

Debt Service and Capital Planning

Section 6

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Debt Service

Several methods are available to finance capital improvement projects and other authorized activities. 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 are 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, usually through the issuance of bonds, to finance capital projects has several advantages. Primarily, 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 structure of the principal payments cumulatively effects both interest payments and subsequently the County's operating budget.

In general, the State Legislature has granted the power and defined the procedure for the County to borrow by the enactment of the Local Finance Law. Pursuant to the Local Finance Law, its 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. Through the bond resolutions, the County Legislature delegates to the Chief Fiscal Officer the power to authorize and sell bond anticipation notes in anticipation of authorized 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 Period of Probable Usefulness (PPU), which ties in with the maximum maturity of the bonds subject to legal restrictions. Within these bonding requirements, the County has considerable flexibility in its borrowing program and can issue two basic forms of debt instruments: Serial Bonds (Bonds) and Bond Anticipation Notes (BANs). BANs, due to their short term (12 months or less), are used to facilitate borrowing for projects that have a PPU of 5 years or less, or are relatively small in amount or otherwise inappropriate for long-term borrowing.

In addition, BANs allow the County the option of conversion to Serial Bonds when interest rates are most beneficial for long-term debt. Statutory law in New York permits BANs to be renewed each year provided annual principal installments are made prior to the second renewal, if the principal is not paid off after the fourth renewal (5 years from the original date of borrowing), the BAN must be converted to a Serial Bond. There is an exception to the 4-time renewal limitation on BANs for Special District Borrowing for Water Environment Protection and Water. BANs may be renewed indefinitely for Special Districts as long as they do not violate the assigned PPU.

The Local Finance Law contains provisions providing the County with power to issue certain other short-term general obligation indebtedness, including revenue and tax anticipation notes and budget and capital notes. Onondaga County has not used any of these short-term borrowing options since 1992.

Bond Advisors

Bond counsel and our financial advisors play an important role in the bond issuing process. They can be influential in reducing borrowing costs by advising the issuing government on how best to structure the issue and when best to go to market. They assist us in the preparation of the County's Official Statement,

insuring that it meets the legal requirements and includes the information to present the County's financial status and economic activities and comparisons.

They assist us in the application for bond ratings, which provide investors with a symbol of credit quality that is easily recognized. Through careful fiscal planning and sound financial management, Onondaga County received the following ratings: AAA by Fitch, AA+ by S&P and Aa2 by Moody's, with a stable outlook from all of the agencies.

Market Factors Affecting Bonds

The market for Bonds and Notes could be affected by a variety of factors, some of which are beyond the County's control. There can be no assurance that adverse events at the state level will not occur which might affect the market price of outstanding Bonds and Notes and the market for additional debt. If a significant default or other financial crisis should occur in the affairs of the federal or state government or of any of its agencies or political subdivisions, it could impair the acceptability of obligations issued and bond ratings of borrowers, such as Onondaga County.

The traditional market for our debt has changed over the years, from primarily banks and individual investors, to the major brokerage houses and fund investors. The County looks to market conditions when scheduling its bond sale to optimize savings to the taxpayers.

Debt Management Planning

Onondaga County's debt management planning covers all debt issued by the County including debt wholly supported by special district fund revenues. The County's comprehensive approach to debt management includes: administrative review, emphasis on pay-as-you-go within defined limits, adherence to multiple policies established by the legislature, adherence to local finance law, and comprehensive use of bond counsel and financial advisors.

Between 2000 - 2015, Onondaga County has undertaken many debt management initiatives. In 2000, the County defeased \$10.7M of debt using its fund balance. The County Legislature had passed a resolution in November 1999, which established a fund balance target of 10% of General Fund revenues. Any excesses would be used to avoid or reduce debt and provide property tax relief. The defeasance had a benefit to taxpayers of \$11.7M in 2000 - 2004. In August 2001, the County participated in a pooled financing with 5 other New York counties to sell its rights to the tobacco revenues guaranteed under the Master Tobacco Agreement with the 4 major tobacco companies. This financing provided funds sufficient to defease approximately \$95M of Onondaga County General Obligation debt, beneficially affecting the years 2002 - 2021 for a total of \$131.7M.

Taking advantage of the lowest interest-rate environment in 40 years, the County refunded \$18.5M of 10 year old bonds in 2003, saving \$1.8M through 2014. In 2005, the County participated in a second pooled tobacco bond sale, which enabled the County to defease \$19.9M, beneficially affecting the years 2007 - 2025 for total debt service relief of \$27.3M. In 2007, \$8M in cash was used to fund capital projects, avoiding debt and maintaining the County's fund balance 10% target. In 2009 and again in 2012, the County issued \$33.3M and \$20.6M of refunding bonds, enabling savings of \$3.3M and \$1.2M, respectively. In 2014 the county issued \$19.6M of refunding bonds saving over \$1.1M and in 2015 \$11.37M of refunding debt was issued saving \$572,000. It is the County's goal to annually review its outstanding debt for refunding opportunities, which meet the 3% NPV savings target. 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 \$5M of fund balance to offset future debt service.

The County has established the following policies to guide its management of debt (calculations based on 2017 Budget):

1. Debt service costs paid through the General Fund will not exceed 5.5% of total General Fund revenue. For 2017, debt service costs are 4.51% of revenues.
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. Net general fund indebtedness is \$597 per capita and 1.018% of the County's full valuation. (Population source is 2010 U. S. Census Bureau)
4. 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 10 years. This goal may be modified to reflect changes in the interest rate environment, which may argue for shorter or longer retirement terms. Currently, 71% of the County's outstanding general fund debt is scheduled to be retired within 10 years.

In addition, the following capital planning and debt management strategies will continue:

Where possible, capital expenditures will be funded through pay-as-you-go programs and alternative financing mechanisms, such as state loan programs and as federal pilot projects;

Reviewing operating cost and revenue implications for all proposed capital projects as a part of the annual 60 year capital improvement planning process;

Maintaining an inventory of capital assets and developing plans to reduce maintenance costs and extend the useful life of the County's infrastructure, including the development and implementation of preventive maintenance programs.

Debt Management - Department of Water Environment Protection

The County has taken advantage of zero-interest short-term notes and subsidized-interest loans with the NYS Environmental Facilities Corp., as well as Federal and State grants. This is especially true for the Onondaga Lake cleanup projects.

Debt Limits

Local Finance Law prohibits the County from issuing debt in excess of the Debt Limit. The Debt Limit is 7% of the 5 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 2, 2016 the County will have exhausted 16.50% of its Debt-Contracting Power, a minimal increase from the 15.5% in 2000. Despite the issuance of new debt the percentage of Debt-Contracting Power has increased marginally due to the use of tobacco bond revenues to defease \$115M of General Fund debt (2001 & 2005). The following table is the calculation of Total Net Indebtedness:

Calculation of Total Net Indebtedness (As of September 2, 2016)

5 Year Average Full Valuation of Taxable Real Property		\$26,982,767,318
Debt Limit (7% of 5 year average)		\$1,888,793,712
Outstanding Indebtedness:		
Bonds	\$ 630,662,344	
Bond Anticipation Notes	\$ 10,009,415	
Outstanding Gross Indebtedness	\$ 640,671,759	
Less Exclusions	\$ (328,967,414)	
Total Net Indebtedness		\$311,704,345
Net Debt-Contracting Margin		\$1,577,089,367
Percentage of Debt-Contracting Power Exhausted		16.50% ¹

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

Debt Limit and Debt Margin

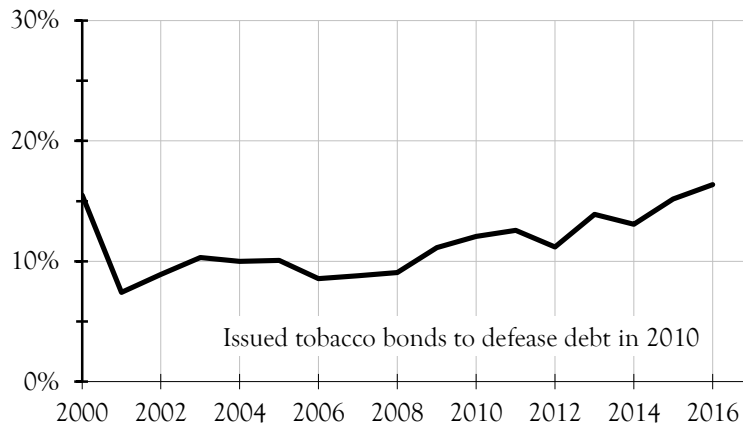
Onondaga County's use of its constitutional debt limit declined dramatically in 2001 when it defeased \$95M of general fund debt, using proceeds from tobacco revenue bonds. A second tobacco bond sale in 2005 enabled an additional \$20M in debt to be defeased. The current percentage of debt contracting power that has been exhausted is 16.50%, which is a marginal increase over the 15.5% in 2000, and down in comparison to an average of 17.8% for the years 1994 - 2000. The debt margin is more than 5 times the total net indebtedness and provides ample flexibility to continue to meet the capital needs of the County.

2016 Debt Limit and Debt Margin (as of September 2, 2016)

Debt Limit	\$1,888,793,712
Total Net Indebtedness	\$311,704,345
Debt Margin	\$1,577,089,367
Percentage of Debt Limit Used	16.50%

Note: The constitutional debt margin is the amount of additional debt, which a municipality may legally assume at a particular time and is calculated by subtracting the total net indebtedness from the debt limit. The debt limit is equal to 7% of the 5 year full value of taxable real property while the total net indebtedness equals total outstanding debt minus approved exclusions.

Percentage of Debt Limit Used



Debt Service Summary - All Funds

2017

	Countywide Tax Levy	Van Duyn	Water/Ad Valorem Tax	WEP/Unit Charge	Total
General Oblig. Principal	25,023,064	385,000	1,402,700	6,064,236	32,875,000
General Oblig. Interest	11,310,708	89,900	1,326,010	3,560,822	16,287,440
NYS EFC* Principal	0	0	0	11,901,780	11,901,780
NYS EFC* Interest	0	0	0	8,992,040	8,992,040
Estimated EFC* Principal	0	0	0	0	0
Estimated EFC* Interest	0	0	0	400,000	400,000
Fiscal Agent Fees	40,530	0	0	568,872	609,402
Debt Service Totals	36,374,302	474,900	2,728,710	31,487,750	71,065,662
RBD/Subsidy/Other**	8,639,798	474,900	329,499	6,435,984	15,880,181
Charges to Operating Fund	27,734,504	0	2,399,211	25,051,766	55,185,481

Note: WEP - Water Environment Protection (Consolidated Sanitary District and Drainage Districts)

*EFC - Environmental Facilities Corporation, a New York State agency financing environmental projects.

**Includes subsidies for BAB & RZ Bonds, EFC, Oneida Exclusivity

Debt Service Summary - Countywide Debt Service
2017

Department/Fund	General Obligation		Fiscal Agent Fees	Debt Service Totals	RBD/ Fed Subsidy Other Sources	Charge to Operating Fund
	Principal	Interest				
Office of Environment	0	53,334	0	53,334	53,334	0
Board of Elections	43,000	10,445	0	53,445	0	53,445
Community College	2,253,073	1,661,934	0	3,915,007	608,043	3,306,964
OnCenter Complex	762,300	587,287	40,000	1,389,587	175,573	1,214,014
Information Technology	1,480,141	384,194	0	1,864,335	328,389	1,535,946
Facilities	4,373,870	1,380,099	530	5,754,499	1,615,218	4,139,281
Correction	110,000	75,200	0	185,200	185,200	0
Sheriff/Jail	220,000	17,050	0	237,050	11,495	225,555
Children & Family Services	310,385	158,921	0	469,306	100,000	369,306
Parks & Recreation	2,680,466	2,753,450	0	5,433,916	3,286,007	2,147,909
Library	550,000	269,881	0	819,881	432,782	387,099
Transportation	8,438,133	3,263,716	0	11,701,849	1,824,164	9,877,685
E-911	3,801,696	695,197	0	4,496,893	19,593	4,477,300
TOTALS	25,023,064	11,310,708	40,530	36,374,302	8,639,798	27,734,504

Debt Service Summary - Special Districts

2017

	Van Duyn ¹	Water District	Consol. San Dist	Meadow brook DD	Bear Trap DD	Bloody Brook DD	Harbor Brook DD	Total
General Oblig. Principal	385,000	1,402,700	5,463,792	393,444	14,000	66,000	127,000	7,851,936
General Oblig. Interest	89,900	1,326,010	3,409,402	101,419	10,035	25,341	14,625	4,976,732
NYS EFC* Principal	0	0	11,901,780	0	0	0	0	11,901,780
NYS EFC* Interest ¹	0	0	8,992,040	0	0	0	0	8,992,040
Estimated EFC* Principal	0	0	0	0	0	0	0	0
Estimated EFC* Interest	0	0	400,000	0	0	0	0	400,000
Fiscal Agent Fees	0	0	568,872	0	0	0	0	568,872
Debt Service Totals	474,900	2,728,710	30,735,886	494,863	24,035	91,341	141,625	34,691,360
RBD/Fed ² Subsidy/ Other	474,900	329,499	6,432,795	0	0	3,189	0	7,240,383
Charges to Operating Fund	0	2,399,211	24,303,091	494,863	24,035	88,152	141,625	27,450,977

¹ Van Duyn debt will be paid with proceeds of Van Duyn's sale

² Includes Reserves for Bonded Debt, EFC Subsidies, and BAB & RZ Subsidies

County Indebtedness
Authorized and Unissued

As of September 2, 2016

Department	Authorized and Unissued
Facilities	8,020,264
Parks & Recreation	1,805,699
County Clerk	600,000
Transportation	11,023,500
Emergency Communications	1,788,852
Sheriff	100,000
Community College	3,800,205
Metropolitan Water Board	20,551,556
Water Environment Protection	148,125,201
Total	195,815,277

Serial Bonds 2017 Debt Service

Title of Bond	Final Maturity	Interest Rate*	Amount Issued	Initial Interest	2017 Principal	2017 Interest	Balance 12/31/2017
N.Y.S. E.F.C. Bonds 1998*	2018	2.996%	6,030,821	3,386,630	355,000	17,202	365,942
N.Y.S. E.F.C. Bonds 2000*	2020	2.996%	1,383,178	881,653	75,000	9,700	253,288
N.Y.S. E.F.C. Bonds 2001A*	2020	2.996%	9,078,380	4,562,877	500,000	71,318	1,691,161
N.Y.S. E.F.C. Bonds 2001B*	2021	2.306	2,195,433	1,108,934	115,000	17,660	516,529
N.Y.S. E.F.C. Bonds 2002A*	2021	4.522	1,980,745	1,980,745	101,180	17,008	482,968
N.Y.S. E.F.C. Bonds 2002G*	2028	1.306%	14,681,217	5,432,687	615,600	256,470	7,919,271
N.Y.S. E.F.C. Bonds 2003A*	2022	4.311%	1,128,465	1,583,722	60,000	9,248	301,289
N.Y.S. E.F.C. Bonds 2003F*	2023	3.823%	4,657,961	1,868,010	250,000	53,961	1,623,223
N.Y.S. E.F.C. Bonds 2004D*	2024	4.493%	9,579,475	4,760,948	500,000	202,652	3,905,153
N.Y.S. E.F.C. Bonds 2005A*	2024	3.888%	17,469,284	7,080,442	915,000	161,872	7,533,246
N.Y.S. E.F.C. Bonds 2005B*	2025	3.689%	5,495,439	2,218,182	280,000	100,359	2,658,606
N.Y.S. E.F.C. Bonds 2006C*	2036	4.960%	44,610,657	44,610,657	1,430,000	1,256,594	40,935,807
N.Y.S. E.F.C. Bonds 2007D*	2036	4.180%	41,442,558	26,106,369	1,585,000	1,165,596	33,887,110
General Obligation Bonds 2007A	2027	4.021%	25,600,000	10,650,054	1,350,000	164,626	0
N.Y.S. E.F.C. Bonds 2008A&B*	2028	4.270%	1,645,373	801,562	80,000	45,262	1,240,257
General Obligation Bonds 2009A	2029	3.738%	61,725,000	13,881,162	4,675,000	1,538,375	38,442,063
GO Refund Bonds 2009	2023	2.400%	33,345,000	8,234,590	3,135,000	416,531	9,734,609
N.Y.S. E.F.C. Bonds 2010C*	2030	2.412%	2,972,800	1,150,144	135,000	74,991	2,532,829
General Obligation Bonds 2010A	2019	2.093%	31,150,000	7,611,076	3,000,000	377,500	6,351,250
GO Bonds 2010B (BAB's)	2026	4.761%	17,570,000	10,532,039	0	828,406	21,921,218
GO Bonds 2010B (RZ's)	2030	5.709%	4,905,000	7,021,077	0	282,352	8,019,422
N.Y.S. E.F.C. Bonds 2011C*	2031	1.753%	15,603,494	6,787,783	705,000	424,570	15,001,399
General Obligation Bonds 2011	2030	3.006%	33,755,000	11,688,907	2,475,000	949,595	25,679,141
N.Y.S. E.F.C. Bonds 2012B*	2034	1.015%	11,395,171	4,410,561	465,000	281,411	12,434,858
General Obligation Bonds 2012	2037	2.699%	51,425,000	17,994,687	3,125,000	1,468,376	47,172,750
GO Refund Bonds 2012	2025	2.511%	20,615,000	3,844,196	2,400,000	397,012	9,233,169
N.Y.S. E.F.C. Bonds 2012E*	2032	0.779%	4,100,953	1,238,401	180,000	85,063	4,034,725
General Obligation Bonds 2013	2033	3.169%	67,870,000	30,461,070	5,125,000	2,707,500	70,776,250
N.Y.S. E.F.C. Bonds 2014D*	2044	0.622%	128,800,968	79,460,686	3,555,000	4,016,474	184,170,926
General Obligation Bonds 2014	2034	2.632%	34,800,000	12,060,823	2,700,000	1,307,187	36,781,781
GO Refund Bonds 2014	2036	2.194%	19,600,000	5,951,257	2,255,000	781,325	20,138,175
General Obligation Bonds 2015	2045	3.433%	79,900,000	46,215,073	2,365,000	3,118,460	115,979,991
GO Refunds Bonds 2015	2027	2.215%	11,370,000	3,592,519	5,000	481,101	13,761,625
QECCB 2015	2025	3.500%	2,650,000	1,041,161	265,000	104,145	3,326,256
General Obligation Bonds 2016	2036	2.080%	26,500,000	7,770,442	0	1,364,950	32,905,491
TOTAL:			847,032,372	397,981,126	44,776,780	24,554,852	781,711,778

*Interest Rates for General Obligation Bonds are based on the True Interest Costs, while rates for EFC Loans are based on the budget year coupon per maturity

Serial Bonds 2017 Debt Service by Department

	No.	Year Issued	Final Maturity	Interest Rate	2017 Serial Bond Payments		
					Principal	Interest	Total
Office of Environment							
General Obligation Bonds	830	2016	2036	2.080%	0	53,333	53,333
Total: Office of Environment					0	53,333	53,333
Board of Elections							
General Obligation Bonds	770	2011	2030	3.006%	43,000	10,445	53,445
Total: Board of Elections					43,000	10,445	53,445
Onondaga Community College							
General Obligation Bonds, Series A	730	2007	2026	4.021%	210,000	113,538	323,538
General Obligation Bonds, Series A	740	2009	2029	3.738%	275,000	155,525	430,525
General Obligation Bonds, Series A	760	2010	2019	2.093%	330,000	41,750	371,750
GO Bonds, Series B (Bab's)	761	2010	2026	4.761%	0	134,344	134,344
GO Bonds, Series B (Rz's)	762	2010	2030	5.709%	0	107,924	107,924
General Obligation Bonds	770	2011	2030	3.006%	377,000	245,073	622,073
General Obligation Bonds	780	2012	2030	2.699%	60,000	39,320	99,320
General Obligation Refunding Bonds	790	2012	2025	2.511%	137,000	55,933	192,933
General Obligation Bonds	800	2013	2033	3.169%	520,000	282,150	802,150
General Obligation Bonds	810	2014	2034	2.632%	115,000	43,075	158,075
General Obligation Refunding Bonds	811	2014	2026	2.194%	226,400	102,506	328,906
General Obligation Bonds	820	2015	2045	3.433%	1,895	1,784	3,679
General Obligation Refunding Bonds	821	2015	2027	2.215%	778	103,988	104,766
General Obligation Bonds	830	2016	2036	2.080%	0	235,024	235,024
Total: Community College					2,253,073	1,661,934	3,915,007
Correction							
General Obligation Bonds, Series A	740	2009	2029	3.738%	100,000	74,500	174,500
General Obligation Bonds	800	2013	2033	3.169%	10,000	700	10,700
Total: Corrections					110,000	75,200	185,200
OnCenter Complex							
General Obligation Bonds, Series A	740	2009	2029	3.738%	399,000	273,545	672,545
General Obligation Bonds, Series A	760	2010	2019	2.093%	140,000	17,500	157,500
GO Bonds, Series B (Bab's)	761	2010	2026	4.761%	0	52,535	52,535
GO Bonds, Series B (Rz's)	762	2010	2030	5.709%	0	39,143	39,143
General Obligation Bonds	770	2011	2030	3.006%	50,000	31,119	81,119
General Obligation Bonds	780	2012	2024	2.699%	18,000	7,220	25,220
General Obligation Refunding Bonds	790	2012	2024	2.511%	85,000	19,195	104,195
General Obligation Bonds	800	2013	2033	3.169%	50,000	43,100	93,100
General Obligation Bonds	820	2015	2045	3.433%	20,300	19,918	40,218
General Obligation Bonds	830	2016	2036	2.080%	0	84,012	84,012
Total: OnCenter Complex					762,300	587,287	1,349,587

Serial Bonds 2017 Debt Service by Department

	No.	Year Issued	Final Maturity	Interest Rate	2017 Serial Bond Payments		
					Principal	Interest	Total
Information Technology							
General Obligation Bonds	770	2011	2030	3.006%	450,000	101,750	551,750
General Obligation Bonds	780	2012	2021	2.699%	460,000	109,700	569,700
General Obligation Bonds	800	2013	2033	3.169%	530,000	133,350	663,350
General Obligation Bonds	820	2015	2045	3.433%	40,141	39,394	79,535
Total: Information Technology					1,480,141	384,194	1,864,335
Facilities Management							
General Obligation Bonds, Series A	730	2007	2026	4.021%	120,000	3,000	123,000
General Obligation Bonds, Series A	740	2009	2029	3.738%	182,000	82,880	264,880
General Obligation Refunding Bonds	750	2009	2023	2.400%	2,368,000	355,386	2,723,386
General Obligation Bonds	780	2012	2032	2.699%	300,000	218,951	518,951
General Obligation Refunding Bonds	790	2012	2025	2.511%	268,000	50,978	318,978
General Obligation Bonds	800	2013	2033	3.169%	275,000	117,300	392,300
General Obligation Bonds	810	2014	2034	2.632%	360,000	272,563	632,563
General Obligation Refunding Bonds	811	2014	2026	2.194%	168,600	69,376	237,976
General Obligation Bonds	820	2015	2045	3.433%	66,826	62,652	129,478
General Obligation Refunding Bonds	821	2015	2027	2.215%	444	42,868	43,312
QECCB	822	2015	2025	3.500%	265,000	104,145	369,145
Total: Facilities					4,373,870	1,380,099	5,753,969
Sheriff							
General Obligation Bonds	800	2013	2033	3.169%	190,000	14,300	204,300
General Obligation Refunding Bonds	811	2014	2026	2.194%	30,000	2,750	32,750
Total: Sheriff/Jail					220,000	17,050	237,050
Children and Family Services							
General Obligation Bonds, Series A	730	2007	2026	4.020%	50,000	23,838	73,838
General Obligation Refunding Bonds	811	2014	2026	2.194%	260,200	112,909	373,109
General Obligation Refunding Bonds	821	2015	2027	2.215%	185	22,174	22,359
Total: Children and Family Services					310,385	158,921	469,306

Serial Bonds 2017 Debt Service by Department

	No.	Year	Final	Interest	2017 Serial Bond Payments		
		Issued	Maturity	Rate	Principal	Interest	Total
Parks & Recreation							
General Obligation Bonds, Series A	730	2007	2017	4.020%	125,000	3,125	128,125
General Obligation Bonds, Series A	740	2009	2029	3.738%	80,000	27,600	107,600
General Obligation Bonds, Series A	760	2010	2019	2.093%	335,000	40,625	375,625
GO Bonds, Series B (Bab's)	761	2010	2026	4.761%	0	93,669	93,669
GO Bonds, Series B (Rz's)	762	2010	2030	5.709%	0	41,445	41,445
General Obligation Bonds	770	2011	2030	3.006%	375,000	103,594	478,594
General Obligation Bonds	780	2012	2027	2.699%	215,000	106,900	321,900
General Obligation Bonds	800	2013	2033	3.169%	300,000	191,000	491,000
General Obligation Bonds	810	2014	2034	2.632%	120,000	68,049	188,049
General Obligation Bonds	820	2015	2045	3.433%	1,130,000	1,907,213	3,037,213
General Obligation Bonds Refunding	821	2015	2027	2.215%	466	5	471
General Obligation Bonds	830	2016	2036	2.080%	0	170,225	170,225
Total: Parks & Recreation					2,680,466	2,753,450	5,433,916
Library							
General Obligation Bonds	770	2011	2030	3.006%	25,000	4,825	29,825
General Obligation Bonds	780	2012	2020	2.699%	260,000	43,250	303,250
General Obligation Bonds	800	2013	2033	2.169%	165,000	122,200	287,200
General Obligation Bonds	820	2015	2045	3.433%	100,000	99,606	199,606
Total: Library					550,000	269,881	819,881
Transportation (County Road Fund)							
General Obligation Bonds, Series A	730	2007	2022	4.021%	90,000	2,250	92,250
General Obligation Bonds, Series A	740	2009	2029	3.378%	335,000	121,675	456,675
General Obligation Refunding Bonds	750	2009	2023	2.400%	400,000	10,000	410,000
General Obligation Bonds, Series A	760	2010	2019	2.093%	1,430,000	184,000	1,614,000
GO Bonds, Series B (Bab's)	761	2010	2026	4.761%	0	409,430	409,430
GO Bonds, Series B (Rz's)	762	2010	2030	5.709%	0	16,706	16,706
General Obligation Bonds	770	2011	2030	3.006%	1,045,000	379,239	1,424,239
General Obligation Bonds	780	2012	2032	2.699%	878,000	370,355	1,248,355
General Obligation Refunding Bonds	790	2012	2024	2.511%	1,662,000	189,486	1,851,486
General Obligation Bonds	800	2013	2033	3.169%	555,000	389,200	944,200
General Obligation Bonds	810	2014	2034	2.632%	1,161,000	430,950	1,591,950
General Obligation Refunding Bonds	811	2014	2026	2.194%	604,300	100,578	704,878
General Obligation Bonds	820	2015	2045	3.433%	277,500	272,390	549,890
General Obligation Refunding Bonds	821	2015	2027	2.215%	333	17,656	17,989
General Obligation Bonds	830	2016	2036	2.080%	0	369,801	369,801
Total: Transportation					8,438,133	3,263,716	11,701,849

Serial Bonds 2017 Debt Service by Department

	No.	Year Issued	Final Maturity	Interest Rate	2017 Serial Bond Payments		
					Principal	Interest	Total
E - 911							
General Obligation Bonds, Series A	730	2007	2021	4.021%	80,000	2,000	82,000
General Obligation Bonds, Series A	740	2009	2029	3.738%	2,900,000	556,500	3,456,500
General Obligation Bonds, Series A	760	2010	2019	2.093%	215,000	20,625	235,625
GO Bonds, Series B (Bab's)	761	2010	2026	4.761%	0	17,325	17,325
General Obligation Bonds	780	2012	2017	2.699%	180,000	3,600	183,600
General Obligation Bonds	810	2014	2034	2.632%	147,000	21,975	168,975
General Obligation Refunding Bonds	811	2014	2026	2.194%	265,000	47,871	312,871
General Obligation Bonds	820	2015	2045	3.433%	14,400	13,941	28,341
General Obligation Refunding Bonds	821	2015	2027	2.215%	296	11,360	11,656
TOTAL: E - 911					3,801,696	695,197	4,496,893
Van Duyn							
General Obligation Bonds, Series A	760	2010	2019	2.093%	285,000	37,875	322,875
GO Bonds, Series B (Bab's)	761	2010	2026	4.476%	0	14,025	14,025
General Obligation Bonds	800	2013	2033	3.169%	100,000	38,000	138,000
Total: Van Duyn					385,000	89,900	474,900
Consolidated Sanitary District							
N.Y.S. E.F.C. 1998 Series B Bonds	595	1998	2018	2.996%	355,000	17,202	372,202
N.Y.S. E.F.C. 2000 Series A Bonds	615	2000	2020	2.996%	75,000	9,700	84,700
N.Y.S. E.F.C. 2001 Series A Bonds	625	2001	2020	2.996%	500,000	71,318	571,318
N.Y.S. E.F.C. 2001 Series B Bonds	635	2001	2021	2.306%	115,000	17,660	132,660
N.Y.S. E.F.C. 2002 Series A Bonds	645	2002	2021	4.522%	101,180	17,008	118,188
N.Y.S. E.F.C. 2002 Series G Bonds	655	2002	2028	1.306%	615,600	256,470	872,070
N.Y.S. E.F.C. 2003 Series A Bonds	665	2003	2022	4.311%	60,000	9,248	69,248
N.Y.S. E.F.C. 2003 Series F Bonds	675	2003	2023	3.823%	250,000	53,961	303,961
N.Y.S. E.F.C. 2004 Series D Bonds	685	2004	2024	4.493%	500,000	202,652	702,652
N.Y.S. E.F.C. 2005 Series A Bonds	695	2005	2024	3.888%	915,000	161,872	1,076,872
N.Y.S. E.F.C. 2005 Series B Bonds	705	2005	2025	3.689%	280,000	100,359	380,359
N.Y.S. E.F.C. 2006 Series C Bonds	715	2006	2036	4.960%	1,430,000	1,256,594	2,686,594
N.Y.S. E.F.C. 2007 Series D Bonds	725	2007	2036	4.180%	1,585,000	1,165,596	2,750,596
General Obligation Bonds, Series A	730	2007	2027	4.021%	555,000	13,875	568,875
N.Y.S. E.F.C. 2008 Series A&B Bonds	735	2008	2028	4.270%	80,000	45,262	125,262
General Obligation Bonds, Series A	740	2009	2029	3.738%	400,000	243,800	643,800
N.Y.S. E.F.C. 2010 Series C Bonds	755	2010	2030	2.412%	135,000	74,991	209,991
General Obligation Bonds, Series A	760	2010	2019	2.093%	265,000	35,125	300,125
GO Bonds, Series B (BAB's)	761	2010	2026	4.761%	0	107,078	107,078
GO Bonds, Series B (RZ's)	762	2010	2030	5.709%	0	77,134	77,134

Serial Bonds 2017 Debt Service by Department

	No.	Year	Final	Interest	2017 Serial Bond Payments		
		Issued	Maturity	Rate	Principal	Interest	Total
N.Y.S. E.F.C. 2011 Series C Bonds	765	2011	2031	1.753%	705,000	424,570	1,129,570
General Obligation Bonds	770	2011	2030	3.006%	110,000	73,550	183,550
N.Y.S. E.F.C. 2012 Series B Bonds	775	2012	2034	1.015%	465,000	281,411	746,411
General Obligation Bonds	780	2012	2032	2.699%	466,000	312,910	778,910
General Obligation Refunding Bonds	790	2012	2025	2.511%	153,000	48,154	201,154
N.Y.S. E.F.C. 2012 Series E Bonds	795	2012	2032	0.779%	180,000	85,063	265,063
General Obligation Bonds	800	2013	2033	3.169%	1,825,000	772,400	2,597,400
N.Y.S. E.F.C. 2014 Series B Bonds	805	2014	2044	0.622%	3,555,000	4,016,474	7,571,474
General Obligation Bonds	810	2014	2034	2.632%	607,000	328,075	935,075
General Obligation Refunding Bonds	811	2014	2026	2.194%	591,800	280,763	872,563
General Obligation Bonds	820	2015	2045	3.343%	488,938	482,399	971,337
General Obligation Refunding Bonds	821	2015	2027	2.215%	2,054	231,426	233,480
General Obligation Bonds	830	2016	2036	2.080%	0	402,715	402,715
Total: Consol. Sanitary District					17,365,572	11,676,815	29,042,387
Drainage Districts							
General Obligation Bonds, Series A	730	2007	2027	4.021%	120,000	3,000	123,000
General Obligation Bonds, Series A	740	2009	2029	3.738%	4,000	2,350	6,350
General Obligation Refunding Bonds	750	2009	2023	2.400%	367,000	51,145	418,145
General Obligation Bonds	780	2012	2032	2.99%	14,000	10,035	24,035
General Obligation Refunding Bonds	790	2012	2025	2.511%	95,000	33,266	128,266
General Obligation Refunding Bonds	821	2015	2027	2.215%	444	51,624	52,068
Total: Drainage Districts					600,444	151,420	751,864
Water District							
General Obligation Bonds	780	2012	2037	2.699%	274,000	246,135	520,135
General Obligation Bonds	800	2013	2033	3.169%	605,000	603,800	1,208,800
General Obligation Bonds	810	2014	2034	2.632%	160,000	142,500	302,500
General Obligation Refunding Bonds	811	2014	2026	2.194%	138,700	64,572	203,272
General Obligation Bonds	820	2015	2045	3.343%	225,000	219,163	444,163
General Obligation Bonds	830	2016	2036	2.080%	0	49,840	49,840
Total: Water District					1,402,700	1,326,010	2,728,710
Total: All Funds					44,776,780	24,554,852	69,331,632

* All payments are as scheduled with no subsidies or other offsets applied

**Does not include Short Term EFC Grid Notes

Capital Planning

The Capital Process

The Capital Improvement Plan (CIP) serves as a mechanism for defining and prioritizing capital projects that are necessary to maintain the high standard of living that County residents have come to expect. Throughout the CIP, 3 spending priorities emerge: environmental protection, economic development, and operational efficiency.

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 Capital Improvement Plan takes place over several months, beginning in February of each year, and includes 5 major phases:

1. In February, department heads begin preparation of project proposals in accordance with executive guidelines.
2. In April, proposals are submitted to the Division of Management and Budget (DMB). The proposals are analyzed by DMB in conjunction with the Syracuse-Onondaga County Planning Agency and the Department of Finance. The Law Department is consulted as needed.
3. By September, a tentative CIP has been approved by the County Executive. 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 Capital Improvement Plan 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 February, 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:

1. Consistency with the stated goals of the County Executive
2. Degree of the overall need for the project
3. Fiscal impact, including the County's capacity to borrow
4. Non-County funding sources
5. Community participation and support

The final product of this process is a 6-year plan to improve 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, which require borrowing, must be presented to the Legislature individually in order to secure authorization to borrow funds.

The 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 Development Guide profiles Onondaga County in terms of natural resources and land use, population, and our local economy. While the Development Guide serves many purposes, clearly the most important is its role in influencing land development within Onondaga County. The 2010 Development Guide provides the planning framework within which capital-spending decisions will be made.

Project Criteria

As a matter of policy, capital requests are not considered for the Capital Improvement Plan if: 1) the total cost of the project is less than \$250,000; 2) the probable useful life (PPU) is less than 5 years; 3) the request involves the procurement of light or heavy vehicles. These must be funded through the operating budget and are excluded from the Capital Improvement Plan.

A Brief Summary

In addition to projects, which have been authorized by the County Legislature, the 2017-2022 Capital Improvement Plan (CIP) includes 43 County Wide projects, 11 projects in the Sewer Fund, and 1 project in the Water Fund. All 55 projects recommended for inclusion in the 6-year plan estimate total spending at \$486,110,000.

Total funds for the recommended County-wide project, for 6 years, are \$234,468,000 of which \$46,621,000 will be pay-as-you-go and \$113,356,000 will be debt. The rest is State and Federal Aid. The Special Funds projects are expected to cost \$251,642,000, of which \$31,590,000 will be pay-as-you-go and \$220,052,000 will be debt.

Impact on the Operating Budget

Capital projects can affect the operating budget in several ways. First, when funds are borrowed, annual principal and interest payments to retire the debt must be made. The County's budget to pay scheduled debt payments is presented in the Annual Budget as Debt Service (Debt Service Fund). Additionally, scheduled debt service payments are summarized by department and fund, as well as specified by individual borrowing, in the Debt Service Fund section.

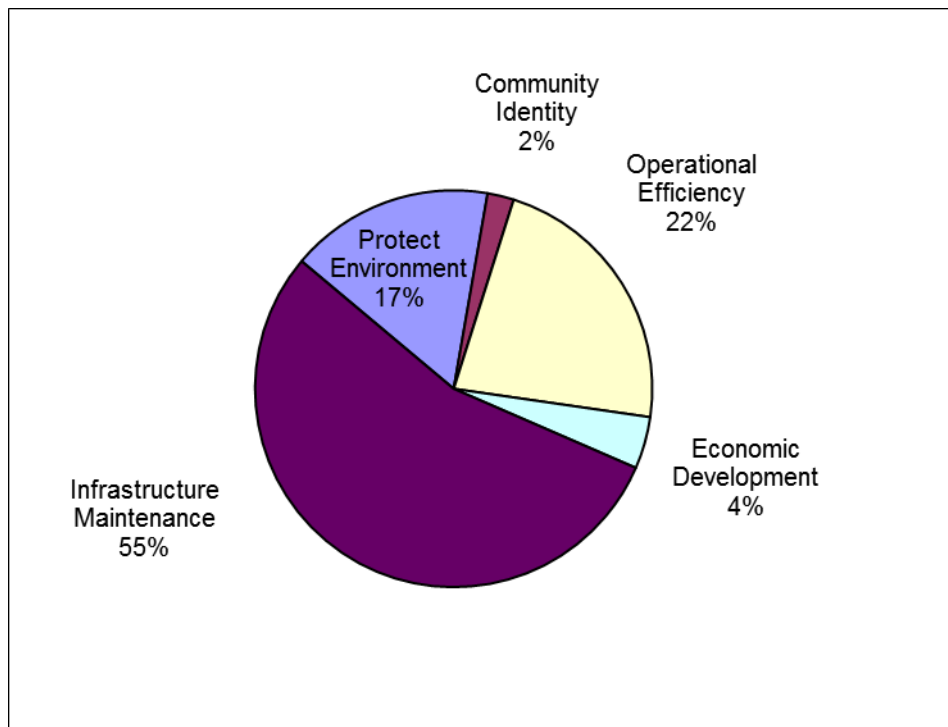
As an alternative to assuming debt, some capital projects are funded on a "pay-as-you-go" basis through departmental operating budgets. Most engineering studies are funded in this manner. Finally, operating costs associated with a project, such as utilities and maintenance, may cause a change in departmental budgets. The impact of these anticipated changes is calculated during the operating budget process as well as in the review, analysis and decision-making process for each capital project. A very brief summary of those projects anticipated to require funding in 2017 is included in this section. Additionally included are:

1. Estimated 6 year costs for the proposed projects in the CIP

2. The proposed source of funding for those projects
3. Summary of the estimated debt service for:
 - currently scheduled debt
 - debt which has been authorized but not yet issued
 - estimated debt service if all of the proposed projects were to be authorized by the County Legislature

It is important to note that the summary of estimated debt service schedule shows a maximum possible debt obligation through the payoff period.

2017 – 2022 Capital Priorities



CIP Proposed Projects

Six Year Summary of Estimated Expenses (\$ in 000's)

Countywide	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

Countywide		2017 - 22 Total
Status	Project	
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
	Countywide Total	\$ 234,468

CIP Proposed Projects

Six Year Summary of Estimated Expenses (\$ in 000's)

Special Funds	Project	2017 - 22 Total
Status		
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	130
	Brewerton WWTP Asset Renewal Improvements	7,400
new	Camillus Force Main Replacement	10,000
	Energy Efficiency Improvements/Performance Contracting	26,300
new	Harbor Brook Miscellaneous Culvert and Channel Improvements	800
new	Meadowbrook-Limestone WWTP Disinfection System and Collection System Improvements	18,725
	Metro WWTP Phosphorus Treatment System Optimization	22,005
new	Oak Orchard Disinfection and Lagoon Cleaning	6,024
new	Oak Orchard WWTP Secondary Clarifier Rehabilitation	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

Funding Sources of Proposed Projects

Countywide	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
Countywide TOTALS	\$38,780	\$62,294	\$43,643	\$42,921	\$29,440	\$17,390	\$234,468
Special Funds							
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

CIP Proposed Projects

Summary of 2017 Estimated Expenses

Department/Projects	2017 Cost Only (\$ in 000's)
<u>E911</u>	
Computer Aided Dispatch (CAD) System Hardware Refresh (2017-2019)	\$191
E911 Center Roof Replacement (NEW) (2017)	\$303
<u>Facilities</u>	
Civic Center Office and Masonry Improvements (2017-2018)	\$801
Courthouse - HVAC Renovations (2017-2021)	\$400
Facilities Various Capital Improvements (2017-2021)	\$1,100
Oncenter Rehabilitations (2017-2020)	\$500
<u>Hillbrook</u>	
Hillbrook Detention Facility Improvements (2017) (NEW)	\$394
<u>Office of Environment</u>	
Ash Tree Management (2017-2022)	\$750
<u>Parks</u>	
Onondaga Lake Park Shoreline Stabilization (NEW)	\$235
Park Roofs	\$280
<u>DOT</u>	
Bituminous Surface Treatment (2017-2022)	\$753
Bridges (2017-2022)	\$2,393
Capital Highway Construction (2017-2022)	\$8,767
Caughdenoy Road / NYS Route 31 Road Improvements (2017)	\$4,120
Cold Mix Bituminous Paving (2017-2022)	\$1,858
Guide Rail (2017-2022)	\$453
Rehabilitation of North Area and Camillus Highway Mtce Facil. (2017)	\$8,500
Repaving Program (Hot Mix Bituminous) (2017-2022)	\$5,932
Testing, Drainage and Facilities Repair (2017-2022)	\$730
Traffic Systems Management (2017-2022)	\$320
COUNTY WIDE FUNDS TOTAL	\$38,780
<u>WEP</u>	
Baldwinsville Seneca Knolls WWTP Disinfection & Phase II Asset Renewal Improvements (2017-2021)	\$2,574
Bear Trap - Ley Creek North Midler Culvert Repair Project (NEW) (2017)	\$130
Camillus Force Main Replacement (NEW) (2017-2021)	\$2,000
Energy Efficiency Improvements/Performance Contracting (2017-2022)	\$3,500
Harbor Brook Miscellaneous Culvert and Channel Improvements (NEW) (2017-2020)	\$200
Meadowbrook-Limestone WWTP Disinfection & Collection System Improvements (NEW) (2017-2021)	\$8,152
Metro WWTP Phosphorus Treatment System Optimization (2017-2019)	\$7,814

Oak Orchard WWTP Secondary Clarifier Rehabilitation (NEW) (2017-2020)	\$950
Wastewater Transportation System Improvements (2017-2022)	\$6,250
<u>MWB</u>	
Water Treatment Plant Comprehensive Improvements (2017-2022)	\$3,472
ALL FUNDS TOTAL	\$73,822

Proposed Capital Improvement Projects For 2017

The following is a listing with a very brief description of the capital projects that are anticipated to require funding in 2017. More detail can be found in the County's 2017-2022 Capital Improvement Plan.

EMERGENCY COMMUNICATIONS

Project: Computer Aided Dispatch (CAD) System Hardware Refresh

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: E911 Center Roof Replacement (NEW)

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.

FACILITIES MANAGEMENT

Project: Civic Center Office and Masonry Improvements

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: Courthouse - HVAC Renovations

Level of Development: Advanced

Project Description: This project is designed to address the aging, 50+ year old HVAC systems in this important 106 year old landmark building. The goal of this project is to extend and improve the mechanical life of the building's infrastructure without the need to displace the critical functions that take place during the renovation process.

Project: Facilities Various Capital Improvements

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: Oncenter Rehabilitations

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.

OFFICE OF ENVIRONMENT

Project: Ash Tree Management

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.

PARKS & RECREATION

Project: Onondaga Lake Park Shoreline Stabilization (NEW)

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: Park Roofs

Level of Development: Intermediate

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

TRANSPORTATION

Project: Bituminous Surface Treatment

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: Bridges

Level of Development: Ongoing

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

Project: Capital Highway Construction
Level of Development: Ongoing
Project Description: This project involves construction of major highway improvements.

Project: Caughdenoy Road / NYS Route 31 Road Improvements
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: Cold Mix Bituminous Paving
Level of Development: Ongoing
Project Description: This project entails the repaving of the 375 miles of secondary County roads on a rotating basis.

Project: Guide Rail
Level of Development: Ongoing
Project Description: This program involves the installation of guide rail at various locations on County highways.

Project: Rehabilitation of North Area and Camillus Highway Maintenance Facilities
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: Repaving Program (Hot Mix Bituminous)
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: Testing, Drainage and Facilities Repair
Level of Development: Ongoing
Project Description: This project provides support programs for the Department of Transportation's Annual Work Plan.

Project: Traffic Systems Management
Level of Development: Ongoing
Project Description: This program addresses Traffic System improvements on County highways.

METROPOLITAN WATER BOARD

Project: Water Treatment Plant Comprehensive Improvements

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.

WATER ENVIRONMENT PROTECTION

Project: Baldwinsville Seneca Knolls WWTP Rehabilitation Project

Level of Development: Preliminary

Project Description: The Baldwinsville-Seneca Knolls Wastewater Treatment Plant was issued a renewed SPDES Discharge Permit in June 2014 by the New York State Department of Environmental Conservation (NYSDEC) which included modifications to the effluent total residual chlorine (TRC) limit from 2.0 mg/L to 0.08 mg/L. The new TRC permit limits will become effective beginning May 15, 2018. The WWTP currently has no means to dechlorinate the effluent to meet this limit. Therefore, the County initiated this project to design and construct upgrades to the disinfection system which will enable the new TRC limit to be met. Additionally, the plant is over 30 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: Bear Trap - Ley Creek North Midler Culvert Repair Project (NEW)

Level of Development: Preliminary

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

Project: Camillus Force Main Replacement (NEW)

Level of Development: Preliminary

Project Description: Replacement of a 24 inch diameter, 7 mile long wastewater pipeline.

Project: Energy Efficiency Improvements/Performance Contracting

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 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: Harbor Brook Miscellaneous Culvert and Channel Improvements (NEW)

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

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: Metro WWTP Phosphorus Treatment System Optimization

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: Oak Orchard Disinfection and Lagoon Cleaning (NEW)

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: Wastewater Transportation System Improvements

Level of Development: Ongoing

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