

# Debt Management

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## **Capital Expenditures vs. Current Expenditures**

Local government expenditures can be broadly categorized as either current or capital. Generally, current expenditures are related to ongoing operations or purchases that are relatively inexpensive or short-lived. Capital expenditures tend to be one-time, relatively high-cost, or long-lived assets. There is not a perfectly clear line separating current and capital expenditures, but current expenditures should be funded with current sources of revenue and it may be appropriate to fund capital expenditures with current revenue and/or debt financing. When debt financing is used, it is important that the useful life of the asset exceed the time necessary to pay for the asset. Carroll County's operating expenditures are entirely funded by current revenue. A mix of sources such as bonds, grants, and paygo is used to fund capital projects.

## **Paying for Capital Assets**

There are two general approaches to paying for capital assets; paygo, or using current resources to pay as the expenditure occurs and debt financing, or paying over time as the asset is used. Paygo funding creates no long-term obligation but may require years of saving that delay addressing a need. Constraints on accumulating funds over time may make it difficult or impossible for a local government to save for a future project. Paygo funding places the entire burden on the existing taxpayer, even though a long-lived asset may benefit new taxpayers in future years. Debt financing commits the County to a long-term obligation and increases the cost of the funding, but allows timely filling of needs and spreads the cost of an asset over a larger number of taxpayers, who will benefit from its use. To benefit from the advantages of each of these approaches, Carroll County uses a mix of paygo and debt funding in the Capital Budget.

## **Bonds**

For local governments, financing with long-term debt usually means issuing bonds. A bond is like a mortgage; it is written evidence of the issuer's obligation to repay a specified principal amount on a certain date (maturity date), together with interest at a stated rate, or according to a formula for determining that rate.

General obligation bonds are used when the capital project is beneficial to the community. Examples would be expenditures for law enforcement, fire protection, education, public health facilities, or roads and bridges. The payments are financed by the taxpayers of the issuing government because general obligation bonds are secured unconditionally by the full faith, credit, and taxing powers of the issuing government. These bonds typically carry high credit ratings with correspondingly low risk.

Serial bonds are a package of individual bonds with each bond potentially having a different maturity than the rest. Typically, a municipal serial bond issue has

maturities ranging from one year to more than twenty years. General obligation bond issues are usually entirely in serial form.

### Debt Retirement

As of June 30, 2015, 67.8% of long-term debt owed by the County will be retired within ten years and 41.2% will be retired in five years. New Consolidated Public Improvement Bonds issued in November 2015 have an aggregate principal amount of \$28.0 million in new bonds and \$9.1 million in refunded bonds.

### Rating Agencies

There are currently three credit rating agencies used by Carroll County: Moody’s, Fitch, and Standard & Poor’s. These agencies tackle the difficult task of evaluating municipal bond issues in light of demographic, economic, financial, and debt factors. The result of the evaluation process is a “rating” that is assigned to the bond issue. Ratings generally measure the probability of the timely repayment of principal and interest on municipal bonds. The higher the credit rating assigned to the issue, the lower the interest rate the County will need to attract investors.

The following table displays the various rating categories used by the rating agencies:

Moody’s <sup>1</sup>	Standard & Poor <sup>2</sup>	Fitch	Description
Aaa	AAA	AAA	Highest quality, extremely strong capacity to pay
Aa	AA	AA	High quality, very strong capacity to pay
A	A	A	Upper medium quality, strong capacity to pay
Baa	BBB	BBB	Medium quality, adequate capacity to pay
Ba	BB	BB	Questionable quality, low capacity to pay

Credit evaluation, to some extent, is subjective which may result in different analysts looking at different data or assigning different weight to the same data. The rating agencies do not necessarily give the same credit ratings to the same bond issues.

Ratings are initially made before issuance and are continuously reviewed and amended as necessary to reflect change in the issuer’s credit position. According to the rating agencies, Carroll County demonstrates very strong credit worthiness. Moody’s has assigned Carroll County an **Aa1** rating, Standard & Poor’s an **AAA** Rating, and Fitch an **AAA**. These high ratings allow Carroll County to pay lower

<sup>1</sup> Relative ranking within a range may be designated by 1, 2, or 3.

<sup>2</sup> Relative ranking within a rating may be designated by a + or -.

interest rates on capital projects that are financed with long-term debt issues. The County's goal is to maintain or improve our current bond ratings in order to minimize borrowing costs.

### **Sale of Bonds**

Bonds are sold to investors through the services of an underwriter. Underwriters buy the entire bond issue from the issuer and then resell the individual bonds to investors. Since they assume the responsibility of distributing the bonds, they risk having to sell the bonds at a price below the purchase price and thus realize a loss.

The financial advisor helps the issuer design the bond issue in terms of maturity dates, maturity amounts, and calls provisions; prepares the official statement; selects an appropriate time to mark the issue; and comply with legal requirements.

Carroll County historically has used a competitive bid process to sell its bonds. This means that at a specified date and time, bids are accepted from various underwriters. The underwriter submitting the lowest bid (interest rate) is selected to purchase the bonds. The underwriter then, within a few days of purchasing the bonds, sells the bonds to various investors.

### **Debt Affordability**

Carroll County does not have a legal debt limit. The County uses a debt affordability model to evaluate the county's ability to support debt. The model establishes guidelines for the amount of debt the County can initiate each year, and projects the effects of that financing through six years of the CIP.

Debt affordability measures a number of criteria such as total debt to assessable base, and debt service to General Fund revenue, and compares the projected ratios to guideline ratios. The model takes into account potential changes in revenue and interest. The model distinguishes between direct debt, debt to be paid with general fund revenue, and indirect debt which is debt that is backed by the government, but with an associated revenue stream separate from the general fund.

**Schedule of Debt Service Requirements on Direct County Debt**

The following table sets forth the schedule of debt service requirements for the County's direct general obligation bonded debt, State of Maryland Loans, Promissory Notes, Capital Leases, and Enterprise Fund bonded debt, projected as of the year ended June 30, 2016.

**Schedule of Debt Service Requirements (1)**

Fiscal Years Ending June 30	G.O. Bonds (2)		Watershed Bonds		Notes, Capital Leases, and Other Debt		General Obligation Debt		Total General Fund			Enterprise Funds			Grand Total Debt Service (1)
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	
2016	\$28,375,894	\$11,012,035	\$52,608	\$22,069	\$33,1393	\$149,308	\$0	\$1,753,676	\$28,759,895	\$12,937,088	\$41,696,983	\$2,050,288	\$670,451	\$2,720,738	\$44,417,721
2017	26,857,987	9,899,369	54,489	20,188	296,536	138,025	0	1,753,676	27,209,012	11,811,258	39,020,270	1,965,547	577,530	2,543,077	\$41,566,347
2018	24,994,501	8,807,541	56,437	18,240	316,017	126,594	1,201,212	1,753,676	26,568,167	10,706,051	37,274,218	1,749,676	488,744	2,238,420	\$39,512,638
2019	23,552,298	7,789,357	58,455	16,222	336,498	114,513	0	1,681,603	23,947,250	9,601,695	33,548,946	1,787,827	407,940	2,195,766	\$35,744,712
2020	20,471,158	6,824,990	60,546	14,132	391,245	101,461	0	1,681,603	20,922,948	8,622,186	29,545,134	1,497,242	327,745	1,824,987	\$31,370,121
2021	16,893,169	5,968,134	62,710	11,967	344,966	91,064	246,000	1,681,603	17,546,845	7,752,768	25,299,613	1,436,831	263,544	1,700,375	\$26,999,988
2022	16,013,016	5,211,549	45,198	9,724	391,972	82,329	680,930	1,650,158	17,131,116	6,953,759	24,084,875	1,326,984	178,590	1,505,573	\$25,590,449
2023	15,239,697	4,487,212	33,755	8,094	401,975	73,026	1,006,624	1,629,844	16,682,051	6,198,175	22,880,226	700,303	134,268	834,571	\$23,714,797
2024	13,296,485	3,835,587	30,776	7,021	411,505	63,496	2,179,934	1,519,877	15,918,700	5,425,981	21,344,681	513,515	82,973	596,488	\$21,941,169
2025	13,647,352	3,278,539	23,986	5,739	421,261	53,740	1,346,000	1,451,652	15,438,599	4,789,670	20,228,269	537,648	60,918	598,566	\$20,826,834
2026	13,910,207	2,752,237	24,861	4,864	431,248	43,752	2,584,000	1,404,765	16,950,316	4,205,618	21,155,935	559,793	41,873	601,665	\$21,757,600
2027	14,267,898	2,207,545	25,769	3,956	441,472	33,528	0	1,267,785	14,735,139	3,512,814	18,247,953	582,102	2,190	604,012	\$18,851,965
2028	14,639,351	1,635,118	26,709	3,016	451,938	23,062	107,290	1,267,785	15,225,289	2,928,981	18,154,270	605,649	1,150	606,799	\$18,761,069
2029	10,842,615	1,103,964	27,686	2,042	462,653	12,348	4,662,430	1,186,657	15,995,384	2,305,011	18,300,394	127,385	3,708	131,094	\$18,431,488
2030	7,027,229	730,390	28,264	1,031	235,424	2,077	13,115,500	813,676	20,406,417	1,547,173	21,953,590	2,771	68	2,839	\$21,956,429
2031	5,750,000	493,256	0	0	0	0	0	230,716	5,750,000	723,972	6,473,972	0	0	0	\$6,473,972
2032	4,440,000	313,794	0	0	0	0	445,320	219,026	4,885,320	532,820	5,418,140	0	0	0	\$5,418,140
2033	3,365,000	177,453	0	0	0	0	3,475,344	207,337	6,840,344	384,790	7,225,134	0	0	0	\$7,225,134
2034	2,105,000	82,388	0	0	0	0	0	24,881	2,105,000	107,269	2,212,269	0	0	0	\$2,212,269
2035	1,355,000	23,713	0	0	0	0	473,924	12,441	1,828,924	36,153	1,865,077	0	0	0	\$1,865,077
<u>\$277,043,855</u> <u>\$76,634,169</u> <u>\$612,249</u> <u>\$148,305</u> <u>\$5,666,102</u> <u>\$11,008,322</u> <u>\$3,152,458</u> <u>\$23,192,436</u> <u>\$3,148,467,715</u> <u>\$101,083,232</u> <u>\$415,929,947</u> <u>\$15,443,561</u> <u>\$3,261,411</u> <u>\$18,704,972</u> <u>\$434,634,919</u>															

(1) Totals may not add due to rounding.  
(2) Loans paid from revenues or by repayments by others:

(a) Promissory Notes..... \$0  
(b) Capital Lease Agreements..... \$5,666,102

Source: Carroll County Department of the Comptroller.

**Projected Statement of Direct and Enterprise Fund Bonded  
Debt Issued and Outstanding  
As of June 30, 2016 (1)**

<b>Direct Bonded Debt</b>	<b>Principal Date of Issue</b>	<b>Issued</b>	<b>Outstanding</b>
Volunteer Fire Dept. Project Bonds.....	11/01/03	2,100,000	505,000
Volunteer Fire Dept Project Bonds.....	09/22/04	2,065,000	676,669
Consolidated Public Improvement .....	12/01/05	31,799,320	0
Volunteer Fire Dept Project Bonds.....	12/01/05	2,900,000	950,000
Consolidated Public Improvement.....	10/10/06	20,260,000	1,348,379
Consolidated Public Improvement Refunding Bonds.....	01/09/07	23,165,983	8,801,430
Consolidated Public Improvement & Refunding.....	11/13/07	27,100,000	6,092,841
Consolidated Public Improvement.....	11/13/08	72,088,000	11,933,811
Consolidated Public Improvement & Refunding-Series A.....	11/12/09	30,931,089	10,432,486
Consolidated Public Improvement Series B.....	11/12/09	33,577,761	33,577,761
Consolidated Public Improvement Refunding Series A.....	10/21/10	12,480,329	2,787,736
Consolidated Public Improvement Refunding Fire Company Series B.....	10/21/10	2,210,000	560,000
Consolidated Public Improvement Series D.....	10/21/10	19,649,128	16,805,044
Consolidated Public Improvements and Refunding.....	11/10/11	28,623,957	23,304,736
Consolidated Public Improvement and Refunding.....	11/08/12	37,680,345	34,455,345
Consolidated Public Improvement.....	11/14/13	26,000,000	23,325,000
Taxable Pension Refunding Bonds.....	12/23/13	4,524,000	3,612,000
Consolidated Public Improvement and Refunding.....	11/13/14	67,576,682	63,860,536
Consolidated Public Improvement and Refunding.....	11/19/15	34,015,081	34,015,081
Installment Purchase Agreements:			
Installment Purchase Agreements Issued Fiscal Year 2002.....	7/1/01-6/30/02	396,000	396,000
Installment Purchase Agreements Issued Fiscal Year 2003.....	7/1/02-6/30/03	530,930	530,930
Installment Purchase Agreements Issued Fiscal Year 2004.....	7/1/03-6/30/04	100,000	100,000
Installment Purchase Agreements Issued Fiscal Year 2005.....	7/1/04-6/30/05	2,179,934	2,179,934
Installment Purchase Agreements Issued Fiscal Year 2006.....	7/1/05-6/30/06	1,346,000	1,346,000
Installment Purchase Agreements Issued Fiscal Year 2007.....	7/1/06-6/30/07	2,584,000	2,584,000
Installment Purchase Agreements Issued Fiscal Year 2009.....	7/1/08-6/30/09	2,215,126	2,215,126
Installment Purchase Agreements Issued Fiscal Year 2010.....	7/1/09-6/30/10	4,662,430	4,662,430
Installment Purchase Agreements Issued Fiscal Year 2011.....	7/1/10-6/30/11	13,115,500	13,115,500
Installment Purchase Agreements Issued Fiscal Year 2013.....	7/1/12-6/30/13	445,320	445,320
Installment Purchase Agreements Issued Fiscal Year 2014.....	7/1/13-6/30/14	3,475,344	3,475,344
Installment Purchase Agreements Issued Fiscal Year 2016.....	7/1/15-6/30/16	473,924	473,924
Farmers Home Administration:			
Watershed Bond — 1972.....	06/01/72	769,700	185,189
Watershed Bond — 1974.....	07/01/74	253,000	88,555
Watershed Bond — 1979.....	09/02/80	678,800	338,504
		<u>\$511,972,683</u>	<u>\$309,180,611</u>
<b>Enterprise Fund Bonded Debt</b>			
Consolidated Public Improvement Refunding Bonds.....	03/11/04	2,166,411	0
Consolidated Public Improvements.....	07/27/04	378,474	0
Consolidated Public Improvements.....	12/01/05	302,525	0
Consolidated Public Improvements.....	10/10/06	200,000	14,442
Consolidated Public Improvement Refunding Bonds.....	01/09/07	212,504	80,737
Consolidated Public Improvement & Refunding.....	11/13/07	9,401,000	1,251,737
Consolidated Public Improvements.....	11/13/08	7,616,000	1,199,712
Consolidated Public Improvement & Refunding Series A.....	11/12/09	745,461	333,276
Consolidated Public Improvement Series B.....	11/12/09	1,072,239	1,072,239
Consolidated Public Improvement Refunding Series A.....	10/21/10	6,371	1,423
Consolidated Public Improvement D.....	10/21/10	13,742	11,753
Consolidated Public Improvements and Refunding.....	11/10/11	484,429	325,052
Consolidated Public Improvement and Refunding.....	11/08/12	198,549	198,549
Consolidated Public Improvement and Refunding.....	11/13/14	5,446,058	5,245,814
Consolidated Public Improvement and Refunding.....	11/19/15	2,978,549	2,978,549
Water Quality Loan — MD Dept. of the Environment.....	03/22/00	532,680	158,748

Consolidated Public Improvement Refunding Bonds (Solid Waste)	03/11/04	1,004,270	0
Solid Waste .....	07/27/04	2,449,026	0
Solid Waste.....	01/09/07	345,658	131,326
Solid Waste.....	11/13/07	604,000	80,422
Solid Waste.....	11/13/08	296,000	66,477
Solid Waste Series A.....	11/12/09	203,450	4,238
Solid Waste.....	11/10/11	789,648	632,398
Solid Waste.....	11/13/14	406,860	314,034
Solid Waste.....	11/19/15	191,370	191,370
Septage.....	10/09/06	200,000	12,180
Septage.....	11/08/12	62,391	62,391
Airport.....	11/13/01	2,200,000	660,000
Consolidated Public Improvement Refunding Bonds (Airport)	03/11/04	278,964	0
Airport.....	07/27/04	407,500	0
Airport.....	12/01/05	58,155	0
Airport.....	01/09/07	240,854	91,508
Airport Series A.....	10/21/10	93,300	20,841
Airport Series D.....	10/21/10	27,130	23,203
Airport.....	11/10/11	286,966	202,814
Airport.....	11/08/12	18,715	18,715
Airport.....	11/13/14	85,400	59,615
		<u>\$ 42,004,649</u>	<u>\$ 15,443,562</u>
		<u>\$553,977,332</u>	<u>\$324,624,173</u>

(1) This table reflects indebtedness of the County exclusive of the following obligations:

(a) Promissory Notes.....	\$0
(b) Capital Lease Agreements.....	\$5,666,102
(2) This subtotal reflects the direct bonded indebtedness of the County exclusive of those items in Note (1) of this table and Enterprise Fund Bonded Debt and is exclusive of any related bond premiums/discounts or other unamortized charges.	

Source: Carroll County Department of the Comptroller.

The following tables set forth the County's long-term debt per capita and ratios of debt to assessed value for the six most recent fiscal years ended June 30 and a projection for the fiscal year ended June 30, 2016.

**Projected County Debt  
Exclusive of Enterprise Fund Debt (1)**

	<u>Bonded Debt</u>	<u>Estimated Population</u>	<u>Assessed Value</u>	<u>Bonded Debt Per Capita</u>	<u>Bonded Debt to Assessed Value</u>
2016.....	\$309,180,611	172,098	\$18,688,384,000	\$1,796.54	1.65%
2015.....	308,973,068	171,702	18,495,548,665	1,799.47	1.67
2014.....	322,300,607	170,643	18,549,381,425	1,888.74	1.74
2013.....	319,294,954	169,519	18,808,823,173	1,883.53	1.70
2012.....	323,601,170	168,570	19,829,611,572	1,919.68	1.63
2011.....	331,907,961	167,929	20,907,114,686	1,976.47	1.59

**Projected County Debt  
Inclusive of Enterprise Fund Debt (1)**

	<u>Bonded Debt (2)</u>	<u>Estimated Population</u>	<u>Assessed Value</u>	<u>Bonded Debt Per Capita</u>	<u>Bonded Debt to Assessed Value</u>
2016.....	\$324,624,173	172,098	\$18,688,384,000	\$1,886.27	1.74%
2015.....	326,345,144	171,702	18,495,548,665	1,898.53	1.76
2014.....	342,092,417	170,643	18,549,381,425	2,004.72	1.84
2013.....	341,226,838	169,519	18,808,823,173	2,012.91	1.81
2012.....	347,723,989	168,570	19,829,611,572	2,062.79	1.75
2011.....	359,464,291	167,929	20,907,114,686	2,140.57	1.72

(1) These tables reflect indebtedness of the County exclusive of MD Industrial Land Act and MD Industrial Commercial Redevelopment Fund Loans, Promissory Notes, Capital Lease Agreements, and any related bond premiums/discounts or other unamortized charges..

(2) This chart includes, among other things, the bonded indebtedness originally incurred by the Carroll County Sanitary Commission, which indebtedness is to be paid first from various charges which the County is authorized to levy together with State and federal monies received, but which indebtedness is ultimately secured by the full faith and credit of the County.

**THE COUNTY COMMISSIONERS OF CARROLL COUNTY**  
**Westminster, Maryland**

**Computation of the Projected Legal Debt Margin**  
**As of June 30, 2016**

Net assessed value- Real Property	\$ 18,130,197,000	
Debt Limit - 6% of Net Total Assessed Value (1)		\$ 1,087,811,820
Assessed Value - Personal Property	<u>558,187,000</u>	
Debt Limit - 15% of Net Assessed Value		<u>83,728,050</u>
Total Debt Limit		1,171,539,870
Amount of debt applicable to debt limit:		
Total Bonded Debt	\$ 324,624,173	
Less Agricultural Preservation Program Self Supporting Debt	31,524,508	
Less Fire Company Loans- Self Supporting Debt	7,295,840	
Less Bureau of Utilities bonds and loans payable	12,713,282	
Less Septage bonds payable	74,571	
Total amount of debt applicable to debt limit		<u>273,015,972</u>
Legal debt margin		<u><u>\$ 898,523,898</u></u>

Note: (1) Recommended limit - Carroll County does not have a legal debt limit.  
Source: Carroll County Department of the Comptroller.

Schedule of Legal Debt Margin  
2007-2016

Fiscal Year	Assessed Value	Legal Debt Limitation	Legal Borrowing Limitation	Debt Subject to Limitation	Legal Debt Margin	Ratio of Debt Subject to Limitation To Legal Borrowing Limitation
2007	15,441,306,101	6%/15%	974,208,067	211,725,319	762,482,748	21.73%
2008	17,902,568,902	6%/15%	1,124,225,213	214,237,099	909,988,114	19.06%
2009	20,409,412,280	6%/15%	1,274,735,894	268,496,244	1,006,239,650	21.06%
2010	22,066,168,625	6%/15%	1,373,814,980	303,156,906	1,070,658,074	22.07%
2011	20,895,165,478	6%/15%	1,302,726,361	301,960,750	1,000,765,611	23.18%
2012	19,813,576,019	6%/15%	1,248,709,194	292,937,714	955,771,480	23.46%
2013	18,789,765,921	6%/15%	1,175,305,137	287,113,093	888,192,044	24.43%
2014	18,514,343,538	6%/15%	1,158,193,261	286,486,025	871,707,236	24.74%
2015	18,495,548,665	6%/15%	1,159,503,407	273,161,300	886,342,107	23.56%
2016	18,688,348,000	6%/15%	1,171,539,870	273,015,972	898,523,898	23.30%