

MEMORANDUM

To: Mr. Henrietta Lafayette, Managing Director - *Stars Hollow Analytics (SHA)*

From: Alexandra Gazzolo, Oswaldo Gomez, and Sief Salameh

Re: Credit Rating of City of Oshkosh, WI 2021 Water System Revenue Bonds

Executive Summary: Oshkosh, a city in eastern Wisconsin, issued \$5.605 million in bonds to improve its water utility's infrastructure in June of 2021. Based on a comparative analysis of three nearby municipalities, Kaukauna, Fond Du Lac, and Green Bay, we believe that the current AA- rating (S&P) of the city's Water System Bonds should be maintained at AA-. This proposed rating is derived from an analysis of the enterprise and financial risks faced by the city's water utility as outlined by Stars Hollow Analytics (SHA). Our AA- rating suggests that Oshkosh's water utility services perform on-par based on the industry standard and above some of its comparable municipalities. However, there is not enough sustained improvement in either risk to give it a positive outlook.

Enterprise Risk Profile Weighted Rating: 1.67

Economic Fundamentals (45% of Enterprise Risk Profile) - Oshkosh's median household income is 89.45% of the US median household income, in between that of peer municipalities. The real Gross Domestic Product (GDP) in Winnebago County has outpaced US growth by several percentage points. Limited economies of scale weaken Oshkosh's initial assessment, though its diverse employment sectors and broad keypayer base improve their outlook. Together, these factors earn them an unweighted score of 2 out of 6.

Industry Risk (20%) - SHA generally considers all water and sewer utilities to have a very low industry risk because of the essentiality of the service and the limited competition. There are no extenuating circumstances in Oshkosh that would change this, thus earning them an unweighted score of 1.

Market Position (25%) - Utilizing industry standards, we evaluate market position based on the percentage of the populations below the national poverty line, and by comparing the projected residential monthly water expenditures in each city. Oshkosh and Green Bay have about 15 percent of their population living below the poverty line--twice the rate of Kaukauna, but comparable to Fond Du Lac. However, Oshkosh has the lowest average residential monthly water bill at just \$32.83 dollars. Thus Oshkosh earns an unweighted rate of 1.5.

Operational Management Assessment (10%) - To optimize this metric, we look at the percent of reservoir or reserve water potentially lost during peak times. Without data from Green Bay, we see that Oshkosh has the second lowest projected decrease (28%), below Fond Du Lac (16%), but considerably better than Kaukauna (97% decrease). The cities' ability to execute rate changes effectively is also evaluated. Both Oshkosh (2019) and Green Bay (2018) had recent rate hikes, with the latter seeing a longer review process by the state's regulator. Oshkosh earns an unweighted rating of 2.

Financial Risk Profile Weighted Rating: 3.05

All-in Coverage (40%) - We apply a comprehensive formula for this metric to measure the utility's ratio of operating income to debt servicing for interest, principal, and lease payments. The city of Oshkosh experienced an average coverage ratio of 1.20 across five years from 2016 - 2020, equating to an unweighted assessment of 3 out of 6. The city has demonstrated a stable coverage ratio over a multi-year

analysis, and its ability to satisfy the water utility's debt is strong. Oshkosh receives the same unweighted assessment as the city of Fond Du Lac - which has comparable debt service obligation and similar revenue/expense trends. However, Oshkosh has a lower debt coverage than Kaukauna and Green Bay - both receive an assessment of 1. This is due to contrasting findings. One, Kaukauna had significantly lower debt service payments and a smaller population. Two, Green Bay's high coverage ratio could be attributed to the significantly higher revenues streams and increased utility service charge.

Liquidity and Reserves (40%) - This metric measures the total "cash on hands" available to the utility and includes cash reserves that are both unrestricted funds and funds designated for emergency repairs or operation. Oshkosh maintains an average liquidity reserve of \$16.6 million across five years, which translates to an unweighted assessment of 3 out of 6. The city can practically operate the water utility for 60 to 90 days without supporting revenues or service charges. Oshkosh performed better than Fond Du Luc and Kaukauna, which received assessment scores of 4/6 or 30 to 60 days of "cash on hands" across an average of five years. Oshkosh also received the same score as Green Bay.

Debt and Liabilities (10%) - Using the industry standard, we optimize the percentage of long term liabilities as a ratio of the capitalized assets held by the municipality. Oshkosh's ratio of 54 percent set it at a 4 rating. Kaukana's 84 percent earned it a score of six, Fond Du Lac's 25 percent set it at a rating of 2, and Green Bay's 71 percent earned a 5.

Financial Management Assessment (10%) - The existence of a municipal capital improvement plan, and the ratio of capital funds committed in the current budget as a percentage of the total assigned funds serve as the metrics for this analysis. Oshkosh, having a 4 year CIP and committing 32.6 percent of their restricted funds to capital projects, earns an unweighted score of 2.5.

Recommended Credit Rating

Recommendation: Oshkosh's final weighted average of risks is 2.363 out of 6. This equates to an SHA rating of AA-. We recommend that no changes be made to the water utility revenue bonds' rating. First, although the City experienced a higher debt coverage in 2019 and 2020, the city saw a stagnant change from 2016 until 2019. It also performed far below Green Bay in terms of debt coverage. Additionally, even though Oshkosh outperforms its peers in cash liquidity, it only experienced a minor improvement from 2017-2020. While the financial assessment for these two metrics is overall credit positive, the lack of exponential or constant improvement over the past five years challenges our ability to differentiate between random economic growth and improved financial planning. Furthermore, Oshkosh's 54 percent of long-term liabilities as a ratio of capitalized assets is double the ratio of Fond Du Luc - signaling it as a credit negative metric. Therefore, we recommend no credit rating change based on the financial assessment.

Oshkosh's strong and consistent performance across enterprise risk categories earns it a strong rating. It was on par or outperformed its peers across the majority of categories. However, there is not enough evidence of sustained positive trends to necessitate a change in outlook or grade. Finally, it is important to note that none of the planned capital improvement projects are expected to dramatically change the risk profiles of Oshkosh in the near future.

Appendix

Credit Rating Methodology: According to SHA rating criteria, municipal utility bonds are rated based on the cumulative average of two sources of evaluated risk: enterprise (50%) and financial(50%). Enterprise risk is itself a weighted average of various subcategories: fundamental economic outlook, substitution risk for the utility given the industry, the market positionality of the utility, and the quality of management practices in the operations of the utility. Financial risk is weighted by the overall ratio between revenues and serviced debt, the liquidity and value of available emergency reserves, the ratio between debt liabilities and held capital assets, and the management practices used to secure capital for the utility. To calculate each rating, we analyze and score each subcategory of enterprise and financial risks, weighted each score by their given percentage, and sum them together to generate a score for each risk type. Each risk type's ratings are then averaged to assess the overall rating of the bond. Finally, each bond's rating is compared with the other municipalities' to provide the counterfactual ratings.

Table 1: Overall SHA Recommended Ratings

CATEGORY	Oshkosh	Kaukauna	Fond Du Lac	Green Bay
ENTERPRISE RISK PROFILE (50%)				
Economic Fundamentals (45%)	2	1	2.5	2.5
Industry Risk (20%)	1	1	1	1
Market Position (25%)	1.5	1.5	2	2
Operational Management Assessment (10%)	2	4.5	2.5	3
FINANCIAL RISK PROFILE (50%)				
All-in Coverage (40%)	3	1	3	1
Liquidity Reserves (40%)	2	4	4	3
Debt & Liabilities (10%)	4	6	2	5
Financial Management (10%)	2.5	3.5	2	1.5
Weighted Overall Score	2.3625	2.55	2.63	2.18
SHA Recommended Rating	AA-	A+	A+	AA

Table 2: Rating Categories and Raw Metrics

Figure 1:

1	City of Osh Kosh										
2	Year	Operating Revenues	Operating Expenses	Non-Operating Expenses	Transfers In	Transfers-Out	Depreciation and Amortization	Debt Service	All-In Coverage	Initial Assessment	
3	2020	15,576,609	9,885,293	1,453,872	14,394	1,000,000	3,589,037	5,518,060	1.239725	3	
4	2019	16,109,837	9,419,938	1,360,998	562,123	1,000,000	3,473,118	6,163,174	1.357116	3	
5	2018	15,465,120	9,170,916	1,471,910	0	1,000,000	3,354,525	6,935,134	1.034849	5	
6	2017	15,122,194	8,616,450	1,687,067	431,897	1,000,000	3,208,165	6,914,821	1.07866	5	
7	2016	14,445,314	8,790,681	2,007,616	971,368	1,000,000	3,106,445	5,239,674	1.283444	3	
8	Five-Year Average								1.198759	3	
9											
10	*Notes*										
11	Figures Computed from STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION PROPRIETARY FUNDS										
12	Figures Computed from HISTORIC STATEMENT OF REVENUES AND EXPENSES										
13											
14	All-In Coverage Formula = ((Operating Revenues + Depreciation) - (Operating Expenses + Non-Operating Expenses) - (Transfers-Out - Transfers-In)) / Debt Service Payments										

Figure 2:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	City of Kaukauna															
2	Year	Operating Revenues	Operating Expenses	Non-Operating Expenses	Transfers - In	Transfers-Out	Depreciation and Amortization	Debt Service	All-In Coverage	Initial Assessment						
3	2020	3,749,100	3,270,550	254,152	0	0	521,000	614,656	1.212708	3						
4	2019	3,668,400	3,145,200	267,705	0	0	493,000	598,156	1.251337	3						
5	2018	3,916,633	3,064,251	110,142	0	518,679	582,832	576,097	1.399752	2						
6	2017	3,800,751	3,131,432	260,000	0	0	565,510	519,782	1.875457	1						
7	2016	3,742,336	2,543,965	67,792	436,988	479,191	529,679	509,906	3.173242	1						
8	Five-Year Average								1.782499	1						
9																
10	Figures Computed from CITY OF KAUKAUNA WATERWORKS SYSTEM COVERAGE ANALYSIS															
11	Figures Computed from Summary of Operations – Water Utility															
12																
13	All-In Coverage Formula = ((Operating Revenues + Depreciation) - (Operating Expenses + Non-Operating Expenses) - (Transfers-Out - Transfers-In)) / Debt Service Payments															

Figure 3:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	City of Fond Du Luc														
2	Year	Operating Revenues	Operating Expenses	Non-Operating Expenses	Transfers In	Transfers-Out	Depreciation and Amortization	Debt Service	All-In Coverage	Initial Assessment					
3	2020	12,083,930	6,936,571	786,884	0	1,893,636	3,036,811	4,707,338	1.169164	4					
4	2019	12,853,004	7,043,758	970,390	0	1,942,047	3,005,427	4,684,425	1.25997	3					
5	2018	12,879,093	6,964,041	1,120,375	385,543	1,945,017	2,965,709	4,657,876	1.331275	3					
6	2017	12,673,108	6,986,366	1,235,895	0	1,921,794	2,953,783	4,629,505	1.184324	4					
7	2016	12,610,507	7,074,806	1,318,939	0	1,897,026	2,943,232	4,589,999	1.146616	4					
8	Five-Year Average								1.21827	3					
9															
10	*Notes*														
11	Figures Computed from STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION PROPRIETARY FUNDS														
12	Figures Computed from City of Fond Du Luc WATER SYSTEM COVERAGE ANALYSIS														
13															
14	All-In Coverage Formula = ((Operating Revenues + Depreciation) - (Operating Expenses + Non-Operating Expenses) - (Transfers-Out - Transfers-In)) / Debt Service Payments														

Figure 4:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Liquidity And Reserves												
2	Year	City	Un - restricted Cash Reserves	Re - placement / Repair Funds	Total	Assessment							
3	2021	Oshkosh	18,879,457	1293809	20,173,266	2							
4	2020	Oshkosh	18,121,815	1290191	19,412,006	3							
5	2019	Oshkosh	15,470,669	1281184	16,751,853	3							
6	2018	Oshkosh	7,713,656	1259382	8,973,038	3							
7	2017	Oshkosh	17,873,313	140,008	18,013,321	3							
8	Average	Oshkosh			16,664,697	3							
9	2021	Fund Du 1	455,118	0	455,118	6							
10	2020	Fund Du 1	1,022,060	0	1,022,060	4							
11	2019	Fund Du 1	1,894,558	0	1,894,558	4							
12	2018	Fund Du 1	1,897,679	0	1,897,679	4							
13	2017	Fund Du 1	1,381,743	0	1,381,743	4							
14	Average	Fund Du Lue			1,330,232	4							
15	2018	Kaukauna	1,796,282	1,621,880	3,418,162	4							
16	2017	Kaukauna	1948495	0	1,948,495	4							
17	Average	Kaukauna			2,683,329	4							
18	2021	Green Bay	10,029,788	0	10,029,788	3							
19	2020	Green Bay	6,344,292	0	6,344,292	3							
20	2019	Green Bay	5,524,272	0	5,524,272	3							
21	2018	Green Bay	5,052,127	0	5,052,127	3							
22	2017	Green Bay	4,369,873	0	4,369,873	4							
23	Average	Green Bay			6,264,070	3							
24													
25	Figures Computed from STATEMENT OF CASH FLOWS PROPRIETARY FUNDS												
26	Figures Computed from NOTES TO BASIC FINANCIAL STATEMENTS: RESTRICTED ASSETS												
27	Figures Computed from Pledged-Revenue Coverage												
28													
29	2019 - 2021 data is missing for the City of Kaukauna because the city combines cash flows for the electric utility and the water system utility.												
30													

Figure 5:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	City of Green Bay														
2	Year	Operating Revenues	Operating Expenses	Non-Operating Expenses	Transfers - In	Transfers - Out	Depreciation and Amortization	Debt Service	All-In Coverage	Initial Assessment					
3	2020	24,125,498	15,388,167	531,784	591,178	2,545,829	5,295,672	5,391,707	2.141542	1					
4	2019	22,814,089	15,607,850	1,186,508	1,325,622	2,394,972	5,228,702	5,530,057	1.840683	1					
5	2018	21,445,631	14,418,286	1,431,480	782,979	2,353,288	5,027,530	5,098,833	1.775521	1					
6	2017	20,193,476	13,555,357	2,005,224	638,822	2,297,587	4,994,158	4,150,166	1.919993	1					
7	2016	19,812,428	13,300,973	2,056,221	434,274	2,210,285	4,936,857	5,225,992	1.457346	2					
8	Five-Year Average								1.827017	1					
9															
10	*Notes*														
11	Figures Computed from STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION PROPRIETARY FUNDS														
12	Figures Computed from SUMMARY OF REVENUES, EXPENSES AND DEBT SERVICE COVERAGE														
13															
14	All-In Coverage Formula = ((Operating Revenues + Depreciation) - (Operating Expenses + Non-Operating Expenses) - (Transfers-Out - Transfers-In)) / Debt Service Payments														