

November 17, 2022

SALE DAY REPORT FOR:

Village of Germantown, Wisconsin

\$42,380,000 General Obligation Corporate Purpose Bonds,
Series 2022E



Prepared by:

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Suite 100
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BUILDING COMMUNITIES. IT'S WHAT WE DO.

Competitive Sale Results

PURPOSE: For public purposes of paying the costs of constructing and equipping a new department of public works building and Tax Incremental District No. 9 project costs as well as current refunding certain outstanding general obligations of the Village.

RATING: Moody's Investor's Service "Aa2"

NUMBER OF BIDS: 10

LOW BIDDER: Janney Montgomery Scott LLC, Philadelphia , Pennsylvania

COMPARISON FROM LOWEST TO HIGHEST BID: (TIC as bid)

LOW BID:* 3.8417%

HIGH BID: 4.0114%

Summary of Sale Results:	
Principal Amount*:	\$42,380,000
Underwriter's Discount:	\$277,700
Reoffering Premium:	\$1,948,802
True Interest Cost:	3.8427%
Costs of Issuance:	\$136,749
Yield:	2.75%-4.10%
Future Value Savings on Refunding Portion:	\$(211,819.62)
Present Value Savings on Refunding Portion:	\$1,053,310
Savings Percentage on Refunding Portion:	23.278%
Total Net P&I	\$63,843,721

NOTES: Bond Trust Services Corporation, Roseville, Minnesota will serve as Paying Agent on the Bonds.

The Bonds maturing March 1, 2031 and thereafter are callable March 1, 2030 or any date thereafter.

* Subsequent to bid opening, the issue size was decreased to \$42,380,000.00.

CLOSING DATE: December 1, 2022

DESIGNATED OFFICIAL ACTION: Award the sale of \$42,380,000 General Obligation Corporate Purpose Bonds, Series 2022E.

SUPPLEMENTARY ATTACHMENTS

- Bid Tabulation
- Equalized Value Projection Model
- Existing G.O. Debt Base Case
- Capital Improvements Financing Plan
- Allocation of Debt Service - 2022 G.O. Bonds
- Financing Plan Tax Impact: Option 5 - Level Payments & Reserves Used for 2023 Capital Projects
- Rating Report
- BBI Graph

BID TABULATION

\$44,425,000* General Obligation Corporate Purpose Bonds, Series 2022E

Village of Germantown, Wisconsin

SALE: November 17, 2022

AWARD: JANNEY MONTGOMERY SCOTT LLC

Rating: Moody's Investor's Service "Aa2"

Tax Exempt - Non-Bank Qualified

NAME OF BIDDER	MATURITY (March 1)	RATE	REOFFERING YIELD	PRICE	NET INTEREST COST	TRUE INTEREST RATE
JANNEY MONTGOMERY SCOTT LLC				\$46,175,223.99	\$21,049,963.51	3.8417%
Philadelphia , Pennsylvania	2023	5.000%	2.750%			
	2024	5.000%	2.830%			
	2025	5.000%	2.850%			
	2026	5.000%	2.890%			
	2027	5.000%	2.900%			
	2028	5.000%	2.910%			
	2029	5.000%	2.940%			
	2030	5.000%	2.970%			
	2031	5.000%	2.990%			
	2032	5.000%	3.040%			
	2033	5.000%	3.050%			
	2034	5.000%	3.170%			
	2035	4.000%	3.600%			
	2036	4.000%	3.700%			
	2037	4.000%	3.750%			
	2038	4.000%	3.800%			
	2039	4.000%	3.900%			
	2040	4.000%	4.000%			
	2041	4.000%	4.050%			
	2042	4.000%	4.100%			

* Subsequent to bid opening the issue size was decreased to \$42,380,000.

Adjusted Price - \$44,051,102.29 Adjusted Net Interest Cost - \$20,180,785.21 Adjusted TIC - 3.8427%

PIPER SANDLER & CO. Minneapolis, Minnesota	\$45,923,080.76	\$21,020,856.74	3.8477%
J.P. MORGAN SECURITIES LLC New York, New York	\$46,653,498.26	\$21,254,064.24	3.8552%
UBS FINANCIAL SERVICES INC. New York, New York	\$46,114,644.01	\$21,110,543.49	3.8561%
BAIRD Red Bank, New Jersey	\$46,104,877.00	\$21,120,310.50	3.8584%
MESIROW FINANCIAL, INC. Chicago, Illinois	\$46,079,621.01	\$21,145,566.49	3.8645%
FIFTH THIRD SECURITIES, INC. Cincinnati, Ohio	\$46,065,968.51	\$21,159,218.99	3.8677%
KEYBANC CAPITAL MARKETS INCORPORATED Cleveland, Ohio	\$46,552,605.23	\$21,354,957.27	3.8791%
BOFA MERRILL LYNCH New York, New York	\$45,648,759.00	\$21,154,553.50	3.8864%
JEFFERIES New York, New York	\$46,000,930.67	\$21,906,631.83	4.0114%

Equalized Value Projection Model

Village of Germantown, WI

I. Five-Year Historical TID IN Growth by Category (Data Per Wis. Dept. of Revenue)									
Vaulation Year	Budget Year	Historical TID IN Equalized Value		Economic Change		New Construction		Other & Personal Property	
2017	2018	2,405,913,400							
2018	2019	2,501,879,800	3.99%	86,657,600	3.60%	40,492,300	1.68%	-31,183,500	-1.30%
2019	2020	2,577,479,900	3.02%	51,026,800	2.04%	18,151,900	0.73%	6,421,400	0.26%
2020	2021	2,698,776,600	4.71%	83,550,400	3.24%	38,329,600	1.49%	-583,300	-0.02%
2021	2022	2,807,971,400	4.05%	76,773,100	2.84%	67,108,500	2.49%	-34,686,800	-1.29%
AVERAGE CHANGE				74,501,975	2.93%	41,020,575	1.60%	-15,008,050	-0.59%

II. Five-Year Historical TID OUT Growth by Category (Data Per Wis. Dept. of Revenue - Breakdown Assumes Same Ratios as TID IN)									
Vaulation Year	Budget Year	Historical TID OUT Equalized Value		Economic Change		New Construction		Other & Personal Property	
2017	2018	2,323,047,400							
2018	2019	2,402,708,100	3.43%	71,933,563	3.10%	33,612,233	1.45%	-25,885,096	-1.11%
2019	2020	2,479,116,200	3.18%	51,572,165	2.15%	18,345,904	0.76%	6,490,031	0.27%
2020	2021	2,586,720,000	4.34%	74,118,591	2.99%	34,002,661	1.37%	-517,453	-0.02%
2021	2022	2,772,351,300	7.18%	130,514,368	5.05%	114,084,536	4.41%	-58,967,604	-2.28%
AVERAGE CHANGE				82,034,672	3.32%	50,011,334	2.00%	-19,720,030	-0.79%

III. Projection of TID OUT Equalized Value - Selection of Method & Discount				
PROJECTION METHOD		Percent		Manual Adjustments
DISCOUNT FACTOR		50.00%		33.30%

IV. Projection of TID OUT Equalized Value									
Vaulation Year	Budget Year	Projected TID OUT Equalized Value		Economic Change		New Construction		TID Closure or Other Adjustment	
2022	2023	2,855,314,207	2.99%	46,014,823	1.66%	36,948,084	1.33%		0.00%
2023	2024	2,940,759,788	2.99%	47,391,821	1.66%	38,053,760	1.33%		0.00%
2024	2025	3,028,762,336	2.99%	48,810,026	1.66%	39,192,522	1.33%		0.00%
2025	2026	3,119,398,371	2.99%	50,270,672	1.66%	40,365,363	1.33%		0.00%
2026	2027	3,212,746,698	2.99%	51,775,027	1.66%	41,573,300	1.33%		0.00%
2027	2028	3,308,888,484	2.99%	53,324,400	1.66%	42,817,386	1.33%		0.00%
2028	2029	3,407,907,323	2.99%	54,920,138	1.66%	44,098,701	1.33%		0.00%
2029	2030	3,509,889,311	2.99%	56,563,629	1.66%	45,418,359	1.33%		0.00%
2030	2031	3,738,902,722	6.52%	58,256,302	1.66%	46,777,508	1.33%	123,979,600	3.53%
2031	2032	3,850,789,782	2.99%	62,057,412	1.66%	49,829,649	1.33%		0.00%
2032	2033	3,966,025,075	2.99%	63,914,486	1.66%	51,320,807	1.33%		0.00%
2033	2034	4,084,708,797	2.99%	65,827,134	1.66%	52,856,587	1.33%		0.00%
2034	2035	4,206,944,141	2.99%	67,797,018	1.66%	54,438,326	1.33%		0.00%
2035	2036	4,332,837,391	2.99%	69,825,851	1.66%	56,067,399	1.33%		0.00%
2036	2037	4,462,498,010	2.99%	71,915,397	1.66%	57,745,222	1.33%		0.00%
2037	2038	4,596,038,736	2.99%	74,067,473	1.66%	59,473,254	1.33%		0.00%
2038	2039	4,733,575,683	2.99%	76,283,950	1.66%	61,252,997	1.33%		0.00%
2039	2040	4,875,228,438	2.99%	78,566,755	1.66%	63,086,000	1.33%		0.00%
2040	2041	5,021,120,166	2.99%	80,917,874	1.66%	64,973,855	1.33%		0.00%
2041	2042	5,171,377,720	2.99%	83,339,350	1.66%	66,918,204	1.33%		0.00%
2042	2043	5,326,131,747	2.99%	85,833,288	1.66%	68,920,739	1.33%		0.00%
2043	2044	5,485,516,805	2.99%	88,401,859	1.66%	70,983,199	1.33%		0.00%
2044	2045	5,649,671,478	2.99%	91,047,294	1.66%	73,107,379	1.33%		0.00%
2045	2046	5,818,738,496	2.99%	93,771,894	1.66%	75,295,125	1.33%		0.00%
2046	2047	5,992,864,863	2.99%	96,578,028	1.66%	77,548,340	1.33%		0.00%
2047	2048	6,172,201,981	2.99%	99,468,135	1.66%	79,868,982	1.33%		0.00%
2048	2049	6,356,905,780	2.99%	102,444,730	1.66%	82,259,070	1.33%		0.00%
2049	2050	6,547,136,860	2.99%	105,510,399	1.66%	84,720,681	1.33%		0.00%
2050	2051	6,743,060,626	2.99%	108,667,809	1.66%	87,255,956	1.33%		0.00%
2051	2052	6,944,847,430	2.99%	111,919,705	1.66%	89,867,100	1.33%		0.00%

Existing G.O. Debt Base Case

Village of Germantown, WI

Year Ended	Existing Debt											Annual Taxes \$350,000 Home	Year Ended	
	Total G.O. Debt Payments	Issuance Fiscal Agent Fees	Budget Offset	Less: Premium/l	Less: Transfer	Less: Sewer	Less: TID #6	Less: TID #7	Less: TID #8	Net Tax Levy	Equalized Value (TID OUT) - 3% Annual Growth			Tax Rate Per \$1,000
2022	4,878,854	3,800	15,821	(20,823)	(40,000)	(192,481)	(451,513)	(190,350)	(867,238)	3,136,071	2,772,351,300	\$1.13	\$395.92	2022
2023	5,415,641	3,800		(85,794)	(40,000)	(187,881)	(441,713)	(327,010)	(955,763)	3,381,281	2,855,314,207	\$1.18	\$414.47	2023
2024	5,064,055				(20,000)	(188,181)	(479,513)	(292,208)	(981,788)	3,102,366	2,940,759,788	\$1.05	\$369.23	2024
2025	4,860,914				(20,000)	(188,281)	(515,313)	(371,958)	(1,035,413)	2,729,950	3,028,762,336	\$0.90	\$315.47	2025
2026	4,985,810				(20,000)	(188,181)	(500,113)	(684,758)	(1,164,369)	2,428,390	3,119,398,371	\$0.78	\$272.47	2026
2027	4,752,734				(20,000)	(187,881)	(511,438)	(682,020)	(1,213,550)	2,137,845	3,212,746,698	\$0.67	\$232.90	2027
2028	4,498,648				(20,000)	(188,081)	(509,138)	(683,701)	(1,251,728)	1,846,000	3,308,888,484	\$0.56	\$195.26	2028
2029	4,424,710					(188,806)	(506,538)	(788,101)	(1,363,815)	1,577,450	3,407,907,323	\$0.46	\$162.01	2029
2030	4,123,264					(189,944)	(503,094)	(869,408)	(1,354,681)	1,206,138	3,509,889,311	\$0.34	\$120.27	2030
2031	3,673,391					(191,513)	(493,875)	(859,060)	(1,373,094)	755,850	3,738,902,722	\$0.20	\$70.76	2031
2032	3,284,381					(187,928)	(479,025)	(842,869)	(1,343,184)	431,375	3,850,789,782	\$0.11	\$39.21	2032
2033	2,270,566					(189,188)	(463,625)	(304,800)	(1,312,953)	0	3,966,025,075	\$0.00	\$0.00	2033
2034	1,935,213					(190,225)	(462,963)	0	(1,282,025)	0	4,084,708,797	\$0.00	\$0.00	2034
2035	1,460,719					(191,038)	0	0	(1,269,681)	0	4,206,944,141	\$0.00	\$0.00	2035
2036	1,428,344					(191,725)			(1,236,619)	0	4,332,837,391	\$0.00	\$0.00	2036
2037	1,419,600					(192,175)			(1,227,425)	0	4,462,498,010	\$0.00	\$0.00	2037
2038	1,379,550					(187,450)			(1,192,100)	0	4,596,038,736	\$0.00	\$0.00	2038
2039	719,763					(187,544)			(532,219)	0	4,733,575,683	\$0.00	\$0.00	2039
2040	0					0			0	0	4,875,228,438	\$0.00	\$0.00	2040
Total	60,576,155	7,600	15,821	(106,617)	(180,000)	(3,408,503)	(6,317,856)	(6,896,241)	(20,957,643)	22,732,716				Total

Notes:

Legend:

Represents +/- 25% Change over previous year



Capital Improvements Financing Plan

Village of Germantown, WI

	2022						
	G.O. Bonds	Levy Portion	TID #9 Portion	Water Portion	Sewer Portion	Takeout NAN - Levy Portion	Takeout NAN - TID #9 Portion
CIP Projects¹							
Village Portion	28,101,597	28,101,597					
NAN Takeout	4,611,603					2,547,847	2,063,756
TID #9 Portion	1,729,749		1,729,749				
Water	4,496,256			4,496,256			
Sewer	4,870,944				4,870,944		
HVAC Library - Levy	-						
Subtotal Project Costs	43,810,149	28,101,597	1,729,749	4,496,256	4,870,944	2,547,847	2,063,756
Total DPW							
CIP Projects¹	43,810,149	28,101,597	1,729,749	4,496,256	4,870,944	2,547,847	2,063,756
Premium							
Underwriter's Premium	(1,948,802)	(1,238,150)	(89,759)	(216,014)	(233,289)	(71,365)	(100,227)
Premium Dep. To Debt Service	388,167			186,658	201,509		
Transfer of Premium	0	1,054,742	78,488			(1,054,742)	(78,488)
Net Premium	(1,560,636)	(183,408)	(11,271)	(29,356)	(31,780)	(1,126,106)	(178,715)
Estimated Issuance Expenses	414,449	275,321	14,062	45,698	46,151	13,259	19,959
Municipal Advisor (Ehlers)	70,000	47,828	83	9,286	6,732	1,596	4,476
Bond Counsel	36,500	24,107	1,481	3,858	4,177	1,236	1,641
Rating Fee	29,700	19,615	1,205	3,140	3,399	1,006	1,335
Maximum Underwriter's Discount	277,700	183,408	11,271	29,356	31,780	9,403	12,483
Paying Agent	549	363	22	58	63	19	25
Subtotal Issuance Expenses	414,449	275,321	14,062	45,698	46,151	13,259	19,959
TOTAL TO BE FINANCED	42,663,963	28,193,510	1,732,541	4,512,598	4,885,314	1,435,000	1,905,000
Estimated Interest Earnings	2.90% (284,189)	(203,736.58)	(12,540.68)	(32,597.86)	(35,314.34)	0	0
Assumed spend down (months)	3						
Rounding (Deposited into Project Construction Fund)	227	227	(0)	(0)	0	0	0
NET BOND SIZE	42,380,000	27,990,000	1,720,000	4,480,000	4,850,000	1,435,000	1,905,000

Allocation of Debt Service - 2022 G.O. Bonds

Village of Germantown, WI

Year Ending	Levy Portion				TID #9 Portion				Water Portion				
	Principal	Est. Rate ¹	Interest	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Pre. Dep. To D.S.	Total
2022				0		0.00%		0		0.00%			0
2023	390,000	5.00%	911,438	1,301,438	0	5.00%	57,150	57,150	315,000	5.00%	143,850	(143,850)	315,000
2024	595,000	5.00%	1,193,875	1,788,875	0	5.00%	76,200	76,200	175,000	5.00%	182,175	(42,808)	314,367
2025	985,000	5.00%	1,154,375	2,139,375	0	5.00%	76,200	76,200	145,000	5.00%	174,175		319,175
2026	290,000	5.00%	1,122,500	1,412,500	65,000	5.00%	74,575	139,575	150,000	5.00%	166,800		316,800
2027	340,000	5.00%	1,106,750	1,446,750	70,000	5.00%	71,200	141,200	160,000	5.00%	159,050		319,050
2028	395,000	5.00%	1,088,375	1,483,375	75,000	5.00%	67,575	142,575	165,000	5.00%	150,925		315,925
2029	435,000	5.00%	1,067,625	1,502,625	80,000	5.00%	63,700	143,700	175,000	5.00%	142,425		317,425
2030	1,055,000	5.00%	1,030,375	2,085,375	80,000	5.00%	59,700	139,700	185,000	5.00%	133,425		318,425
2031	1,580,000	5.00%	964,500	2,544,500	85,000	5.00%	55,575	140,575	195,000	5.00%	123,925		318,925
2032	1,545,000	5.00%	886,375	2,431,375	90,000	5.00%	51,200	141,200	205,000	5.00%	113,925		318,925
2033	1,585,000	5.00%	808,125	2,393,125	95,000	5.00%	46,575	141,575	215,000	5.00%	103,425		318,425
2034	1,670,000	5.00%	726,750	2,396,750	100,000	5.00%	41,700	141,700	225,000	5.00%	92,425		317,425
2035	1,785,000	4.00%	649,300	2,434,300	105,000	4.00%	37,100	142,100	235,000	4.00%	82,100		317,100
2036	1,785,000	4.00%	577,900	2,362,900	110,000	4.00%	32,800	142,800	245,000	4.00%	72,500		317,500
2037	2,045,000	4.00%	501,300	2,546,300	115,000	4.00%	28,300	143,300	255,000	4.00%	62,500		317,500
2038	2,090,000	4.00%	418,600	2,508,600	120,000	4.00%	23,600	143,600	265,000	4.00%	52,100		317,100
2039	2,145,000	4.00%	333,900	2,478,900	125,000	4.00%	18,700	143,700	275,000	4.00%	41,300		316,300
2040	2,285,000	4.00%	245,300	2,530,300	130,000	4.00%	13,600	143,600	285,000	4.00%	30,100		315,100
2041	2,425,000	4.00%	151,100	2,576,100	135,000	4.00%	8,300	143,300	300,000	4.00%	18,400		318,400
2042	2,565,000	4.00%	51,300	2,616,300	140,000	4.00%	2,800	142,800	310,000	4.00%	6,200		316,200
2043				0									
2044				0									
2045				0									
2046				0									
Total	27,990,000		14,989,763	42,979,763	1,720,000		906,550	2,626,550	4,480,000		2,051,725	(186,658)	6,345,067

Notes:

1) Estimated Rate assumes Current GO Non-BQ "Aa2" Market Rates + .75 Bps

Allocation of Debt Service - 2022 G.O. Bonds

Continued

Village of Germantown, WI

Sewer Portion					Takeout NAN - Levy Portion				Takeout NAN - TID #9 Portion				Year Ending	Totals		
Principal	Est. Rate	Interest	Pre. Dep. To D.S.	Total	Principal	Est. Rate	Interest	Total	Principal	Est. Rate	Interest	Total		Principal (3/1)	Interest	Total
	0.00%			0		0.00%		0		0.00%		0	2022	0	0	0
345,000	5.00%	155,625	(155,625)	345,000	60,000	5.00%	46,875	106,875		5.00%	63,375	63,375	2023	1,110,000	1,378,313	2,188,838
190,000	5.00%	197,000	(45,884)	341,116	45,000	5.00%	60,375	105,375		5.00%	84,500	84,500	2024	1,005,000	1,794,125	2,710,433
155,000	5.00%	188,375		343,375	45,000	5.00%	58,125	103,125		5.00%	84,500	84,500	2025	1,330,000	1,735,750	3,065,750
165,000	5.00%	180,375		345,375	50,000	5.00%	55,750	105,750	75,000	5.00%	82,625	157,625	2026	795,000	1,682,625	2,477,625
170,000	5.00%	172,000		342,000	55,000	5.00%	53,125	108,125	80,000	5.00%	78,750	158,750	2027	875,000	1,640,875	2,515,875
180,000	5.00%	163,250		343,250	55,000	5.00%	50,375	105,375	85,000	5.00%	74,625	159,625	2028	955,000	1,595,125	2,550,125
190,000	5.00%	154,000		344,000	60,000	5.00%	47,500	107,500	90,000	5.00%	70,250	160,250	2029	1,030,000	1,545,500	2,575,500
200,000	5.00%	144,250		344,250	60,000	5.00%	44,500	104,500	90,000	5.00%	65,750	155,750	2030	1,670,000	1,478,000	3,148,000
210,000	5.00%	134,000		344,000	65,000	5.00%	41,375	106,375	95,000	5.00%	61,125	156,125	2031	2,230,000	1,380,500	3,610,500
220,000	5.00%	123,250		343,250	70,000	5.00%	38,000	108,000	100,000	5.00%	56,250	156,250	2032	2,230,000	1,269,000	3,499,000
230,000	5.00%	112,000		342,000	70,000	5.00%	34,500	104,500	105,000	5.00%	51,125	156,125	2033	2,300,000	1,155,750	3,455,750
245,000	5.00%	100,125		345,125	75,000	5.00%	30,875	105,875	110,000	5.00%	45,750	155,750	2034	2,425,000	1,037,625	3,462,625
255,000	4.00%	88,900		343,900	80,000	4.00%	27,400	107,400	115,000	4.00%	40,700	155,700	2035	2,575,000	925,500	3,500,500
265,000	4.00%	78,500		343,500	80,000	4.00%	24,200	104,200	120,000	4.00%	36,000	156,000	2036	2,605,000	821,900	3,426,900
275,000	4.00%	67,700		342,700	85,000	4.00%	20,900	105,900	125,000	4.00%	31,100	156,100	2037	2,900,000	711,800	3,611,800
285,000	4.00%	56,500		341,500	90,000	4.00%	17,400	107,400	130,000	4.00%	26,000	156,000	2038	2,980,000	594,200	3,574,200
300,000	4.00%	44,800		344,800	90,000	4.00%	13,800	103,800	135,000	4.00%	20,700	155,700	2039	3,070,000	473,200	3,543,200
310,000	4.00%	32,600		342,600	95,000	4.00%	10,100	105,100	145,000	4.00%	15,100	160,100	2040	3,250,000	346,800	3,596,800
325,000	4.00%	19,900		344,900	100,000	4.00%	6,200	106,200	150,000	4.00%	9,200	159,200	2041	3,435,000	213,100	3,648,100
335,000	4.00%	6,700		341,700	105,000	4.00%	2,100	107,100	155,000	4.00%	3,100	158,100	2042	3,610,000	72,200	3,682,200
4,850,000		2,219,850	(201,509)	6,868,341	1,435,000		683,475	2,118,475	1,905,000		1,000,525	2,905,525	Total	42,380,000	21,851,888	63,843,721



Financing Plan Tax Impact: Option 5 - Level Payments & Reserves Used for 2023 Capital Projects

Village of Germantown, WI

Year Ending	Existing Debt					Proposed Debt											Year Ending			
	Net Debt Service Levy	Change From Prior Year Levy	Equalized Value (TID OUT)	Annual Taxes \$350,000 Home		2022 G.O. Bonds 42,380,000 Dated: 12/1/2022	2024 G.O. Notes 3,600,000 Dated: 3/1/2024	2025 G.O. Bonds 20,000,000 Dated: 3/1/2025	2025 G.O. Notes 3,600,000 Dated: 3/1/2025	2026 G.O. Notes 3,600,000 Dated: 3/1/2026	2027 G.O. Notes 3,600,000 Dated: 3/1/2027	2028 G.O. Notes 3,600,000 Dated: 3/1/2028	Abatements			Debt Service Levy		Taxes		
				Per \$1,000	Home	Total P&I	Total P&I	Total P&I	Total P&I	Total P&I	Total P&I	Total P&I	Total P&I	Total P&I	Less: TID #9	Less: Water		Less: Sewer	Total Net Debt Service Levy	Levy Change from Prior Year
2022	3,136,071		2,772,351,300	\$1.13	\$395.92	0	0	0	0	0	0	0	0	0	0	3,136,071		\$1.13	\$396	2022
2023	3,381,281	245,210	2,855,314,207	\$1.18	\$414.47	2,188,838	0	0	0	0	0	0	(120,525)	(315,000)	(345,000)	4,789,594	1,653,522	\$1.68	\$587	2023
2024	3,102,366	(278,915)	2,940,759,788	\$1.05	\$369.23	2,710,433	0	0	0	0	0	0	(160,700)	(314,367)	(341,116)	4,996,616	207,023	\$1.70	\$595	2024
2025	2,729,950	(372,416)	3,028,762,336	\$0.90	\$315.47	3,065,750	449,719	0	0	0	0	0	(160,700)	(319,175)	(343,375)	5,422,169	425,553	\$1.79	\$627	2025
2026	2,428,390	(301,560)	3,119,398,371	\$0.78	\$272.47	2,477,625	451,744	1,621,875	458,050	0	0	0	(297,200)	(316,800)	(345,375)	6,478,309	1,056,140	\$2.08	\$727	2026
2027	2,137,845	(290,545)	3,212,746,698	\$0.67	\$232.90	2,515,875	453,038	1,622,625	455,125	458,050	0	0	(299,950)	(319,050)	(342,000)	6,681,558	203,249	\$2.08	\$728	2027
2028	1,846,000	(291,845)	3,308,888,484	\$0.56	\$195.26	2,550,125	448,800	1,619,625	455,838	455,125	461,513	0	(302,200)	(315,925)	(343,250)	6,875,650	194,093	\$2.08	\$727	2028
2029	1,577,450	(268,550)	3,407,907,323	\$0.46	\$162.01	2,575,500	449,031	1,620,000	455,875	455,838	463,663	461,513	(303,950)	(317,425)	(344,000)	7,093,494	217,844	\$2.08	\$729	2029
2030	1,206,138	(371,313)	3,509,889,311	\$0.34	\$120.27	3,148,000	453,519	1,618,625	455,238	455,875	463,581	463,663	(295,450)	(318,425)	(344,250)	7,306,513	213,019	\$2.08	\$729	2030
2031	755,850	(450,288)	3,738,902,722	\$0.20	\$70.76	3,610,500	452,263	1,620,375	458,813	455,238	462,788	463,581	(296,700)	(318,925)	(344,000)	7,319,781	13,269	\$1.96	\$685	2031
2032	431,375	(324,475)	3,850,789,782	\$0.11	\$39.21	3,499,000	450,369	1,620,125	456,600	458,813	461,281	462,788	(297,450)	(318,925)	(343,250)	6,880,725	(439,056)	\$1.79	\$625	2032
2033	0	(431,375)	3,966,025,075	\$0.00	\$0.00	3,455,750	452,731	1,617,875	458,600	456,600	463,944	461,281	(297,700)	(318,425)	(342,000)	6,408,656	(472,069)	\$1.62	\$566	2033
2034	0	0	4,084,708,797	\$0.00	\$0.00	3,462,625	449,350	1,618,500	459,700	458,600	460,775	463,944	(297,450)	(317,425)	(345,125)	6,413,494	4,838	\$1.57	\$550	2034
2035	0	0	4,206,944,141	\$0.00	\$0.00	3,500,500	0	1,621,750	455,013	459,700	461,775	460,775	(297,800)	(317,100)	(343,900)	6,000,713	(412,781)	\$1.43	\$499	2035
2036	0	0	4,332,837,391	\$0.00	\$0.00	3,426,900	0	1,622,500	0	455,013	461,825	461,775	(298,800)	(317,500)	(343,500)	5,468,213	(532,500)	\$1.26	\$442	2036
2037	0	0	4,462,498,010	\$0.00	\$0.00	3,611,800	0	1,620,750	0	0	465,806	461,825	(299,400)	(317,500)	(342,700)	5,200,581	(267,631)	\$1.17	\$408	2037
2038	0	0	4,596,038,736	\$0.00	\$0.00	3,574,200	0	1,621,375	0	0	0	465,806	(299,600)	(317,100)	(341,500)	4,703,181	(497,400)	\$1.02	\$358	2038
2039	0	0	4,733,575,683	\$0.00	\$0.00	3,543,200	0	1,619,250	0	0	0	0	(299,400)	(316,300)	(344,800)	4,201,950	(501,231)	\$0.89	\$311	2039
2040	0	0	4,875,228,438	\$0.00	\$0.00	3,596,800	0	1,619,250	0	0	0	0	(303,700)	(315,100)	(342,600)	4,254,650	52,700	\$0.87	\$305	2040
2041	0	0	5,021,120,166	\$0.00	\$0.00	3,648,100	0	1,621,125	0	0	0	0	(302,500)	(318,400)	(344,900)	4,303,425	48,775	\$0.86	\$300	2041
2042	0	0	5,171,377,720	\$0.00	\$0.00	3,682,200	0	1,619,750	0	0	0	0	(300,900)	(316,200)	(341,700)	4,343,150	39,725	\$0.84	\$294	2042
2043	0	0	5,326,131,747	\$0.00	\$0.00	0	0	1,620,000	0	0	0	0	0	0	0	1,620,000	(2,723,150)	\$0.30	\$106	2043
2044	0	0	5,485,516,805	\$0.00	\$0.00	0	0	1,621,625	0	0	0	0	0	0	0	1,621,625	1,625	\$0.30	\$103	2044
2045	0	0	5,649,671,478	\$0.00	\$0.00	0	0	1,619,500	0	0	0	0	0	0	0	1,619,500	(2,125)	\$0.29	\$100	2045
2046	0	0	5,818,738,496	\$0.00	\$0.00	0	0	0	0	0	0	0	0	0	0	0	(1,619,500)	\$0.00	\$0	2046
2047	0	0	5,992,864,863	\$0.00	\$0.00	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0	2047
2048	0	0	6,172,201,981	\$0.00	\$0.00	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0	2048
2049	0	0	6,356,905,780	\$0.00	\$0.00	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0	2049
2050	0	0	6,547,136,860	\$0.00	\$0.00	0	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0	2050
2051	0	0	6,743,060,626	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2051
Total	22,732,716					63,843,721	4,510,563	32,406,500	4,568,850	4,568,850	4,626,950	4,626,950	(5,532,075)	(6,345,067)	(6,868,341)					Total

Notes:

General Obligation Debt Capacity Analysis - Impact of Financing Plan

Village of Germantown, WI

Existing Debt				
Year Ending	Projected Equalized Value (TID IN) ¹	Debt Limit	Existing Principal Outstanding	% of Limit
2021	2,807,971,400	140,398,570	49,965,000	36%
2022	2,879,018,892	143,950,945	46,330,000	32%
2023	2,951,864,033	147,593,202	42,555,000	29%
2024	3,026,552,307	151,327,615	38,800,000	26%
2025	3,103,130,349	155,156,517	35,050,000	23%
2026	3,181,645,974	159,082,299	31,045,000	20%
2027	3,262,148,206	163,107,410	27,145,000	17%
2028	3,344,687,312	167,234,366	23,380,000	14%
2029	3,429,314,829	171,465,741	19,575,000	11%
2030	3,516,083,597	175,804,180	15,965,000	9%
2031	3,605,047,794	180,252,390	12,710,000	7%
2032	3,696,262,970	184,813,148	9,755,000	5%
2033	3,789,786,079	189,489,304	7,740,000	4%
2034	3,885,675,516	194,283,776	6,005,000	3%
2035	3,983,991,154	199,199,558	4,700,000	2%
2036	4,084,794,382	204,239,719	3,390,000	2%
2037	4,188,148,140	209,407,407	2,050,000	1%
2038	4,294,116,962	214,705,848	710,000	0%
2039	4,402,767,015	220,138,351	0	0%
2040	4,514,166,139	225,708,307	0	0%
2041	4,628,383,892	231,419,195	0	0%
2042	4,745,491,591	237,274,580	0	0%
2043	4,865,562,357	243,278,118	0	0%
2044	4,988,671,162	249,433,558	0	0%
2045	5,114,894,874	255,744,744	0	0%

Proposed Debt							Combined Principal			Year
2022 G.O. Bonds	2024 G.O. Notes	2025 G.O. Bonds	2025 G.O. Notes	2026 G.O. Notes	2027 G.O. Notes	2028 G.O. Notes	Existing & Proposed	% of Limit	Residual Capacity	Ending
							\$49,965,000	36%	\$90,433,570	2021
42,380,000							\$88,710,000	62%	\$55,240,945	2022
41,270,000							\$83,825,000	57%	\$63,768,202	2023
40,265,000	3,600,000						\$82,665,000	55%	\$68,662,615	2024
38,935,000	3,375,000	20,000,000	3,600,000				\$100,960,000	65%	\$54,196,517	2025
38,140,000	3,060,000	19,875,000	3,380,000	3,600,000			\$99,100,000	62%	\$59,982,299	2026
37,265,000	2,730,000	19,230,000	3,070,000	3,380,000	3,600,000		\$96,420,000	59%	\$66,687,410	2027
36,310,000	2,390,000	18,555,000	2,745,000	3,070,000	3,390,000	3,600,000	\$93,440,000	56%	\$73,794,366	2028
35,280,000	2,035,000	17,845,000	2,405,000	2,745,000	3,080,000	3,390,000	\$86,355,000	50%	\$85,110,741	2029
33,610,000	1,660,000	17,100,000	2,050,000	2,405,000	2,755,000	3,080,000	\$78,625,000	45%	\$97,179,180	2030
31,380,000	1,270,000	16,315,000	1,675,000	2,050,000	2,415,000	2,755,000	\$70,570,000	39%	\$109,682,390	2031
29,150,000	865,000	15,490,000	1,285,000	1,675,000	2,060,000	2,415,000	\$62,695,000	34%	\$122,118,148	2032
26,850,000	440,000	14,625,000	875,000	1,285,000	1,685,000	2,060,000	\$55,560,000	29%	\$133,929,304	2033
24,425,000	0	13,715,000	445,000	875,000	1,295,000	1,685,000	\$48,445,000	25%	\$145,838,776	2034
21,850,000	0	12,755,000	0	445,000	885,000	1,295,000	\$41,930,000	21%	\$157,269,558	2035
19,245,000	0	11,745,000	0	0	455,000	885,000	\$35,720,000	17%	\$168,519,719	2036
16,345,000	0	10,685,000	0	0	0	455,000	\$29,535,000	14%	\$179,872,407	2037
13,365,000	0	9,570,000	0	0	0	0	\$23,645,000	11%	\$191,060,848	2038
10,295,000	0	8,400,000	0	0	0	0	\$18,695,000	8%	\$201,443,351	2039
7,045,000	0	7,170,000	0	0	0	0	\$14,215,000	6%	\$211,493,307	2040
3,610,000	0	5,875,000	0	0	0	0	\$9,485,000	4%	\$221,934,195	2041
0	0	4,515,000	0	0	0	0	\$4,515,000	2%	\$232,759,580	2042
0	0	3,085,000	0	0	0	0	\$3,085,000	1%	\$240,193,118	2043
0	0	1,580,000	0	0	0	0	\$1,580,000	1%	\$247,853,558	2044
0	0	0	0	0	0	0	\$0	0%	\$255,744,744	2045

Notes:

1) Projected TID IN EV based on 5-year average at 2.53 % annual inflation.



Rating Action: Moody's assigns Aa2 to Germantown, WI's GO bonds and affirms related ratings

11 Nov 2022

New York, November 11, 2022 – Moody's Investors Service has assigned a Aa2 rating to the Village of Germantown, WI's General Obligation Corporate Purpose Bonds, Series 2022E with an expected par amount of approximately \$44.4 million. Concurrently, Moody's affirms the village's Aa2 issuer rating, the Aa2 rating on outstanding general obligation unlimited tax (GOULT) debt and the Aa2 rating on outstanding water revenue bonds. Following the sale, the village will have about \$91 million in GOULT debt and \$4.5 million in revenue debt outstanding.

RATINGS RATIONALE

The Aa2 rating reflects the village's strong property wealth and resident incomes, healthy financial profile despite strict levy limits, and modest exposure to unfunded pension liabilities with no other post-employment benefits. These factors are balanced with elevated long-term liabilities driven by the village's debt burden, which will double with the upcoming sale.

The Aa2 rating on the water revenue bonds reflects a low debt burden, very strong debt service coverage and a quickly growing service area. These strengths are balanced by the system's very modest operating size that has healthy liquidity relative to budget but is limited on a nominal basis. The system's bonded debt benefits from satisfactory legal protections, including a rate covenant of 1.25x annual debt service and a debt service fund that will be funded at the lesser of the standard three prong test.

RATING OUTLOOK

Moody's does not typically assign outlooks to local governments with this amount of debt.

FACTORS THAT COULD LEAD TO AN UPGRADE OF THE RATINGS

- Maintenance of strong reserves paired with material economic growth
- Reduced leverage and fixed costs
- Upgrade of the village's issuer and GOULT ratings (water revenue)
- Substantial expansion of the customer and revenue base (water revenue)

FACTORS THAT COULD LEAD TO A DOWNGRADE OF THE RATINGS

- Decline in reserve position
- Significant growth in long-term liabilities

- Tax increment districts or utilities that pressure operating fund balance
- Downgrade of the village's issuer and GOULT ratings (water revenue)
- Narrowed liquidity and debt service coverage or substantial growth in leverage (water revenue)

LEGAL SECURITY

Debt service on the GOULT debt is supported by the village's pledge to levy a dedicated property tax that is not restricted by rate or amount.

Outstanding water revenue bonds are payable from and secured by a pledge of water system income and revenue. The bonds are issued on parity with outstanding revenue bonds of the system.

USE OF PROCEEDS

Proceeds from Series 2022E bonds will finance construction and equipment for a new public works building, project costs associated with one of the village's TIDs and will refund note anticipation notes.

PROFILE

The Village of Germantown is located in Washington County in southeastern Wisconsin, approximately 15 miles northwest of Milwaukee. As of 2020 estimates, the village had an estimated population just over 20,000. The Germantown Water Enterprise is operated by the village and serves approximately 6,200 residential, commercial, public and industrial customers.

METHODOLOGY

The principal methodology used in the GOULT and issuer ratings was US Cities and Counties Methodology published in November 2022 and available at <https://ratings.moodys.com/api/rmc-documents/386953>. The principal methodology used in the water revenue rating was US Municipal Utility Revenue Debt Methodology published in April 2022 and available at <https://ratings.moodys.com/api/rmc-documents/386721>. Alternatively, please see the Rating Methodologies page on <https://ratings.moodys.com> for a copy of these methodologies.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found on <https://ratings.moodys.com/rating-definitions>.

For ratings issued on a program, series, category/class of debt or security this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series, category/class of debt, security or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to the provisional rating assigned, and in relation to a definitive

rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the issuer/deal page for the respective issuer on <https://ratings.moodys.com>.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at https://ratings.moodys.com/documents/PBC_1288235.

Please see <https://ratings.moodys.com> for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

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CREDIT OPINION

11 November 2022



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Village of Germantown, WI & Germantown, WI Water Enterprise

Update to credit analysis

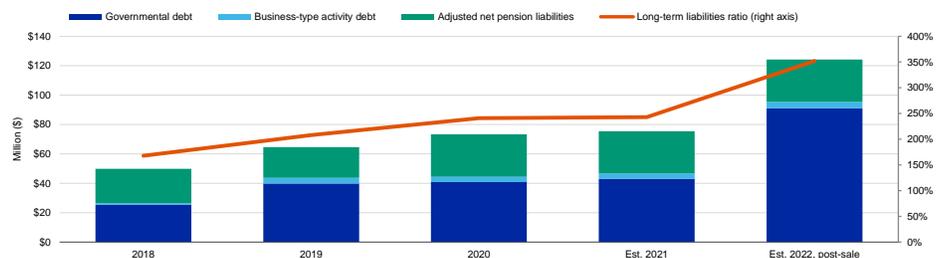
Summary

The [Village of Germantown, WI](#) (Aa2) is a midsized bedroom community just outside Milwaukee. The village provides standard governmental services and owns and operates municipal water and sewer systems that account for about a third of the village's operations but carry minimal leverage. The village's credit profile benefits from a quickly growing tax base, though economic growth in the Milwaukee metropolitan statistical area (MSA) lags national growth. Management plans to draw down reserves modestly in coming years following multiyear fund balance increases. Because of recent accumulation, the draw will not materially impact the village's reserve or liquidity position. Following an upcoming bond sale, leverage will be elevated relative to Aa2 rated cities nationally and is likely to remain so given additional borrowing plans.

[Germantown \(Village of\), WI's Water Enterprise's](#) (Aa2) credit profile is characterized by a low debt burden, a very strong debt service coverage and a quickly growing service area. These strengths are balanced by the system's modest operating size that has healthy liquidity relative to budget but is limited on a nominal basis. The age of the system's assets are relatively new due in part to the quickly growing service area. The system is limited by state legislation that requires rate increases to be approved by the Wisconsin Public Service Commission (PSC)

On November 11, Moody's assigned a Aa2 rating to the village's upcoming GOULT bond sale and affirmed the Aa2 issuer rating, the Aa2 rating on outstanding rated GOULT debt and the water enterprise's Aa2 revenue rating.

Exhibit 1
Governmental debt will double with upcoming sale
Debt, pension liabilities and leverage as a % of annual revenue



Source: Moody's Investors Service

Credit strengths

- » Strong resident income levels and property wealth as measured by full value per capita
- » History of maintaining healthy reserves and liquidity
- » Excess levying capacity for operations and debt service
- » Very strong debt service coverage (water enterprise)
- » Modest debt burden and quickly growing service area (water enterprise)

Credit challenges

- » Economic growth trend in the Milwaukee MSA is sluggish relative to the nation
- » Elevated leverage for the rating category
- » Strict levy limits restrict the village's revenue raising ability
- » Limited system size compared to similarly rated credits (water enterprise)
- » Water rates subject to Wisconsin PSC review and approval (water enterprise)

Rating outlook

Moody's does not typically assign outlooks to local governments with this amount of debt.

Factors that could lead to an upgrade

- » Maintenance of strong reserves paired with material economic growth
- » Reduced leverage and fixed costs

Factors that could lead to a downgrade

- » Decline in reserve position
- » Significant growth in long-term liabilities
- » Tax increment districts (TIDs) or utilities that pressure operating fund balance

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Key indicators

Exhibit 2

Germantown (Village of) WI

	2018	2019	2020
Economy			
Resident income ratio (%)	141.0%	143.3%	142.9%
Full Value (\$000)	\$2,698,777	\$2,807,971	\$2,900,792
Population	19,997	20,166	20,142
Full value per capita (\$)	\$134,959	\$139,243	\$144,017
Economic growth metric (%)	-1.5%	-1.2%	-1.4%
Financial Performance			
Revenue (\$000)	\$30,264	\$31,531	\$30,395
Available fund balance (\$000)	\$18,039	\$21,289	\$20,076
Net unrestricted cash (\$000)	\$26,592	\$33,088	\$27,750
Available fund balance ratio (%)	59.6%	67.5%	66.1%
Liquidity ratio (%)	87.9%	104.9%	91.3%
Leverage			
Debt (\$000)	\$26,492	\$43,687	\$44,484
Adjusted net pension liabilities (\$000)	\$23,420	\$20,932	\$28,785
Adjusted net OPEB liabilities (\$000)	\$0	\$0	\$0
Other long-term liabilities (\$000)	\$877	\$927	\$0
Long-term liabilities ratio (%)	167.8%	207.9%	241.1%
Fixed costs			
Implied debt service (\$000)	\$0	\$1,952	\$3,185
Pension tread water contribution (\$000)	\$384	\$675	\$425
OPEB contributions (\$000)	\$0	\$0	\$0
Implied cost of other long-term liabilities (\$000)	\$0	\$65	\$68
Fixed-costs ratio (%)	1.3%	8.5%	12.1%

For definitions of the metrics in the table above please refer to the [US Cities and Counties Methodology](#) or see the Glossary in the Appendix below. Metrics represented as N/A indicate the data were not available at the time of publication.

The Economic Growth metric cited above compares the five-year CAGR of real GDP for Milwaukee-Waukesha, WI Metropolitan Statistical Area to the five-year CAGR of real GDP for the US.

Sources: US Census Bureau, Germantown (Village of) WI's financial statements and Moody's Investors Service, US Bureau of Economic Analysis

Exhibit 3

Germantown (Village of) WI Water Enterprise					
System Characteristics					
Asset Condition (Net Fixed Assets / Annual Depreciation)	32 years				
System Size - O&M (in \$000s)	\$1,688				
Service Area Wealth: MFI % of US median	133.85%				
Legal Provisions					
Rate Covenant (x)	1.25x				
Debt Service Reserve Requirement	DSRF funded at lesser of standard 3-prong test (Aa)				
Management					
Rate Management	A				
Regulatory Compliance and Capital Planning	A				
Financial Strength					
	2016	2017	2018	2019	2020
Operating Revenue (\$000)	\$2,391	\$2,299	\$2,376	\$2,267	\$2,514
System Size - O&M (\$000)	\$1,132	\$1,144	\$1,530	\$1,501	\$1,688
Net Revenues (\$000)	\$1,286	\$1,213	\$922	\$837	\$862
Net Funded Debt (\$000)	\$1,089	\$991	\$893	\$789	\$678
Annual Debt Service (\$000)	\$136	\$139	\$137	\$139	\$141
Annual Debt Service Coverage (x)	9.4x	8.7x	6.8x	6.0x	6.1x
Cash on Hand	822 days	714 days	305 days	325 days	193 days
Debt to Operating Revenues (x)	0.5x	0.4x	0.4x	0.3x	0.3x

Sources: US Census Bureau, Germantown (Village of) Water Enterprise, WI's financial statements and Moody's Investors Service

Profile

The Village of Germantown is located in [Washington County](#) (Aaa) in southeastern [Wisconsin](#) (Aa1 stable), approximately 15 miles northwest of [Milwaukee](#) (A3 negative). As of 2020, the village had an estimated population just over 20,000.

Detailed credit considerations

Economy

The village's strengthening economic profile is supported by annual growth in resident income levels and full value per capita driven by continued development within the village. Accelerated growth in the tax base is likely to continue because of the village's favorable location with access to regional ground transportation. The tax base is 67% residential with a considerable commercial footprint and smaller manufacturing presence, 23% and 8%, respectively. Employment in Washington County has historically been centered around manufacturing and some of the village's largest employers are in the sector, including MGS Manufacturing, the single largest employer with about 600 employees. Warehousing and distribution activity is growing as the village retains ample land for development and has good access to ground transportation infrastructure.

Most residents commute across the metro area for employment which supports resident income levels that have grown year over year and exceed the median for Aa rated cities and counties nationally. While the village's tax base has grown in recent years, economic growth in the Milwaukee MSA over the last five years has been sluggish with a moderately negative rate compared to the nation as a whole which grew at 1.3%.

The water system's customer base is likely to grow modestly as development in the Village of Germantown continues. The water enterprise is fully owned, operated and maintained by the Village of Germantown and services customers within village boundaries. The system consists of seven wells, electric pumping equipment, a water distribution system and three elevated storage tanks. The utility's wells pump an average of 2.2 million gallons per day, as of 2020.

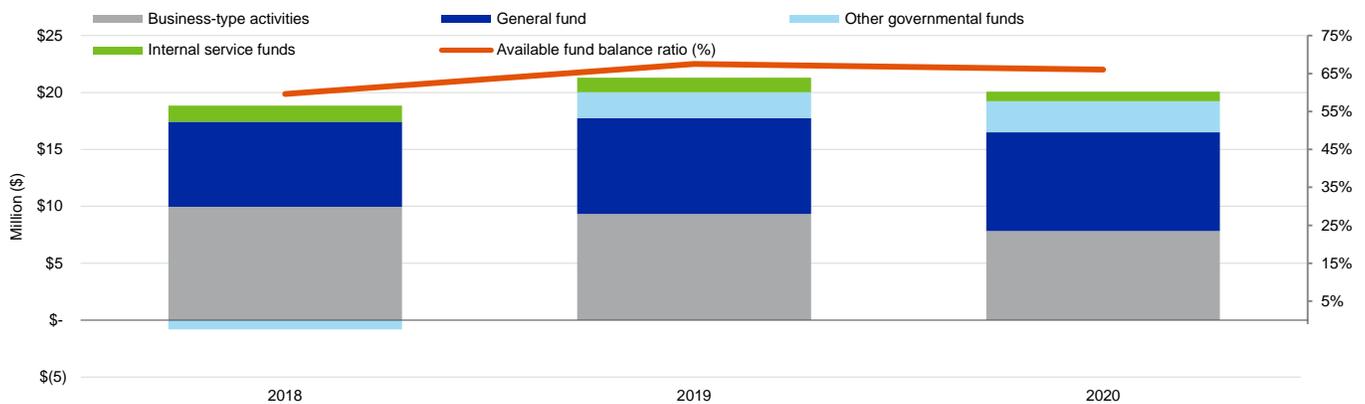
The water enterprise's service area has experienced steady growth over the last decade with total customers growing by 13% in the last five years with a majority of growth occurring in 2021. Total billings have declined during the same period by 13.5% due in part to growth in conservation efforts. Future revenue growth is only likely to occur with sustained growth in the customer base in conjunction with rate increases. The Wisconsin Public Service Commission recently approved a two-phase rate increase. The first phase raised rates by approximately 75% and went into effect January 2022 and the second phase will raise rates another 10% and is likely to occur late in fiscal 2023 (December 31 year end).

Financial operations

The village's financial position will remain strong supported by predictable property tax revenue and conservative budgeting. The village's available fund balance ratio will decline in fiscal 2023 because of a planned general fund draw of about \$3 million for capital. Following the draw, reserves will likely be between 55 - 60%, which is still very strong but below recent peaks. Management has opted to cash finance the upcoming year's capital improvements because of reserve accumulation in excess of the village's formal policy to maintain 16-25% of the previous year's general fund expenditures as unassigned. Additionally, management reports the operating levy for the upcoming fiscal year will not fully utilize the village's allowable increase from net new construction which creates some amount of flexibility in the future as it can be carried over. The fiscal 2022 budget is tracking better than budget and is likely to end with a surplus of about \$500,000.

Exhibit 4

Business- type reserves have declined modestly but are likely to be replenished following a water rate increase that went into effect in 2022
Available fund balance and net current assets by fund



Source: Moody's Investors Service

Across all governmental funds and business-type activities the county's available fund balance closed fiscal 2020 at about \$20 million, an amount equal to 66% of total annual revenue. Reserves are split fairly evenly between the village's general fund and business activity funds. Like many Wisconsin municipalities, the village manages and finances development through various tax increment districts (TIDs) that could pose operating pressure if revenue were to fall short of projections. Management reports that all of the village's TIDs are self-supported.

Water system liquidity remains solid and is likely to grow in coming years as rate increases take effect. Fiscal 2020 debt service coverage on water revenue bonds is very high at 6.1x operating revenue, comfortably above the rate covenant that requires net revenue to be maintained at 1.25x annual debt service. Unaudited results for fiscal 2021 anticipate coverage close to 7.5x because of revenue growth. Debt service coverage is high in part because of a modest debt burden.

Liquidity

About a third of the village's liquidity is held in the enterprise funds. The village's cash position is higher than its fund balance primarily because of assets held in the general capital projects fund and TID funds.

Water system liquidity is healthy relative to budget size but narrow on a nominal basis because of the system's small scale of operations. While liquidity has come down in recent years between rate increases, cash will grow in 2022 after a significant 75% rate

increase takes effect. At the close of fiscal 2020, unrestricted cash was \$890,000 and the system had an adequate 193 days cash on hand.

Leverage

The village's leverage will remain elevated because of a large upcoming issuance and plans for additional debt in the next two to three years. The village is in the process of selling about \$45 million in general obligation unlimited tax (GOULT) bonds to construct a new public works building, which will increase outstanding GOULT debt to about \$90 million. Though ultimately secured by its GO pledge, in fiscal 2020 about 30% of the village's GOULT debt was serviced with alternate revenue sources including TID and business type revenue which helps to alleviate the debt service burden on the tax base. Management plans on paying a similar proportion of the upcoming sale from sources other than ad valorem taxes and will retain the additional levying capacity should other sources decline.

At the close of fiscal 2020, the village's long-term liabilities ratio comprised of debt and pension leverage stood at 240% of revenue. Following the upcoming sale, the ratio will increase to about 400% of 2020 revenue, with about four-fifths of leverage attributable to debt. Relative to budgeted revenue for fiscal 2022, the ratio is likely to be more moderate and closer to 350% due revenue growth in the last two years. However, the ratio will remain elevated as management plans to issue another \$20 million or so in two to three years for a public safety building. In addition to sales for specific capital needs, the village will continue to fund its capital improvement plan with sales of about \$3.5 million annually, although the capital program in fiscal 2023 will be cash funded from reserves (see Financial Operations above). Fixed costs will remain moderate and stood at 12% as of fiscal 2020 and are likely to be closer to 15% following the upcoming sale.

The legal provisions on the village's water system revenue debt provides strong security for bondholders. The rate covenant calls for net revenue to provide at least 1.25x annual debt service coverage on parity issued debt. A debt service reserve fund is maintained in an amount equal to the lesser of MADS, 125% of average annual debt service on the bonds or 10% of the stated principal amount of the bonds.

Legal security

Debt service is supported by the village's GOULT pledge to levy a dedicated property tax that is not restricted by rate or amount.

Debt service on the water revenue bonds is payable from and secured by a pledge of water system income and revenue.

Debt structure

Debt is long-term and fixed rate.

Debt-related derivatives

The village has no exposure to debt-related derivatives.

Pensions and OPEB

Germantown participates in the Wisconsin Retirement System (WRS), a statewide cost sharing plan. Contributions are determined using a level contribution actuarial method in an effort to keep employer and employee contribution rates at a level percentage of payroll over time, and are set at 100% of the plan's funding requirement. As a result, WRS remains one of the best-funded public employee retirement systems in the country.

The village's adjusted net pension liability as of fiscal 2020 (ANPL) is \$28.8 million, equivalent to 0.9x annual revenue. Moody's ANPL reflects the use of a market-based discount rate to value pension liabilities rather than the assumed rate of investment return on plan assets. In comparison, in 2020 the village reported a net pension asset using the plan's 7% discount rate. The Village does not provide any other post employment benefits.

ESG considerations

Environmental

Germantown's E-2 issuer profile score reflects neutral to low exposure to environmental risks across all categories, including physical climate risk, carbon transition, natural resources management, waste and pollution. The village participates in Greenseams, a flood management project in partnership with the Milwaukee Metropolitan Sewer District. The Greenseams program helps to prevent flooding by purchasing flood prone properties and maintaining the land as undeveloped. In the event of a disaster, Washington County, where Germantown is located, maintains a comprehensive plan for mitigation and response.

Social

Germantown's S-2 profile score reflects neutral to low exposure to social risks. Demographic trends are solid as the population has grown modestly over the last decade. The village benefits from above average labor force participation and resident income, low violent crime and high educational attainment. Risk associated with housing, health and safety and access to basic services are similar to peers.

Governance

Germantown's G-2 profile score reflects neutral to low exposure to governmental risk. The score reflects solid budget management balanced against a relatively restrictive institutional structure. Property tax revenue is the village's major revenue source and is subject to a cap that limits increases to the growth in net new construction. The village's formal fund balance policy is to maintain 16- 25% of general fund expenditures as unassigned and board materials, including variance reports, are available on the village's website.

Rating methodology and scorecard factors

The US Cities and Counties Rating Methodology includes a scorecard, which summarizes the rating factors generally most important to city and county credit profiles. Because the scorecard is a summary, and may not include every consideration in the credit analysis for a specific issuer, a scorecard-indicated outcome may or may not map closely to the actual rating assigned.

Exhibit 5

Germantown (Village of) WI

	Measure	Weight	Score
Economy			
Resident income ratio	142.9%	10.0%	Aaa
Full value per capita	156,787	10.0%	Aa
Economic growth metric	-1.4%	10.0%	A
Financial Performance			
Available fund balance ratio	66.1%	20.0%	Aaa
Liquidity ratio	91.3%	10.0%	Aaa
Institutional Framework			
Institutional Framework	Aa	10.0%	Aa
Leverage			
Long-term liabilities ratio	241.1%	20.0%	A
Fixed-costs ratio	12.1%	10.0%	Aa
Notching factors			
No notchings applied			
Scorecard-Indicated Outcome			Aa2
Assigned Rating			Aa2

Sources: US Census Bureau, Germantown (Village of) WI's financial statements and Moody's Investors Service

Appendix

Exhibit 6

Key Indicators Glossary

	Definition	Typical Source*
Economy		
Resident income ratio	Median Household Income (MHI) for the city or county, adjusted for Regional Price Parity (RPP), as a % of the US MHI	MHI: US Census Bureau RPP: US Bureau of Economic Analysis
Full value	Estimated market value of taxable property in the city or county	State repositories; audited financial statements; continuing disclosures
Population	Population of the city or county	US Census Bureau
Full value per capita	Full value / population	
Economic growth metric	Five year CAGR of real GDP for Metropolitan Statistical Area or county minus the five-year CAGR of real GDP for the US	Real GDP: US Bureau of Economic Analysis
Financial performance		
Revenue	Sum of revenue from total governmental funds, operating and non-operating revenue from total business-type activities, and non-operating revenue from internal services funds, excluding transfers and one-time revenue, e.g., bond proceeds or capital contributions	Audited financial statements
Available fund balance	Sum of all fund balances that are classified as unassigned, assigned or committed in the total governmental funds, plus unrestricted current assets minus current liabilities from the city's or county's business-type activities and internal services funds	Audited financial statements
Net unrestricted cash	Sum of unrestricted cash in governmental activities, business type activities and internal services fund, net of short-term debt	Audited financial statements
Available fund balance ratio	Available fund balance (including net current assets from business-type activities and internal services funds) / Revenue	
Liquidity ratio	Net unrestricted cash / Revenue	
Leverage		
Debt	Outstanding long-term bonds and all other forms of long-term debt across the governmental and business-type activities, including debt of another entity for which it has provided a guarantee disclosed in its financial statements	Audited financial statements; official statements
Adjusted net pension liabilities (ANPL)	Total primary government's pension liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits	Audited financial statements; Moody's Investors Service
Adjusted net OPEB liabilities (ANOL)	Total primary government's net other post-employment benefit (OPEB) liabilities adjusted by Moody's to standardize the discount rate used to compute the present value of accrued benefits	Audited financial statements; Moody's Investors Service
Other long-term liabilities (OLTL)	Miscellaneous long-term liabilities reported under the governmental and business-type activities entries	Audited financial statements
Long-term liabilities ratio	Debt + ANPL + ANOL + OLTL / Revenue	
Fixed costs		
Implied debt service	Annual cost to amortize city or county's long-term debt over 20 years with level payments	Audited financial statements; official statements; Moody's Investors Service
Pension tread water contribution	Pension contribution necessary to prevent reported unfunded pension liabilities from growing, year over year, in nominal dollars, if all actuarial assumptions are met	Audited financial statements; Moody's Investors Service
OPEB contribution	City or county's actual contribution in a given period	Audited financial statements
Implied cost of OLTL	Annual cost to amortize city or county's other long-term liabilities over 20 years with level payments	Audited financial statements; Moody's Investors Service
Fixed-costs ratio	Implied debt service + Pension tread water + OPEB contributions + Implied cost of OLTL / Revenue	

*Note: If typical data source is not available then alternative sources or proxy data may be considered. For more detailed definitions of the metrics listed above please refer to the [US City and Counties Methodology](#).

Source: Moody's Investors Service

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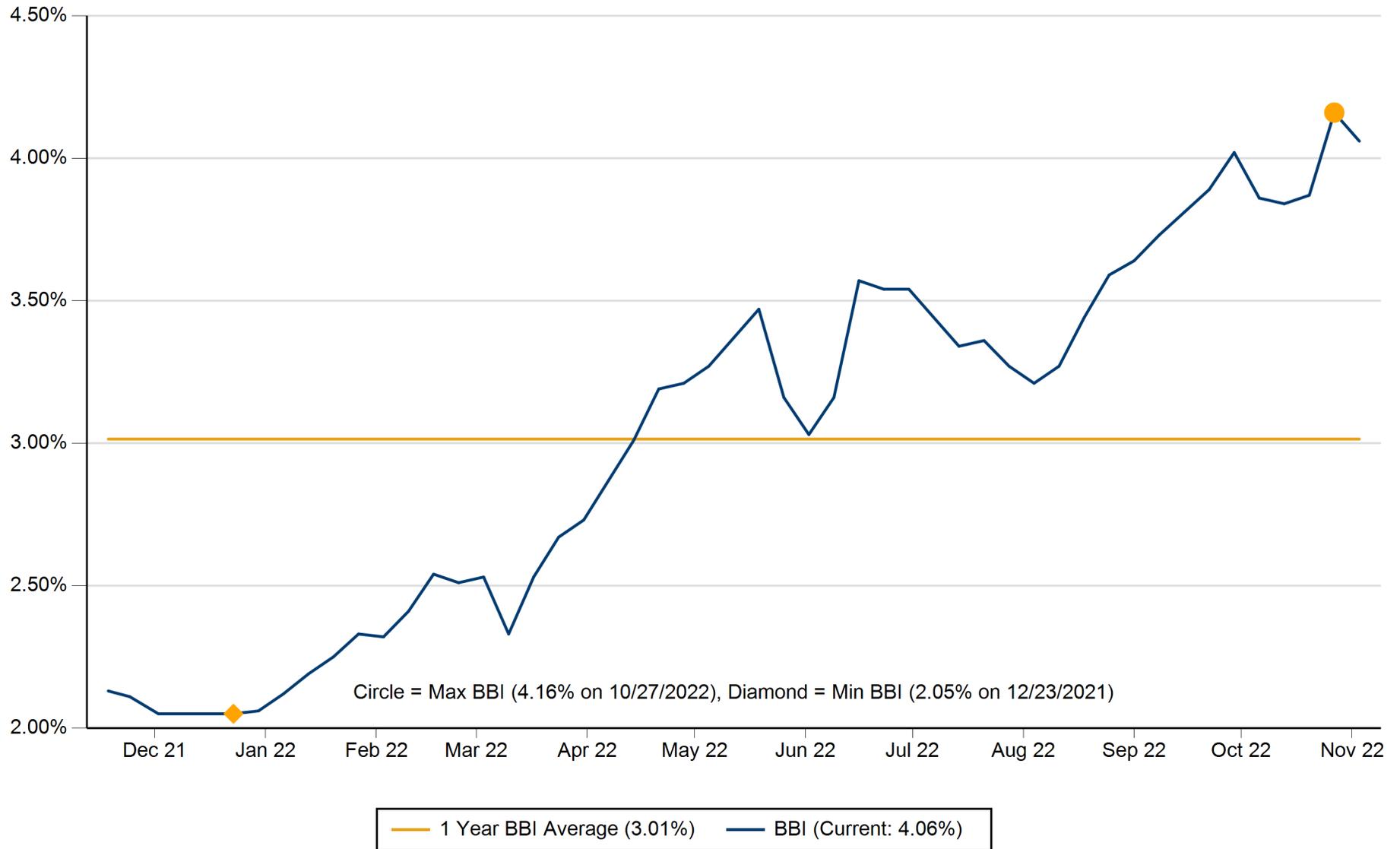
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1 YEAR TREND IN MUNICIPAL BOND INDICES

Weekly Rates November, 2021 - November, 2022



The Bond Buyer "20 Bond Index" (BBI) shows average yields on a group of municipal bonds that mature in 20 years and have an average rating equivalent to Moody's Aa2 and S&P's AA.