

Debt Management

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 for one-time, relatively high costs, or for 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 funding, 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, paying over time as the asset is used. Paygo funding creates no long-term obligation, but may require years of saving, which delays addressing a need. 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, community 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, 2018, 71.4% of long-term debt owed by the County will be retired within ten years and 41.2% will be retired in five years. New Public Improvement Bonds issued in November 2018 have an aggregate principal amount of \$25.0 million of new 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 ¹	Standard & Poor's ²	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

¹Relative ranking within a range may be designated by a 1, 2, or 3.

²Relative ranking within a range may be designated by a + or -.

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 a rating of **Aaa**, Standard & Poor's **AAA**, and Fitch **AAA**. These high ratings allow Carroll County to benefit from lower interest rates for capital projects financed with long-term debt issues. The County's goal is to maintain 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 may realize a loss.

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

Carroll County historically uses 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. Within a few days of the bond purchase, the underwriter 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 (i.e., debt to be paid with General Fund revenue) and indirect debt (i.e., 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, 2019.

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	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Total Debt Service	Total Debt Service	Debt Service
2020	\$ 24,797,464	\$ 8,920,505	\$ 676,290	\$ 415,551	\$ 336,498	\$ 114,513	\$ -	\$ 1,791,103	\$ 25,810,252	\$ 11,241,672	\$ 1,784,826	\$ 373,468	\$ 2,158,294	\$ 39,210,218	\$ 39,210,218
2021	21,724,531	7,880,591	679,840	384,251	391,245	101,461	-	1,791,103	22,795,616	10,157,406	1,494,575	301,281	1,795,856	34,748,878	34,748,878
2022	18,223,161	6,952,107	682,718	352,494	344,966	91,064	246,000	1,791,103	19,496,845	9,186,768	1,436,831	233,506	1,670,337	30,353,950	30,353,950
2023	17,321,452	6,127,710	686,763	320,563	391,971	82,329	680,930	1,759,658	19,081,116	8,290,260	1,326,984	171,477	1,498,461	28,869,837	28,869,837
2024	16,535,130	5,341,555	688,322	286,750	401,975	73,026	1,006,624	1,739,344	18,632,051	7,440,675	700,303	127,156	827,459	26,900,185	26,900,185
2025	14,621,972	4,630,640	655,289	254,468	411,505	63,496	2,179,934	1,629,377	17,868,700	6,577,981	513,515	99,716	613,231	25,059,912	25,059,912
2026	14,963,533	4,009,792	657,805	226,486	421,261	53,740	1,346,000	1,561,152	17,388,599	5,851,170	537,648	77,660	615,308	23,855,077	23,855,077
2027	15,224,446	3,417,671	660,623	200,930	431,248	43,752	2,584,000	1,514,265	18,900,317	5,176,618	559,793	58,615	618,408	24,695,343	24,695,343
2028	15,580,010	2,809,190	663,656	176,812	441,472	33,528	-	1,377,285	16,685,138	4,396,815	582,103	38,653	620,756	21,702,709	21,702,709
2029	15,949,660	2,176,552	666,400	152,582	451,938	23,062	107,290	1,377,285	17,175,288	3,729,481	605,649	17,893	623,542	21,528,311	21,528,311
2030	12,150,581	1,585,376	669,717	128,130	462,653	12,347	4,662,430	1,296,157	17,945,381	3,022,010	127,385	3,708	131,093	21,098,484	21,098,484
2031	8,389,332	1,150,559	616,160	104,862	235,424	2,077	13,115,500	923,176	22,356,416	2,180,674	2,771	68	2,839	24,539,929	24,539,929
2032	7,091,383	860,992	608,617	83,702	-	-	-	340,216	7,700,000	1,284,910	-	-	-	8,984,910	8,984,910
2033	5,811,427	638,992	578,573	63,833	-	-	445,320	328,526	6,835,320	1,031,351	-	-	-	7,866,671	7,866,671
2034	4,786,902	457,356	528,098	45,160	-	-	3,475,344	316,837	8,790,344	819,353	-	-	-	9,609,697	9,609,697
2035	3,625,395	313,577	429,605	29,123	-	-	-	134,381	4,055,000	477,081	-	-	-	4,532,081	4,532,081
2036	2,982,360	201,924	322,640	16,570	-	-	473,924	121,940	3,778,924	340,434	-	-	-	4,119,358	4,119,358
2037	1,794,080	119,246	155,920	8,442	-	-	1,303,000	76,925	3,253,000	204,613	-	-	-	3,457,613	3,457,613
2038	1,172,500	65,953	77,500	4,359	-	-	-	44,350	1,250,000	114,662	-	-	-	1,364,662	1,364,662
2039	1,172,500	21,984	77,500	1,453	-	-	887,000	22,175	2,137,000	45,612	-	-	-	2,182,612	2,182,612
Total	\$ 223,917,819	\$ 57,682,272	\$ 10,782,036	\$ 3,256,521	\$ 4,722,156	\$ 694,395	\$ 32,513,296	\$ 19,936,358	\$ 271,935,307	\$ 81,569,546	\$ 9,672,383	\$ 1,503,201	\$ 11,175,584	\$ 364,680,437	\$ 364,680,437

(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 \$4,722,156

Source: Carroll County Department of the Comptroller

**Projected Statement of Direct and Enterprise Fund Bonded
Debt Issued and Outstanding
As of June 30, 2019 ⁽¹⁾⁽²⁾⁽³⁾**

	Principal Date of Issue	Issued	Outstanding⁽⁴⁾
Direct Bonded Debt			
Volunteer Fire Dept. Project Bonds.....	11/1/2003	2,100,000	0
Volunteer Fire Dept. Project Bonds.....	9/22/2004	2,065,000	179,571
Volunteer Fire Dept. Project Bonds.....	12/1/2005	2,900,000	380,000
Consolidated Public Improvement Bonds.....	11/13/2007	20,430,000	0
Consolidated Public Improvement Refunding Bonds.....	11/13/2007	6,670,000	1,375,000
Consolidated Public Improvement Refunding Bonds.....	11/13/2008	72,088,000	0
Consolidated Public Improvement Series A.....	11/12/2009	30,931,089	2,775,216
Consolidated Public Improvement Series B Bonds.....	11/12/2009	33,577,761	33,577,761
Consolidated Public Improvement Series A Refunding Bonds.....	10/21/2010	12,480,329	0
Consolidated Public Improvement Series B Refunding Bonds.....	10/21/2010	2,210,000	0
Consolidated Public Improvement Series D Bonds.....	10/21/2010	19,649,128	13,786,323
Consolidated Public Improvement Bonds.....	11/10/2011	18,750,000	13,545,000
Consolidated Public Improvement Refunding Bonds.....	11/10/2011	9,873,957	1,421,001
Consolidated Public Improvement Refunding Bonds.....	11/8/2012	16,220,345	8,044,159
Consolidated Public Improvement Bonds.....	11/8/2012	21,460,000	15,010,000
Consolidated Public Improvement Bonds.....	11/14/2013	26,000,000	19,305,000
Refunding of Taxable Pension Bonds.....	12/23/2013	4,524,000	863,000
Consolidated Public Improvement Bonds.....	11/13/2014	15,000,000	12,000,000
Consolidated Public Improvement Refunding Bonds.....	11/13/2014	52,576,682	43,809,171
Consolidated Public Improvement Bonds.....	11/19/2015	28,000,000	23,665,000
Consolidated Public Improvement Refunding Bonds.....	11/19/2015	6,015,081	5,058,955
Consolidated Public Improvement Bonds.....	11/10/2016	14,000,000	12,600,000
Consolidated Public Improvement Refunding Bonds.....	11/10/2016	6,138,285	1,855,985
Consolidated Public Improvement Bonds.....	11/1/2018	25,000,000	25,000,000
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	1,013,914
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
Installment Purchase Agreements Issued Fiscal Year 2017.....	7/1/16-6/30/17	1,303,000	1,303,000
Installment Purchase Agreements Issued Fiscal Year 2018.....	7/1/17-6/30/18	887,000	887,000

Farmers Home Administration:

Watershed Bond — 1972	6/1/1972	769,700	103,361
Watershed Bond — 1974	7/1/1974	253,000	60,892
Watershed Bond — 1979	9/2/1980	678,800	284,460
		<u>\$484,075,665</u>	<u>\$267,213,151</u>

Enterprise Fund Bonded Debt

Consolidated Public Improvement Refunding Bonds.....	11/13/2007	9,401,000	0
Consolidated Public Improvement Refunding Bonds.....	11/13/2008	7,616,000	0
Consolidated Public Improvement & Refunding Series A.....	11/12/2009	745,461	88,657
Consolidated Public Improvement Series B.....	11/12/2009	1,072,239	1,072,239
Consolidated Public Improvement Refunding Series A.....	10/21/2010	6,371	0
Consolidated Public Improvement D.....	10/21/2010	13,742	9,642
Consolidated Public Improvement Refunding Bonds.....	11/10/2011	484,429	24,452
Consolidated Public Improvement Refunding Bonds.....	11/8/2012	198,549	103,802
Consolidated Public Improvement Refunding Bonds.....	11/13/2014	5,446,058	4,854,165
Consolidated Public Improvement Refunding Bonds.....	11/19/2015	2,978,549	2,505,094
Consolidated Public Improvement Refunding Bonds.....	11/10/2016	56,307	17,025
Water Quality Loan — MD Dept. of the Environment	3/22/2000	532,680	65,954
Solid Waste.....	11/13/2007	604,000	0
Solid Waste.....	11/13/2008	296,000	0
Solid Waste.....	11/12/2009	203,450	1,127
Solid Waste.....	11/10/2011	789,648	158,221
Solid Waste.....	11/13/2014	406,860	132,480
Solid Waste.....	11/19/2015	191,370	160,951
Solid Waste.....	11/10/2016	91,589	27,693
Septage.....	11/8/2012	62,391	39,351
Airport.....	11/13/2001	2,200,000	330,000
Airport.....	10/21/2010	93,300	0
Airport.....	10/21/2010	27,130	19,035
Airport.....	11/10/2011	286,966	26,327
Airport.....	11/8/2012	18,715	7,687
Airport.....	11/13/2014	85,400	9,184
Airport.....	11/10/2016	63,819	19,297
		<u>\$33,972,023</u>	<u>\$9,672,383</u>
		<u>\$518,047,688</u>	<u>\$276,885,534</u>

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

(a) Promissory Notes	\$0
(b) Capital Lease Agreements.....	\$4,722,156

Note: 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.

(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.

(3) Does not include Bonds offered herein and the refunding of the Refunded Bonds.

(4) Outstanding 2019 projected from beginning balance of principle payments in NTE6-20 workbook.

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, 2019.

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

	Bonded Debt	Estimated Population	Assessed Value	Bonded Debt Per Capita	Bonded Debt to Assessed Value
2019 ⁽²⁾	\$267,213,151	174,654	\$20,011,232,000	\$1,529.96	1.34%
2018.....	268,176,801	173,852	19,595,053,827	1,542.56	1.37
2017.....	259,668,445	173,015	19,057,823,000	1,708.92	1.55
2016.....	309,180,611	172,703	18,733,020,866	1,790.24	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

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

	Bonded Debt (1)	Estimated Population	Assessed Value	Bonded Debt Per Capita	Bonded Debt to Assessed Value
2019 ⁽²⁾	\$276,885,534	174,654	\$20,011,232,000	\$1,585.34	1.38%
2018.....	279,595,362	173,852	19,595,053,827	1,608.24	1.43
2017.....	309,048,384	173,015	19,057,823,000	1,786.25	1.62
2016.....	324,624,173	172,703	18,733,020,866	1,879.67	1.73
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

- (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. They include, 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.
- (2) Unaudited.

Source: Carroll County Department of the Comptroller.

THE COUNTY COMMISSIONERS OF CARROLL COUNTY
Westminster, Maryland

Computation of the Projected Legal Debt Margin
As of June 30, 2019

Net Assessed Value - Real Property	\$ 19,416,573,000	
Debt Limit - 6% of Net Total Assessed Value ⁽¹⁾		\$ 1,164,994,380
Assessed Value - Personal Property	<u>594,659,000</u>	
Debt Limit - 15% of Net Assessed Value ⁽¹⁾		<u>89,198,850</u>
Debt Limit - (6%/15%) of Net Assessed Value		1,254,193,231
Amount of Debt applicable to Debt Limit:		
Total Bonded Debt	\$ 276,819,580	
Less - Agricultural Preservation Program Self Supporting Debt	32,513,296	
Less - Fire Company Loans - Self Supporting Debt	559,571	
Less - Bureau of Utilities bonds	8,675,076	
Less - Septage bonds	19,035	
Total amount of Debt applicable to Debt Limit		<u>235,052,602</u>
Legal debt margin		<u><u>\$ 1,019,140,629</u></u>

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

Schedule of Legal Debt Margin
2010-2019

Fiscal Year	Assessed Value	Legal Debt Limitation	Legal Borrowing Limitation	Debt Subject to Limitation	Legal Debt Margin	Ratio of Debt Subject to Legal Borrowing Limitation
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	18,733,020,866	6%/15%	1,174,512,828	272,857,221	901,655,607	23.23%
2017	19,098,609,701	6%/15%	1,199,599,196	258,522,314	941,076,882	21.55%
2018	19,595,053,527	6%/15%	1,232,388,106	231,870,818	1,000,517,288	18.81%
2019	20,011,232,000	6%/15%	1,254,193,231	235,052,602	1,019,140,629	18.74%