

**ISD 709 - Duluth Public Schools, MN**

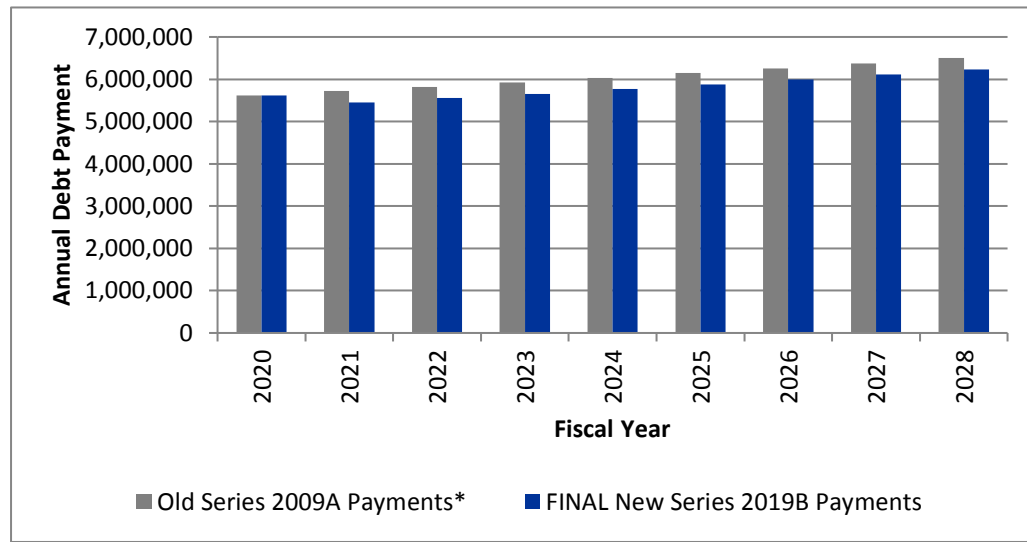
Date prepared: April 23, 2019



**ASSUMPTIONS**

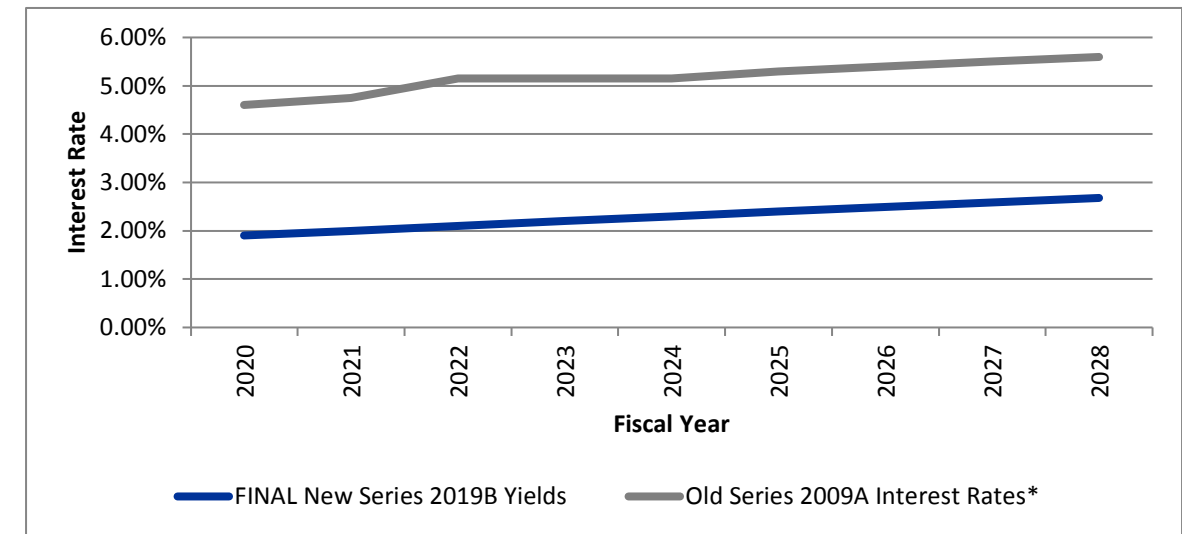
- (1) Series 2019B certificates will current refund the Taxable Full Term Certificates of Participation, Series 2009A; Dated Date of May 29, 2019
- (2) Series 2009A 2020-2028 maturities were callable on February 1, 2019 and will be current refunded with the 2019B Certificates on May 29, 2019
- (3) Below illustration is FINAL and reflects April 17, 2019 pricing results based on Moody's Ba1 Underlying Rating and Aa2 MN School Credit Enhancement rating

**SERIES 2019B: CURRENT REFUNDING OF 2009A FULL TERM COPs**



How do we achieve the savings shown on the left?

By exchanging old interest rates with new interest rates shown to the right.



Fiscal Year	Old Series 2009A Payments*	FINAL New Series 2019B Payments	Gross Savings (net of all costs)
2020	5,618,416	5,617,088	1,328
2021	5,719,205	5,450,000	269,205
2022	5,823,765	5,556,250	267,515
2023	5,923,618	5,658,250	265,368
2024	6,034,649	5,765,500	269,149
2025	6,146,167	5,882,000	264,167
2026	6,257,487	5,991,500	265,987
2027	6,374,365	6,108,500	265,865
2028	6,500,659	6,231,750	268,909
Totals	54,398,331	52,260,838	2,137,494

Maturity	FINAL New Series 2019B Yields	Old Series 2009A Interest Rates*
2020	1.90%	4.60%
2021	2.00%	4.75%
2022	2.10%	5.15%
2023	2.20%	5.15%
2024	2.30%	5.15%
2025	2.40%	5.30%
2026	2.49%	5.40%
2027	2.58%	5.50%
2028	2.68%	5.60%

\* Rates are prior to BABs subsidy

\* Payments are net of assumed 32.83% BABs subsidy

Date	Refunding Par Amount	Premium	Costs of Issuance / Rounding	Net Amount Refunded**	Interest Cost Savings	Rounding	Total Interest Cost Savings^	NPV Savings	Final Maturity	TIC %***
2/28/19	42,100,000	4,769,582.56	274,838.28	46,594,744	1,616,497.87	138.28	1,616,636.15	1,429,449.65	2028	2.71%
3/12/19	42,100,000	4,769,582.56	274,838.28	46,594,744	1,616,497.87	138.28	1,616,636.15	1,429,449.65	2028	2.71%
4/16/19	42,020,000	4,630,013.95	280,015.10	46,369,999	1,747,242.31	3,215.10	1,750,457.41	1,531,881.52	2028	2.72%
<b>FINAL</b> 4/17/19	<b>41,715,000</b>	<b>4,927,474.35</b>	<b>272,475.50</b>	<b>46,369,999</b>	<b>2,137,493.70</b>	<b>244.57</b>	<b>2,137,738.27</b>	<b>1,886,006.48</b>	<b>2028</b>	<b>2.56%</b>

\*\* Closing date of refunding certificates and 2009A Certificate Refunding date now align on May 29, 2019 as of the last two scenarios shown above.

\*\*\* True Interest Cost % of the 2009A Certificates was approximately 5.09%

^ Final interest cost savings per million of borrowing is \$51,246.27