; grit handling equipment; building improvements; and other asset renewal measures. Bonding was procured in October of 2011 for $12,405,000 for construction. The project consists of two construction components: infrastructure rehabilitation and administration building rehabilitation. Construction is well underway for both project components. Projects are scheduled to be completed December 2016/January 2017. As of April 2016, $3.4 million has been spent on this project.

Oneida Lake PS

Project On-going

The goal of this project is to evaluate and perform rehabilitation/upgrades to the Oneida Lake Pump Stations and associated sewer force mains, including Harbor Village, Long Point, Maple Bay, Muskrat Bay, Polar Beach, Shepard Point, and South Bay. The project is near the 95% design stage and it is expected that bidding and project construction would take place in late 2016 or early 2017. In June 7, 2016 the County Legislature authorized $8,120,000 in bonding for construction of this project. Approximately $310,000 of the $10.12 million dollar budget has been expended. No construction dollars have been spent as of 6/30/2016.

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 ordered Metro Wastewater Treatment Plant improvements, CSO abatement facilities, and water quality monitoring over the twenty years covered by the ACJ was estimated to cost $695 million (in today's dollars). The fourth stipulation of the ACJ was effected in November of 2009.

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

- Interim capital improvement projects at Metro
- Major capital projects at Metro
- 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 ACJ has been fully authorized as of April 2011.

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

Projects still in progress include:

Metro WWTP Phosphorus Optimization:

In accordance with the ACJ 4th Stipulation, Phosphorus work plan and Optimization reports have been completed for the Metro WWTP The work plan has been approved by the NYSDEC; no further capital work is projected. The NYSDEC has also approved the Metro WWTP Phosphorus Treatment Optimization report. That report identified a number of infrastructure improvements needed to ensure continued and consistent compliance with Metro's SPDES phosphorus limits. Improvements include: installation of two new isolation gates and dividing wall to isolate the north and south biological aerated filter cells; chemical addition and mixing; replacement of various gates; and other associated treatment system improvements. Accordingly, final design of those improvements is underway and is expected to be completed in late 2016. Construction is anticipated to start circa January 2017 after project funding is procured.

Midland Avenue Conveyances and RTF, Storage and Green Infrastructure (5/01/00-12/31/18 for $128.3M)

This project was completely authorized in March 2008. The Midland RTF is complete, along with 1,000 feet of conveyances. An additional 500 feet of conveyance will be constructed to CSO- 044 (South Ave and West Castle); this project component is completed. CSO 045 (Hudson and West Castle) will be eliminated by sewer separation. The following CSO’s have been

evaluated in a facilities plan to determine how best to abate their overflows: 060/077 (West Colvin) and 052 (Hunt and Elmhurst). The remaining CSO's, 061 (Crehange), 076 (Brighton and Midland), and 067 (West Newell) will be abated by using green infrastructure, implementing floatable control (where warranted), monitoring and eventual closure. Green infrastructure will be implemented where appropriate throughout the Midland Sewer shed to reduce the volume of storm water entering the combined sewer system.

Sewer Separation Continuous (1/1/12 for $27.7M – Ongoing)
This project was completely authorized in July 2010.
A total of thirteen combined sewer basins in the Onondaga Creek watershed have been identified for separation, including portions of downtown and the South side. The US Army Corp of Engineers has administered a design contract for the remaining basins. Construction on CSO 045 and CSO 022 began in 2012. The projects will involve either the construction of new sanitary sewers or the renovation of existing combined sewers to act as storm sewers.

Clinton CSO Abatement and Green Infrastructure (5/1/04-12/31/18 for $165.5M – Ongoing)
This project was completely authorized in April 2011 A new 6.5 million gallon storage facility will be constructed in the Trolley Lot located near Armory Square. The conveyance pipes to this storage facility have been completed. These conveyances will collect CSO discharges from all CSO's in the Clinton Sewer shed except for CSO's 022 (West Genesee), 027 (West Fayette) and 029 (Walton St. E.). These remaining three CSO's were evaluated in a facilities plan to determine how best to abate their overflows. Green infrastructure will be implemented where appropriate throughout the Clinton Sewer shed to reduce the volume of storm water entering the combined sewer system.

Harbor Brook CSO Abatement Storage & Green Infrastructure (11/18/01-12/31/18 for $104.8M)
This project was completely authorized in April 2011.
A new 4.9 million gallon storage facility will be constructed near State Fair Blvd in the lower Harbor Brook

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 bios wales, rain gardens, and green streetscapes as well as and innovative project. Green infrastructure and innovative improvement projects will be designed to reduce infiltration and inflow into sanitary sewer systems in compliance with the recently enacted Capacity Management and Operation and Maintenance (CMOM)/Sewer Use Ordinance (SUO) passed in January 2011.

Projects utilizing green infrastructure will be considered from the following towns and villages:
Towns: Camillus, Cicero, Clay, DeWitt, Geddes, Lysander, Manlius, Onondaga, Pompey, and Salina.
Villages: Baldwinsville, Camillus, East Syracuse, Fayetteville, Liverpool, Manlius, North Syracuse, and Solvay.

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

Westside Pumping Station Service Area
Project On-going
The funds for this project totaling $18,150,000 are fully authorized by the county legislature. The goal of this project is to implement conveyance system improvements at Westside Pumping Station and tributary sewer conveyances and pumping facilities in order to reduce extraneous flows (i.e., infiltration and inflow), eliminate sanitary sewer overflows, provide for future capacity and eliminate odors. The project is currently at the 25% design phase. The 50% design package is expected in early August 2016.

SPECIAL DISTRICTS PROPOSED PROJECTS SUMMARY

Special Funds

Department	STATUS	PROJECT	2017 - 22 Total
Sewer			
WATER ENVIRONMENT PROTECTION			
		Baldwinsville Seneca Knolls WWTP Disinfection and Phase II Asset Renewal Improvements	20,186
	new	Bear Trap - Ley Creek North Midler Culvert Repair Project (NEW)	130
		Brewerton WWTP Asset Renewal Improvements	7,400
	new	Camillus Force Main Replacement (NEW)	10,000
		Energy Efficiency Improvements/Performance Contracting	26,300
	new	Harbor Brook Miscellaneous Culvert and Channel Improvements (NEW)	800
	new	Meadowbrook-Limestone WWTP Disinfection System and Collection System Improvements (NEW)	18,725
		Metro WWTP Phosphorus Treatment System Optimization	22,005
	new	Oak Orchard Disinfection and Lagoon Cleaning (NEW)	6,024
	new	Oak Orchard WWTP Secondary Clarifier Rehabilitation (NEW)	7,150
		Wastewater Transportation System Improvements	95,323
		Sewer Total	**$ 214,043**
Water			
METROPOLITAN WATER BOARD			
		Water Treatment Plant Comprehensive Improvements	37,599
		Water Total	**$ 37,599**
		Special Funds Total	**$ 251,642**

SPECIAL DISTRICTS FUNDING SOURCES

Sewer

SOURCE OF FUNDS	2017	2018	2019	2020	2021	2022	6yr Total
Pay as You Go	7,250	7,042	5,277	3,947	4,047	4,027	**31,590**
Authorized Borrowing	5,064	4,898	3,387	577	110		**14,036**
Borrowing to be Authorized	19,256	24,246	43,063	45,187	27,665	9,000	**168,417**
TOTALS	**$31,570**	**$36,186**	**$51,727**	**$49,711**	**$31,822**	**$13,027**	**$214,043**

Water

SOURCE OF FUNDS	2017	2018	2019	2020	2021	2022	6yr Total
Authorized Borrowing	3,472						**3,472**
Borrowing to be Authorized		3,127	13,000	13,000	5,000		**34,127**
TOTALS	**$3,472**	**$3,127**	**$13,000**	**$13,000**	**$5,000**		**$37,599**

SPECIAL DISTRICTS ESTIMATED DEBT SERVICE

Estimated Debt Service

Payment Schedule ($ in 000's)

WATER ENVIRONMENT PROTECTION

	2017	2018	2019	2020	2021	2022
Brewerton WWTP Asset Renewal Improvements	0	0	0	266	577	657
Energy Efficiency Improvements/Performance Contracting	0	0	0	240	800	1,344
Metro WWTP Phosphorus Treatment System	0	224	844	1,359	1,469	1,448
Baldwinsville Seneca Knolls WWTP Disinfection and	0	81	148	389	959	1,407
Wastewater Transportation System Improvements	0	0	73	1,106	3,166	4,863
Bear Trap - Ley Creek North Midler Culvert Repair	0	10	13	13	12	12
Harbor Brook Miscellaneous Culvert and Channel	0	15	35	55	74	77
Camillus Force Main Replacement (NEW)	0	150	350	545	735	920
Meadowbrook-Limestone WWTP Disinfection System	0	536	1,058	1,305	1,475	1,641
Oak Orchard WWTP Secondary Clarifier Rehabilitation	0	71	95	535	703	693
Oak Orchard Disinfection and Lagoon Cleaning (NEW)	0	0	384	580	590	575
Department Total	**0**	**1,087**	**3,000**	**6,393**	**10,560**	**13,637**

METROPOLITAN WATER BOARD

	2017	2018	2019	2020	2021	2022
Water Treatment Plant Comprehensive Improvements	0	0	188	1,061	2,225	2,883
Department Total	**0**	**0**	**188**	**1,061**	**2,225**	**2,883**

DEPARTMENT: METROPOLITAN WATER BOARD

Project: Water Treatment Plant Comprehensive Improvements

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

Level of Development: Preliminary

Project Description:

This project will implement comprehensive improvements at the MWB Water Treatment Campus required to replace and repair end-of-life equipment to reduce further deterioration; to assure continued compliance with current water quality regulatory standards; to reduce chemical consumption/costs, to optimize energy efficiency, and to advance operations technology in a manner that will improve productivity.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Authorized Borrowing	2,000	3,472						3,472	5,472
Borrowing to be Authorized	0		3,127	13,000	13,000	5,000		34,127	34,127
Pay as You Go	301							0	301
TOTALS	**2,301**	**3,472**	**3,127**	**13,000**	**13,000**	**5,000**		**37,599**	**39,900**

Project Detail and Status:

Existing Water Treatment Plant facilities/infrastructure are now nearing fifty years old, have received minimal capital investment since their construction and do not operate at contemporary levels of energy or operational efficiency. A comprehensive condition and program assessment was completed in 2014 to develop and identify the scope of improvements and provide cost estimates for the project. The improvements will assure future reliability, regulatory compliance and meet public health responsibilities of the water system for the mid-term and long-term future.

The assessment evaluated both building facility improvements, such as roofing, HVAC, and electrical systems as well as filtration and treatment process improvements, including filter beds, piping and valves, process controls, data collection and reporting, etc. These improvements will provide energy savings, address declining physical conditions of the plant building and infrastructure, and will update and improve water quality into the future supporting public health and economic development for both residential and industrial customers, regionally.

The assessment was completed in 2014. Engineering/design will progress through 2016, allowing the project to be bid in progressive and integrated phases which will be completed through 2019. Funds to complete the architectural and engineering design as well as for the Phase 1 construction of the project were approved December 2015 and this work is underway. Funding approval for full construction of Phases 2 and 3 will be sought in Fall of 2017, after further design development.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

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

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

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	1,350	450	3,825	7,650	3,825		17,100	17,100
Pay as You Go	1,150							0	1,150
Authorized Borrowing	212	1,224	1,198	277	277	110		3,086	3,298
TOTALS	**1,362**	**2,574**	**1,648**	**4,102**	**7,927**	**3,935**		**20,186**	**21,548**

Project Detail and Status:

This project provides for an upgrade to the facility's disinfection system so as to comply with new DEC SPDES permit limits. Specifically, additional process tankage and a de-chlorination system will be installed downstream of the existing chlorination system, along with ancillary improvements. Engineering design of disinfection to be completed by September 2016; construction to start in March 2017.

Additionally, the project is for the design and construction of what is known as Phase II improvements as identified in the engineering evaluation completed in June 2014 for the facility. The majority of the improvements, largely consisting of asset renewal measures, include the following elements: grit processing equipment, chemical tanks, concrete structures, aeration systems, aerobic digesters, major mechanicals, fire alarm system, code compliance, water supply systems, energy conservation measures, noise abatement, and other necessary asset renewal measures. Asset renewal design to be completed by October 2018; construction start May 2019.

Legislative approval for $3.4 million for the engineering design phase of this project was obtained in 2014. Legislative approval will be sought in September of 2016 for approximately $1.8 million in bonding for the construction of disinfection improvements. Additionally, it is expected that legislative approval will be sought in September 2018 for approximately $15.3 million in bonding for the asset renewal (construction) portion of this project.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

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

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

Level of Development: Preliminary

Project Description:

Repair of 1950s vintage concrete box culvert located on North Midler Avenue in the Town of DeWitt.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	130						130	130
TOTALS	**0**	**130**						**130**	**130**

Project Detail and Status:

This project entails structural repair of the 1950s vintage 130 foot long North Midler box culvert which conveys storm water within the Bear Trap Ley Creek Drainage District. A portion of the roadway collapsed in June 2016 and required an emergency temporary repair. Closer inspection of the culvert revealed localized area of concrete and reinforcing steel in poor overall condition. The repair project will restore the roadway and culvert back to an acceptable level of service.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Brewerton WWTP Asset Renewal Improvements

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

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0			4,440	2,960			7,400	7,400
Pay as You Go	1,500							0	1,500
TOTALS	**1,500**			**4,440**	**2,960**			**7,400**	**8,900**

Project Detail and Status:

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

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

Final design monies were previously procured for this project. Final design to be completed in early 2018; with construction starting in 2019. It is expected that legislative approval will be sought in September 2018 for approximately $7.4 million for construction.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Camillus Force Main Replacement (NEW)

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

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	2,000	2,000	2,000	2,000	2,000		10,000	10,000
TOTALS	**0**	**2,000**	**2,000**	**2,000**	**2,000**	**2,000**		**10,000**	**10,000**

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 makeup of the wastewater has accelerated the degradation of this asset. An internal assessment of the pipe line using "Smart ball" technology indicated numerous pipe line anomalies that may indicate that the pipe line has a high probability of failure. It is anticipated that the pipe line would be replaced with a plastic pipe that would not be susceptible to chemical attack.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Energy Efficiency Improvements/Performance Contracting

Purpose: Reduce Operating Costs/Efficiency, Other

Level of Development: Preliminary

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0			4,000	4,000	4,000	4,000	16,000	16,000
Authorized Borrowing	0	3,500	3,500	3,000	300			10,300	10,300
TOTALS	**0**	**3,500**	**3,500**	**7,000**	**4,300**	**4,000**	**4,000**	**26,300**	**26,300**

Project Detail and Status:

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

Phase II of this project, consisting of additional energy efficiency ECMs, is expected to be initiated in 2019 and be completed in 2022.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Harbor Brook Miscellaneous Culvert and Channel Improvements (NEW)

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

Level of Development: Intermediary

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-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	200	200	200	200			800	800
TOTALS	**0**	**200**	**200**	**200**	**200**			**800**	**800**

Project Detail and Status:

The Harbor Brook drainage channels and culverts were installed in the early 1900 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.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Meadowbrook-Limestone WWTP Disinfection System and Collection System Improvements (NEW)

Purpose: Federal/State Mandate

Level of Development: Advanced

Project Description:

The Meadowbrook-Limestone Wastewater Treatment Plant (WWTP) 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 0.02 mg/L. The new TRC permit limits will become effective beginning May 15, 2018. The WWTP currently has no means to dechlorinate the effluent to meet this limit. Therefore, the County initiated this project to design and construct upgrades to the disinfection system which will enable the new TRC limit to be met. Additionally, the treatment plant is in need of several other asset renewal measures. This project also provides for necessary collection system improvements so as to reduce extraneous flow coming into the plant.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Pay as You Go	1,100	1,000						1,000	2,100
Borrowing to be Authorized	0	7,152	4,573	2,000	2,000	2,000		17,725	17,725
TOTALS	**1,100**	**8,152**	**4,573**	**2,000**	**2,000**	**2,000**		**18,725**	**19,825**

Project Detail and Status:

The focus of the proposed project is to provide a new ultraviolet (UV) disinfection system to meet the upcoming TRC limit changes. However, the project also includes needed improvements to replace aging equipment, improve control and security systems, and maintain building infrastructure at the wastewater treatment plant. Some of the main improvements include the following.

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

This project also provides for necessary collection system improvements such as manhole rehabilitation, sewer lining, and other rehabilitation efforts so as to reduce excessive inflow and infiltration to the treatment plant.

Design of treatment plant work is scheduled to be completed in August 2016; with construction starting circa March 2017. Legislative approval will be sought in September 2016 for bonding of construction monies for approximately $11.7 million for disinfection and infrastructure improvement construction work: and $1 million in cash for conversion of a Backup Sludge Holding Tank to wet weather tank and collection system improvements.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Metro WWTP Phosphorus Treatment System Optimization

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

Level of Development: Intermediate

Project Description:

This project is for various modifications, upgrades, and improvements to Metro's Wastewater Treatment Plant (WWTP) Biological Aerated Filter (BAF) and High-Rate Flocculated Settling (HRFS) systems so as to enhance and maximize system performance. The BAF and HRFS systems are those unit processes used at Metro to remove ammonia and phosphorus, respectively, in accordance with NYSDEC SPDES permit mandates. The project will also serve to respond to the improvement needs born out of the November 2009 4th Stipulation of the ACJ and the Onondaga Lake Total Maximum Daily Load (TMDL) for phosphorus.

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	7,474	10,678	3,203				21,355	21,355
Authorized Borrowing	1,099	340	200	110				650	1,749
TOTALS	**1,099**	**7,814**	**10,878**	**3,313**				**22,005**	**23,104**

Project Detail and Status:

This project is an extension of earlier evaluation efforts performed for the Metro Wastewater Treatment Plant's Phosphorus treatment system for optimization and identifying alternatives to meet the previously pending NYSDEC Total Maximum Daily Load (TMDL) for the treatment plant (optimization and work plan reports as mandated by the NYSDEC). Monies spent to date were for the various engineering evaluations leading up to this point in the project and for current final design efforts. The project will construct the improvements identified in the ACJ-mandated report that was submitted to the NYSDEC on August 31, 2011 for optimizing the performance of the existing Metro Wastewater Treatment Plant phosphorus treatment system. Said report identified a number of confirmatory evaluations that needed to be completed. Those evaluations have since been completed; the final report was submitted to the NYSDEC in May 2013 and has since been approved. The project is now under final design.

Project elements include the following:

1. Installation of two new isolation gates and a dividing wall to isolate the north and south BAF cells so that maintenance can be performed without having to shut down the entire (ammonia/phosphorus) process.
2. Improving chemical addition and mixing to the High-Rate Flocculated Settling (HRFS) in the BAF effluent channel.
3. Replacement of four stainless steel HRFS influent gates with fiberglass-reinforced plastic (FRP) gates.
4. Repair of the isolation plate in HRFS influent channel.
5. Installation of a new effluent water system.
6. Replacement of a 14" stainless steel process line.
7. Providing for better flow distribution through the treatment system.
8. Replacement of 72 BAF influent gates.
9. Other ancillary improvements to the phosphorus treatment system so as to optimize overall treatment and system reliability.

This project shall also be instrumental in the Department complying with the recently issued Total Maximum Daily Load (TMDL) for phosphorus from the NYSDEC which limits the amount of phosphorus that can be discharged from the Metro WWTP. Final design to be complete October 2016. Construction to start circa May 2017. It is noted that engineering monies in the amount of $2,840,000 have already been approved for this project. Legislative approval will be sought in September 2016 for bonding of construction monies for approximately $21.3 million.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Oak Orchard Disinfection and Lagoon Cleaning (NEW)

Purpose: Maintain Existing Investment, Federal/State Mandate

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Pay as You Go	1,300							0	1,300
Borrowing to be Authorized	0		5,120	904				6,024	6,024
TOTALS	**1,300**		**5,120**	**904**				**6,024**	**7,324**

Project Detail and Status:

Necessary improvements, including installation of additional process tankage and new chemical systems, will be implemented to ensure compliance with the new SPDES permit. Other ancillary infrastructure improvements, such as lighting, and concrete repair, will also be completed as part of the disinfection system project component.

In addition, lagoon system improvements are necessary. The lagoon system plays a critical role meeting SPDES permit compliance by catching any solids remaining after the secondary treatment clarifiers. Since these lagoons are nearly full of the captured solids, cleaning and rehabilitation is necessary for the disinfection process to work effectively. The disinfection system follows the lagoons, therefore, the lagoon work will be necessary to allow for the most efficient design of this downstream process. Noteworthy is that these lagoons originally installed in the early 1970's, and have never been cleaned.

Engineering is scheduled to be complete November 2016. Construction is anticipated to start in March of 2018. Legislative approval will be sought in September 2017 for bonding of construction monies for approximately $6.0 million.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Oak Orchard WWTP Secondary Clarifier Rehabilitation (NEW)

Purpose: Maintain Existing Investment

Level of Development: Intermediate

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	0	950		5,900	300			7,150	7,150
TOTALS	**0**	**950**		**5,900**	**300**			**7,150**	**7,150**

Project Detail and Status:

This asset renewal project will consist of replacing the mechanical sludge collectors, gears, sprockets and other equipment within the six (6) secondary clarifiers at the Oak Orchard WWTP. Associated concrete repairs and other necessary projects elements will also be completed in the project to ensure continued satisfactory operation and maintainability of treatment plant operations, and New York State Department of Environment Conservation (NYSDEC) State Pollutant Discharge Elimination System Permit.

Legislative approval will be sought in September 2016 for bonding of $950,000 for engineering design. Construction is anticipated to begin in 2019.

DEPARTMENT: WATER ENVIRONMENT PROTECTION

Project: Wastewater Transportation System Improvements

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

Level of Development: Ongoing (A)

Project Description:

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

Project Cost Summary:

FUNDING SOURCE:	Pre-2017	2017	2018	2019	2020	2021	2022	6yr Total	Total:
Borrowing to be Authorized	46,028	0	1,225	16,591	26,077	15,840	5,000	64,733	110,761
Pay as You Go	40,023	6,250	7,042	5,277	3,947	4,047	4,027	30,590	70,613
Authorized Borrowing	28,540							0	28,540
TOTALS	**114,591**	**6,250**	**8,267**	**21,868**	**30,024**	**19,887**	**9,027**	**95,323**	**209,914**

Project Detail and Status:

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

Pump Station Upgrade Program Elements:

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

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

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

Trunk Sewer Upgrade Program Elements:

Another component of this project addresses modification, repair, and/or replacement of specified trunk sewers and pressure pipelines, of aged facilities comprising the 400 miles of trunk sewer network, and fifty-one combined sewer overflows for which the Department has responsibility. Trunk sewers identified in this project are: Portions of Tallman Trunk Sewer (circa 1898), Salina Trunk Sewer (circa 1928), LeMoyne/Darlington Trunk Sewer (circa

1929), Sunnycrest Trunk Sewer (circa 1929), Midland Trunk Sewer (circa 1905), Hillcrest Trunk Sewer (circa 1955), Lakeland Trunk Sewer (circa 1960) and Meadowbrook Trunk Sewer (circa 1960).

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

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

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

Facility Maintenance Improvements:

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

The roofing and paving, as well as the clarifier weir capital programs and lightning protection, are customarily segmented and portions are completed annually. This is expected to continue for the next several years. It is anticipated that the asset management and GIS applications within the department shall continue to expand in the next several years. Efforts have been expanded for 2016/2017 for Digester Phase II improvements, Arcflash analysis and compliance, and site and information technology security evaluation, safety projects; motor control center and electrical substation repair; Metro WWTP thickener rehabilitation, and a comprehensive asset management evaluation of Metro's 1978 plant infrastructure addition (secondary system).

New projects for 2017 include: design and replacement of the oxygen generation systems at the Baldwinsville and Oak Orchard Wastewater treatment plants as an asset renewal and energy efficiency measure; and Metro site improvements.

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

It is expected that legislative approval will be sought in September 2016 for approximately $6,250,000 in cash for this project.

GLOSSARY

Section 4

GLOSSARY OF TERMS

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

Assets Property owned by the County that has a monetary value.

Attributable Revenue The revenue generated as a direct consequence of the provision of a specific governmental activity, such as fees for service, state or federal aid for programs, and income from sales. If the government no longer provided the service, the revenue would also stop.

Bond A written promise to pay a sum of money on a specific date at a specified interest rate. The interest payments and the repayment of the principal are detailed in a bond ordinance. The most common types of bonds are general obligation and revenue bonds. These are most frequently used for construction of large capital projects, such as buildings, streets and bridges.

Bond Anticipation Notes (BANs) Short-term interest bearing security issued in anticipation of a long-term bond issuance at a later date. The notes are retired with proceeds from the later related bond issue.

Budget A comprehensive financial plan of operation which allocates limited revenues among competing expenditure requirements for a given time period. Onondaga County has two types of budgets, the annual operating budget and the Capital Improvement Plan.

Budget Calendar The schedule of key dates or milestones, which the county follows in the preparation, adoption, and administration of the budget.

Budget Document The official written statement prepared by the Executive Department, which presents the proposed budget to the legislative body.

Budget Message A general discussion of the proposed budget presented in narrative form as a supplement to the budget document. The budget message explains principal budget issues against the background of financial experience in recent years and provides a general summary of the most important aspects of the budget, changes from the current and previous fiscal years, and the views and recommendations of the County Executive.

Capital Assets Assets of significant value and having a useful life of several years. Capital assets are also called fixed assets.

Capital Fund A fund established to account for all resources, principal and proceeds, which are used for planning, acquisition, and construction phases of capital projects.

Capital Improvement Plan (CIP) A plan for capital expenditures to be incurred each year over a period of six future years setting forth each capital project, identifying the expected beginning and ending date for each project, the amount to be expended in each year, and the method of financing those expenditures.

Capital Improvements Physical assets, constructed or purchased; the acquisition of land; or

improvements to land or buildings. Capital improvements typically involve physical assets such as buildings, streets, water and sewage systems, recreational facilities, and major pieces of equipment.

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

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

Cash Capital See County Tax Revenues.

Cash On Hand Direct financing available from either surplus monies from prior years' taxation, or unused balances in existing capital accounts, or earnings on temporary investments.

County Tax Revenues (Cash Capital) The cash financing of general fund projects by property taxes.

Countywide Authorized Borrowing The financing of a project by long or short term borrowing which has been authorized by the County Legislature.

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

Debt Service The payment of principal and interest on borrowed funds, according to a pre-determined payment schedule.

Department The highest organizational level for the provision and delivery of a specific governmental service or closely related services. A department may be comprised of 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.

Fiscal Agent Fees These are fees charged by institutions for record keeping of registered (Serial) Bondholders and for the semi annual distribution of principal and interest payments to those bondholders. The purchaser pays Fiscal Agent Fees on Capital Notes and Bond Anticipation Notes.

Fiscal Year (FY) A twelve-month period designated as the operating year for an entity. For the county, the fiscal year is the same as the calendar year - January 1 to December 31 - also called the Budget Year. The fiscal year for the State of New York is April 1 - March 31. The Federal fiscal year is October 1 to September 30.

Fixed Assets Assets of long-term character, which are intended to continue to be held or used, such as land, buildings, machinery, furniture and other equipment.

Full Faith and Credit A pledge of the general taxing power of a government to repay debt obligations, typically used in reference to bonds.

Fund An independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, reserves, and equities which are segregated for the purpose of carrying on specific activities or attaining certain objectives (see General Fund).

General Fund The largest fund within the county, the General Fund accounts for most of the county's financial resources. General Fund revenues include property taxes, licenses and permits, local and sales taxes, service charges, and other types of revenue. This fund usually includes most of the basic operating services, such as public safety, finance, data processing, parks and recreation, highway, long term care, community college, library and other direct operating support.

General Obligation Bonds When a government pledges its full faith and credit to the repayment of the bonds it issues, then those bonds are general obligation (GO) bonds. Sometimes the term is also used to refer to bonds that are to be repaid from taxes and other general revenues.

Grant A contribution of assets (usually cash) by one governmental unit or other organization to another. Typically, these contributions are made to local governments from the state and federal governments. Grants are usually made for specified purposes.

Interest The price paid for the use of money, or the return on investment obtained from investing or lending money.

Liability Debt or other legal obligations arising out of transactions in the past that must be liquidated renewed or refunded at some future date. The term does not include encumbrances.

Local Dollars The difference between appropriations and revenues which must be raised through the property tax levy.

Long Term Debt Debt with a maturity of more than one year after the date of issuance.

Mandate Any responsibility, action or procedure that is imposed by one sphere of government on another through constitutional, legislative, administrative, executive, or judicial action as a direct order

or that is required as a condition for reimbursement of expenditures.

Maturity Date The date at which full and/or final payment of principal and interest is due on debt obligations.

Onondaga County Legislature The County Legislature consists of seventeen elected members and 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. PPUs for various types of projects are mandated by Local Finance Law, and range between 3 and 40 years.

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

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

Reserve An account used to indicate that a portion of a fund's balance is legally restricted for a specific purpose and is, therefore, not available for general appropriation.

Revenue Funds that the government receives as income. It includes such items as tax payments, fees from specific services, receipts from other governments (state and federal aid), fines, forfeitures, grants, shared revenues and interest income.

Revenue Anticipation Notes (RANs) RANs are issued in anticipation of the receipt of specific revenues, generally non-tax revenues. RANs are typically used for cash flow borrowings. The specific revenues are set-aside on receipt, for payment of the RAN and interest upon its maturity. The debt cannot extend beyond twelve months and must be paid in full at maturity.

Revenue Estimate A formal estimate of how much revenue will be earned from a specific revenue source for a current or future period; typically, a future fiscal year.

Revenue Source A category of revenue, such as local source, state aid, or federal aid.

Serial Bond A written promise to pay a specified sum of money (principal face value) at a specified future date (maturity date[s]) along with periodic interest paid at a specified percentage of the principal (interest rate). Serial bonds are typically used for long-term debt.

Special Districts Authorized Borrowing The financing of a project by long or short term borrowing which has been authorized by the County Legislature for special districts such as Drainage Districts.

Special Districts Borrowing To Be Authorized The financing of a project by long or short-term borrowing that will require authorization by the County Legislature before the project can be undertaken.

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

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

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