# Warren County School District

# Refinancing Discussion

May 22, 2023

Prepared by:

**Jamie Doyle** 

Managing Director

8

**Melissa Hughes** 

Senior Managing Consultant

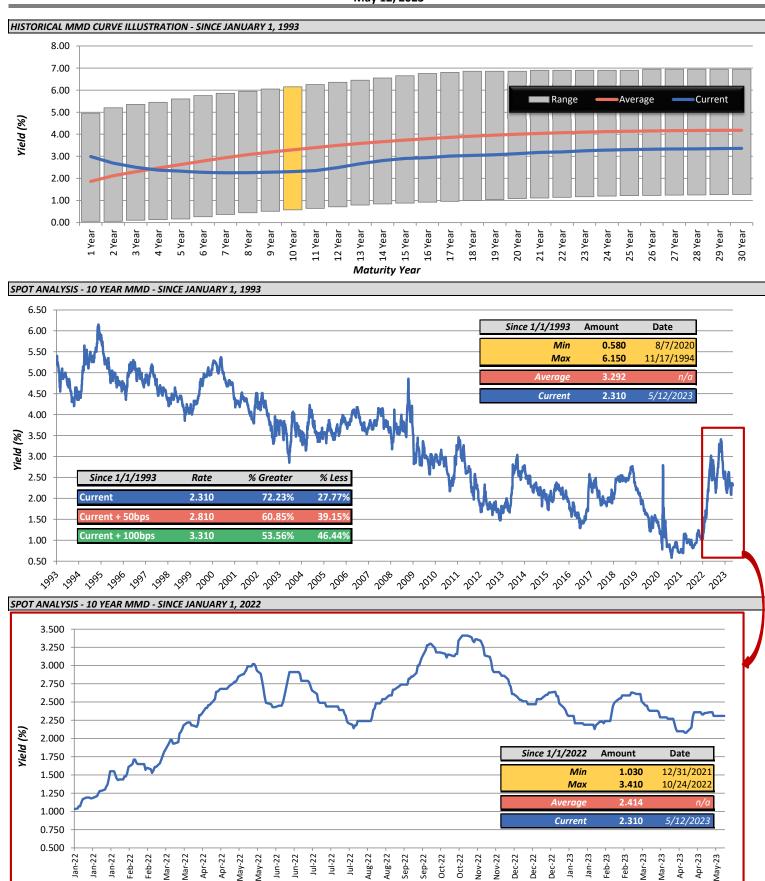


**PFM Financial Advisors LLC** 

100 Market Street Harrisburg, PA 17101 717.231.6265 (P) www.pfm.com

## **MUNICIPAL MARKET UPDATE**

May 12, 2023



### **Warren County School District**

# Series of 2023 Refinancing Opportunity Discussion

#### **Refinancing Opportunity**

- General Obligation Bonds, Series of 2018
  - \$8,435,000 currently outstanding
  - o Coupons range from 3.25%-3.75%
  - o Call date: November 1, 2023

#### **SAMPLE MOTION**

Resolved: The Board of School Directors of the Warren County School District, does hereby authorize the Administration to work with PFM Financial Advisors LLC as Independent Financial Advisor, Knox, McLaughlin Gornall & Sennett, P.C. as Bond Counsel and the local Solicitor to issue G.O. Bonds, Series of 2023 via a competitive internet auction for the purpose of refinancing the District's Outstanding General Obligation Bonds, Series of 2018 with a minimum net savings target of \$100,000.

#### **ESTIMATED TIMELINE**

|                  | Discussion at Committee     | May 22            |
|------------------|-----------------------------|-------------------|
| >                | Authorization to Proceed    | May 22 or later   |
| >                | Adopt Parameters Resolution | June 12 or later  |
| >                | Bond Sale (Lock in Rates)   | June 28 or later  |
| $\triangleright$ | Settlement                  | August 3 or later |

| Debt Service Re                   | equirem <u>ents</u> |                      |                                  |                                  |                                 |                     |                                |                                 |                                    |                                    |                                  |                                  |                        |                        |
|-----------------------------------|---------------------|----------------------|----------------------------------|----------------------------------|---------------------------------|---------------------|--------------------------------|---------------------------------|------------------------------------|------------------------------------|----------------------------------|----------------------------------|------------------------|------------------------|
| 1                                 | 2                   | 3                    | 4                                | 5                                | 6                               | 7                   | 8                              | 9                               | 10                                 | 11                                 | 12                               | 13                               | 14                     | 15                     |
| Fiscal                            | QZAB                |                      | G.O. Bonds                       |                                  | QZAB                            | G.O. Notes          |                                | G.O. Bonds                      | QZAB                               | QZAB                               |                                  | G.O. Bonds                       | G.O. Bonds             | Total                  |
| Year                              | Series of           | Series of            | Series of                        | Series of                        | Series of                       | Series of           | Series of                      | Series of                       |                                    | Series B of                        | Series of                        | Series of                        | Series A of            | Debt                   |
| Ended                             | 2011 (1)            | 2012(2)              | 2013                             | 2014                             | 2015                            | 2015                | 2016                           | 2017                            | 2017                               | 2017                               | 2018                             | 2019                             | 2019                   | Service                |
| 6/30/2023                         | 767,444             | 1,858,075            | 7,100                            | 15,750                           | 125,221                         | 711,159             | 172,000                        | 350,984                         | 172,000                            | 346,000                            | 309,393                          | 335,395                          | 253,590                | 5,424,110              |
| 6/30/2024                         | 749,444             | 1,852,788            | 6,980                            | 35,300                           | 124,151                         | 705,745             | 172,000                        | 350,878                         | 172,000                            | 346,000                            | 309,268                          | 334,345                          | 256,215                | 5,415,114              |
| 6/30/2025                         | 684,000             | 2,559,846            | 6,860                            | 59,125                           | 124,151                         |                     | 172,000                        | 350,753                         | 172,000                            | 346,000                            | 309,105                          | 338,220                          | 253,715                | 5,375,774              |
| 6/30/2026                         | 666,000             | 2,016,867            | 60,900                           | 96,863                           | 124,151                         |                     | 172,000                        | 350,628                         | 172,000                            | 346,000                            | 308,943                          | 341,945                          | 697,465                | 5,353,761              |
| 6/30/2027<br>6/30/2028            | 648,000<br>630,000  | 639,871<br>599,733   |                                  | 137,700                          | 124,151<br>124,151              |                     | 172,000<br>172,000             | 350,503<br>350,378              | 172,000<br>172,000                 | 346,000<br>346,000                 | 308,780<br>308,618               | 877,420<br>1,081,345             | 1,365,615<br>1,332,015 | 5,142,040<br>5,116,239 |
| 6/30/2029                         | 612,000             | 559,595              |                                  |                                  | 124,151                         |                     | 172,000                        | 350,376                         | 172,000                            | 346,000                            | 308,455                          | 1,140,620                        | 1,293,665              | 5,110,239              |
| 6/30/2030                         | 594,000             | 514,639              |                                  |                                  | 124,151                         |                     | 173,000                        | 350,086                         | 172,000                            | 346,000                            | 308,293                          | 1,217,045                        | 1,265,515              | 5,064,729              |
| 6/30/2031                         |                     | 479,501              |                                  |                                  | 124,151                         |                     | 173,000                        | 349,934                         | 172,000                            | 346,000                            | 308,130                          | 1,728,645                        | 1,226,995              | 4,908,356              |
| 6/30/2032                         |                     | 439,363              |                                  |                                  | 124,151                         |                     | 173,000                        | 349,781                         | 172,000                            | 346,000                            | 322,968                          | 1,775,158                        | 1,197,824              | 4,900,244              |
| 6/30/2033                         |                     | 399,225              |                                  |                                  | 124,151                         |                     |                                | 349,629                         |                                    |                                    | 1,017,318                        | 1,837,638                        | 1,168,193              | 4,896,152              |
| 6/30/2034                         |                     | 359,087              |                                  |                                  | 284,121                         |                     |                                | 349,476                         |                                    |                                    | 1,223,723                        | 1,437,640                        | 1,157,881              | 4,811,927              |
| 6/30/2035                         |                     |                      |                                  |                                  | 2,775,821                       |                     |                                | 845,475                         |                                    |                                    | 1,276,593                        |                                  |                        | 4,897,888              |
| 6/30/2036                         |                     |                      |                                  |                                  | 2,777,621                       |                     |                                | 847,275                         |                                    |                                    | 1,276,058                        |                                  |                        | 4,900,953              |
| 6/30/2037<br>6/30/2038            |                     |                      |                                  |                                  | 2,771,910                       |                     |                                | 853,288<br>2,892,200            |                                    |                                    | 1,278,250<br>2,041,813           |                                  |                        | 4,903,448<br>4,934,013 |
| 6/30/2039                         |                     |                      |                                  |                                  |                                 |                     |                                | 2,897,700                       |                                    |                                    | 1,665,188                        |                                  |                        | 4,562,888              |
| 6/30/2040                         |                     |                      |                                  |                                  |                                 |                     |                                | 2,894,788                       |                                    |                                    | 1,000,100                        |                                  |                        | 2,894,788              |
| TOTAL                             | 5,350,889           | 12,278,590           | 81,840                           | 344,738                          | 9,976,206                       | 1,416,904           | 1,723,000                      |                                 | 1,720,000                          | 3,460,000                          | 12,880,890                       | 12,445,415                       | 11,468,688             | 88,581,149             |
| TOTAL                             | 0,000,000           | 12,270,000           | 01,040                           | 044,700                          | 0,010,200                       | 1,410,004           | 1,720,000                      | 10,400,001                      | 1,720,000                          | 0,400,000                          | 12,000,000                       | 12,440,410                       | 11,400,000             | 00,001,140             |
| Local Effort Red                  | quirements          |                      |                                  |                                  |                                 |                     |                                |                                 |                                    |                                    |                                  |                                  |                        |                        |
| 16                                | 17                  | 18                   | 19                               | 20                               | 21                              | 22                  | 23                             | 24                              | 25                                 | 26                                 | 27                               | 28                               | 29                     | 30                     |
| Fiscal                            | QZAB                | QZAB                 | G.O. Bonds                       | G.O. Bonds                       | QZAB                            | G.O. Notes          | QZAB                           | G.O. Bonds                      | QZAB                               | QZAB                               | G.O. Bonds                       | G.O. Bonds                       | G.O. Bonds             | Total                  |
| Year                              | Series of           | Series of            | Series of                        | Series of                        | Series of                       | Series of           | Series of                      | Series of                       |                                    | Series B of                        | Series of                        | Series of                        | Series A of            | Local                  |
| Ended                             | 2011 (1)            | 2012(2)              | 2013                             | 2014                             | 2015                            | 2015                | 2016                           | 2017                            | 2017                               | 2017                               | 2018                             | 2019                             | 2019                   | Effort                 |
| 6/30/2023                         | 578,055             | 1,504,560            | 5,899                            | 15,075                           | 106,011                         | 540,354             | 145,615                        | 304,044                         | 138,247                            | 268,941                            | 240,487                          | 321,028                          | 210,678                | 4,378,992              |
| 6/30/2024                         | 564,497             | 1,500,279            | 5,799                            | 33,788                           | 105,106                         | 536,240             | 145,615                        | 303,952                         | 138,247                            | 268,941                            | 240,389                          | 320,023                          | 212,859                | 4,375,733              |
| 6/30/2025                         | 515,203             | 2,072,812            | 5,699                            | 56,592                           | 105,106                         |                     | 145,615                        | 303,843                         | 138,247                            | 268,941                            | 240,263                          | 323,732                          | 210,782                | 4,386,834              |
| 6/30/2026<br>6/30/2027            | 501,645<br>488,087  | 1,633,140<br>518,130 | 50,595                           | 92,713<br>131,801                | 105,106<br>105,106              |                     | 145,615<br>145,615             | 303,735<br>303,627              | 138,247<br>138,247                 | 268,941<br>268,941                 | 240,137<br>240,010               | 327,297<br>839,834               | 579,441<br>1,134,528   | 4,386,611<br>4,313,925 |
| 6/30/2028                         | 474,529             | 485,629              |                                  | 131,001                          | 105,106                         |                     | 145,615                        | 303,519                         | 138,247                            | 268,941                            | 239,884                          | 1,035,023                        | 1,106,614              | 4,313,923              |
| 6/30/2029                         | 460.971             | 453,127              |                                  |                                  | 105,106                         |                     | 145,615                        | 303,398                         | 138,247                            | 268.941                            | 239,758                          | 1.091.759                        | 1,074,753              | 4,281,674              |
| 6/30/2030                         | 447,413             | 416,724              |                                  |                                  | 105,106                         |                     | 146,461                        | 303,266                         | 138,247                            | 268,941                            | 239,632                          | 1,164,910                        | 1,051,367              | 4,282,066              |
| 6/30/2031                         | •                   | 388,271              |                                  |                                  | 105,106                         |                     | 146,461                        | 303,134                         | 138,247                            | 268,941                            | 239,505                          | 1,654,594                        | 1,019,365              | 4,263,625              |
| 6/30/2032                         |                     | 355,770              |                                  |                                  | 105,106                         |                     | 146,461                        | 303,002                         | 138,247                            | 268,941                            | 251,038                          | 1,699,114                        | 995,130                | 4,262,809              |
| 6/30/2033                         |                     | 323,269              |                                  |                                  | 105,106                         |                     |                                | 302,870                         |                                    |                                    | 790,747                          | 1,758,918                        | 970,513                | 4,251,422              |
| 6/30/2034                         |                     | 290,767              |                                  |                                  | 240,536                         |                     |                                | 302,738                         |                                    |                                    | 951,183                          | 1,376,055                        | 961,946                | 4,123,225              |
| 6/30/2035                         |                     |                      |                                  |                                  | 2,350,000                       |                     |                                | 732,403<br>733,962              |                                    |                                    | 992,278<br>991,862               |                                  |                        | 4,074,681              |
| 6/30/2036<br>6/30/2037            |                     |                      |                                  |                                  | 2,351,524<br>2,346,689          |                     |                                | 733,902                         |                                    |                                    | 993,566                          |                                  |                        | 4,077,348<br>4,079,426 |
| 6/30/2038                         |                     |                      |                                  |                                  | 2,040,000                       |                     |                                | 2,505,402                       |                                    |                                    | 1,587,073                        |                                  |                        | 4,079,420              |
| 6/30/2039                         |                     |                      |                                  |                                  |                                 |                     |                                | 2,510,167                       |                                    |                                    | 1,294,328                        |                                  |                        | 3,804,494              |
| 6/30/2040                         |                     |                      |                                  |                                  |                                 |                     |                                | 2,507,644                       |                                    |                                    | .,,                              |                                  |                        | 2,507,644              |
| TOTAL                             | 4,030,398           | 9,942,478            | 67,991                           | 329,970                          | 8,445,820                       | 1,076,594           | 1,458,686                      | 13,369,877                      | 1,382,465                          | 2,689,411                          | 10,012,140                       | 11,912,285                       | 9,527,975              | 74,246,091             |
| Principal *:                      | 5,770,000           | 16,785,000           | 70,000                           | 300,000                          | 8,414,000                       | 699,000             | 1,551,000                      | 9,895,000                       | 1,548,000                          | 3,114,000                          | 8,435,000                        | 9,815,000                        | 9,825,000              | 76,221,000             |
| Fillicipal .                      | 3,770,000           | 10,700,000           | 70,000                           | 300,000                          | 0,414,000                       | 099,000             | 1,001,000                      | 3,033,000                       | 1,040,000                          | 3,114,000                          | 0,400,000                        | 9,010,000                        | 3,023,000              | 10,221,000             |
| •                                 |                     |                      |                                  |                                  |                                 | 34.93%              | 00.040/                        | 19.45%                          | 28.54%                             | 32.39%                             | 32.39%                           | 6.23%                            | 04.040/                |                        |
| PE%:                              | 35.89%              | 27.67%               | 24.61%                           | 6.23%                            | 22.31%                          |                     | 22.31%                         |                                 |                                    |                                    |                                  | 0.2370                           | 24.61%                 |                        |
| PE%:<br>PE% Status:               | 35.89%<br>Temporary | 27.67%<br>Permanent  | 24.61%<br>Temporary              | 6.23%<br>Temporary               | 22.31%<br>Temporary             | Permanent           | Temporary                      | Estimated                       | Temporary                          | Estimated                          | Estimated                        | Temporary                        | Estimated              |                        |
|                                   |                     |                      |                                  |                                  |                                 |                     |                                |                                 |                                    |                                    |                                  |                                  |                        |                        |
| PE% Status:<br>AR%:               | Temporary           | Permanent            | Temporary                        | Temporary                        | Temporary                       | Permanent           | Temporary                      | Estimated                       | Temporary                          | Estimated                          | Estimated                        | Temporary                        | Estimated              |                        |
| PE% Status:<br>AR%:<br>Call Date: | Temporary<br>68.76% | Permanent<br>68.76%  | Temporary<br>68.76%<br>5/15/2018 | Temporary<br>68.76%<br>5/15/2019 | Temporary<br>68.76%<br>9/1/2025 | Permanent<br>68.76% | Temporary<br>68.76%<br>Anytime | Estimated<br>68.76%<br>9/1/2022 | Temporary<br>68.76%<br>Noncallable | Estimated<br>68.76%<br>Noncallable | Estimated<br>68.76%<br>11/1/2023 | Temporary<br>68.76%<br>5/15/2024 | Estimated 68.76%       |                        |

<sup>(1)</sup> QZAB debt service is net of Fed. Reimbursement Subsidy 5.138% & est. sinking fund earnings of 2.00%

<sup>(1</sup>H) Assumes Fed. Reimbursement Subsidy for 3/1/2020 & 9/1/2020 payment reduced by 5.90% (\$24,554.04 per payment)

<sup>(11)</sup> Assumes Fed. Reimbursement Subsidy for 3/1/2021 & 9/1/2021 payment reduced by 5.70% (\$23,722.15 per payment)

<sup>(1</sup>K) Assumes Fed. Reimbursement Subsidy for 3/1/2022-3/1/2023 payment reduced by 5.70% (23,722.15 per payment)- budget estimate only. Subject to final sequestration %.

(2) QZAB debt service is net of Fed. Reimbursement Subsidy 4.185% & sinking fund earnings of 3.14%

(2H) Assumes Fed. Reimbursement Subsidy for 11/1/2020 & 5/1/2021 payments reduced by 5.70% (\$27,647.37 per payment)- budget estimate only. Subject to final sequestration %.

(2I) Assumes Fed. Reimbursement Subsidy for 11/1/2021 - 5/1/2024 payments reduced by 5.70% (\$27,647.37 per payment)- budget estimate only. Subject to final sequestration %.

|              |                 | OOL DISTRICT |                 |               |   |                  |                 |
|--------------|-----------------|--------------|-----------------|---------------|---|------------------|-----------------|
| SERIES OF 20 | )18             |              |                 |               | Optional R                              | edemption: Nov   | ember 1 2023    |
|              |                 |              |                 |               | Орионан                                 | cacinplion. ivov | 0111001 1, 2020 |
| 1            | 2               | 2 3          | 4               | 5             | 6                                       | 7                | 8               |
|              |                 |              |                 | Semi-Annual   | Fiscal Year                             | State            | Local           |
| <u>Date</u>  | <u>Principa</u> | <u>Rate</u>  | <u>Interest</u> | Debt Service  | Debt Service                            | <u>Aid</u>       | <u>Effort</u>   |
|              |                 |              |                 |               |   |                  |                 |
| 11/1/2023    |                 |              | 152,133.75      | 152,133.75    |   |                  |                 |
| 5/1/2024     | 5,000           | 3.250        | 152,133.75      | 157,133.75    | 309,267.50                              | 68,878.09        | 240,389.41      |
| 11/1/2024    | -,              |              | 152,052.50      | 152,052.50    | , | ,                | ,               |
| 5/1/2025     | 5,000           | 3.250        | 152,052.50      | 157,052.50    | 309,105.00                              | 68,841.90        | 240,263.10      |
| 11/1/2025    | -,              |              | 151,971.25      | 151,971.25    | , | ,-               | ,               |
| 5/1/2026     | 5,000           | 3.250        | 151,971.25      | 156,971.25    | 308,942.50                              | 68,805.71        | 240,136.79      |
| 11/1/2026    | -,              |              | 151,890.00      | 151,890.00    | ,                                       | ,                | ,               |
| 5/1/2027     | 5,000           | 3.250        | 151,890.00      | 156,890.00    | 308,780.00                              | 68,769.52        | 240,010.48      |
| 11/1/2027    | ,               |              | 151,808.75      | 151,808.75    | ,                                       | ,                | •               |
| 5/1/2028     | 5,000           | 3.250        | 151,808.75      | 156,808.75    | 308,617.50                              | 68,733.33        | 239,884.17      |
| 11/1/2028    |                 |              | 151,727.50      | 151,727.50    |   |                  |                 |
| 5/1/2029     | 5,000           | 3.250        | 151,727.50      | 156,727.50    | 308,455.00                              | 68,697.14        | 239,757.86      |
| 11/1/2029    | ,               |              | 151,646.25      | 151,646.25    | ,                                       | ,                | •               |
| 5/1/2030     | 5,000           | 3.250        | 151,646.25      | 156,646.25    | 308,292.50                              | 68,660.94        | 239,631.56      |
| 11/1/2030    |                 |              | 151,565.00      | 151,565.00    |   |                  |                 |
| 5/1/2031     | 5,000           | 3.250        | 151,565.00      | 156,565.00    | 308,130.00                              | 68,624.75        | 239,505.25      |
| 11/1/2031    |                 |              | 151,483.75      | 151,483.75    |   |                  |                 |
| 5/1/2032     | 20,000          | 3.250        | 151,483.75      | 171,483.75    | 322,967.50                              | 71,929.27        | 251,038.23      |
| 11/1/2032    |                 |              | 151,158.75      | 151,158.75    |   |                  |                 |
| 5/1/2033     | 715,000         | 3.300        | 151,158.75      | 866,158.75    | 1,017,317.50                            | 226,570.48       | 790,747.02      |
| 11/1/2033    |                 |              | 139,361.25      | 139,361.25    |   |                  |                 |
| 5/1/2034     | 945,000         | 3.400        | 139,361.25      | 1,084,361.25  | 1,223,722.50                            | 272,539.69       | 951,182.81      |
| 11/1/2034    |                 |              | 123,296.25      | 123,296.25    |   |                  |                 |
| 5/1/2035     | 1,030,000       | 3.450        | 123,296.25      | 1,153,296.25  | 1,276,592.50                            | 284,314.56       | 992,277.94      |
| 11/1/2035    | , ,             |              | 105,528.75      | 105,528.75    | , ,                                     | ,                | •               |
| 5/1/2036     | 1,065,000       | 3.550        | 105,528.75      | 1,170,528.75  | 1,276,057.50                            | 284,195.41       | 991,862.09      |
| 11/1/2036    |                 |              | 86,625.00       | 86,625.00     |   |                  |                 |
| 5/1/2037     | 1,105,000       | 3.750        | 86,625.00       | 1,191,625.00  | 1,278,250.00                            | 284,683.71       | 993,566.29      |
| 11/1/2037    | . ,             |              | 65,906.25       | 65,906.25     | ,                                       | •                | ,               |
| 5/1/2038     | 1,910,000       | 3.750        | 65,906.25       | 1,975,906.25  | 2,041,812.50                            | 454,739.49       | 1,587,073.01    |
| 11/1/2038    |                 |              | 30,093.75       |               |   |                  |                 |
| 5/1/2039     | 1,605,000       | 3.750        | 30,093.75       | 1,635,093.75  | 1,665,187.50                            | 370,859.97       | 1,294,327.53    |
| TOTALS       | 8,435,000       | 1            | 4,136,497.50    | 12,571,497.50 | 12,571,497.50                           | 2,799,843.97     | 9,771,653.53    |
| PE%          | 32.39%          | (Temporary)  |                 |               |   |                  |                 |
| AR%          | 68.76%          | (2022-2023)  |                 |               |   |                  |                 |

5

Net

22.27% Effective Reimbursement

#### WARREN COUNTY SCHOOL DISTRICT

UNRESTRICTED YIELD ESCROW

1 2 3 4 5 6 7 8 9 10

SERIES OF 2018 Optional Redemption Date: November 1, 2023

|             | E                | SCROW REG  | UIREMENTS              |              | ESCROW EARNINGS |        |                 |              |                |  |
|-------------|------------------|------------|------------------------|--------------|-----------------|--------|-----------------|--------------|----------------|--|
|             |                  |            | _                      |              | SETTLE 8/3/2    |        |                 |              |                |  |
| <u>Date</u> | <u>Principal</u> | Interest   | Escrow<br><u>Agent</u> | Required     | <u>Par</u>      | Coupon | <u>Earnings</u> | Cash Flow    | <u>Balance</u> |  |
| 11/1/2023   | 8,435,000.00     | 152,133.75 |                        | 8,587,133.75 | 8,482,057.00    | 5.120  | 107,083.06      | 8,589,140.06 | 2,006.31       |  |
| TOTALS      | 8,435,000.00     | 152,133.75 | 0.00                   | 8,587,133.75 | 8,482,057.00    |        | 107,083.06      | 8,589,140.06 |                |  |

Actual Escrow Yield 5.198722 Actual Escrow Cost 8,482,057.00

Maximum Escrow Yield (Yield on new Bonds) 3.209670
Perfect Escrow Cost 8,522,545.40

**Difference** 40,488.40

| WARREN COUNTY SCHOOL DISTRICT |                  |                           |                     |                             |                             |                 |                          |                          |                |  |
|-------------------------------|------------------|---------------------------|---------------------|-----------------------------|-----------------------------|-----------------|--------------------------|--------------------------|----------------|--|
| SERIES OF 2                   |                  |                           |                     | ILLUSTR                     | ATIVE 2.00%                 | SAVINGS         |                          | Settle                   | 8/3/2023       |  |
| REFUNDS T                     | HE SERIES        | S OF 2018                 |                     |                             |                             |                 |                          | Dated                    | 8/3/2023       |  |
| 1                             | 2                | 3                         | 4                   | 5                           | 6                           | 7               | 8                        | 9                        | 10             |  |
| <u>Date</u>                   | <u>Principal</u> | <u>Rate</u>               | <u>Interest</u>     | Semi-Annual<br>Debt Service | Fiscal Year<br>Debt Service |                 | Proposed<br>Local Effort | Existing<br>Local Effort | <u>Savings</u> |  |
| 44/4/2022                     |                  |                           | 70.004.00           | 70.004.00                   |                             |                 |                          |                          |                |  |
| 11/1/2023                     | F 000            | 0.000                     | 70,061.69           | 70,061.69                   | 040 000 00                  | 40,000,04       | 400 705 70               | 040 000 44               | 70.050.00      |  |
| 5/1/2024                      | 5,000            | 3.620                     | 143,308.00          | 148,308.00                  | 218,369.69                  | 48,633.91       | 169,735.78               | 240,389.41               | 70,653.63      |  |
| 11/1/2024                     | F 000            | 0.040                     | 143,217.50          | 143,217.50                  | 004 405 00                  | 04.000.55       | 000 500 45               | 040,000,40               | 40.704.05      |  |
| 5/1/2025                      | 5,000            | 3.310                     | 143,217.50          | 148,217.50                  | 291,435.00                  | 64,906.55       | 226,528.45               | 240,263.10               | 13,734.65      |  |
| 11/1/2025                     | <b>5</b> 000     | 0.440                     | 143,134.75          | 143,134.75                  | 004 000 50                  | 04.000.00       | 000 000 04               | 040 400 70               | 10.700.00      |  |
| 5/1/2026                      | 5,000            | 3.140                     | 143,134.75          | 148,134.75                  | 291,269.50                  | 64,869.69       | 226,399.81               | 240,136.79               | 13,736.98      |  |
| 11/1/2026                     | = 000            |                           | 143,056.25          | 143,056.25                  | 004 440 50                  | 04.004.70       |                          | 0.40.040.40              | 10 700 71      |  |
| 5/1/2027                      | 5,000            | 3.030                     | 143,056.25          | 148,056.25                  | 291,112.50                  | 64,834.72       | 226,277.78               | 240,010.48               | 13,732.71      |  |
| 11/1/2027                     |                  |                           | 142,980.50          | 142,980.50                  |                             |                 |                          |                          |                |  |
| 5/1/2028                      | 5,000            | 3.000                     | 142,980.50          | 147,980.50                  | 290,961.00                  | 64,800.98       | 226,160.02               | 239,884.17               | 13,724.16      |  |
| 11/1/2028                     |                  |                           | 142,905.50          | 142,905.50                  |                             |                 |                          |                          |                |  |
| 5/1/2029                      | 5,000            | 2.950                     | 142,905.50          | 147,905.50                  | 290,811.00                  | 64,767.58       | 226,043.42               | 239,757.86               | 13,714.44      |  |
| 11/1/2029                     |                  |                           | 142,831.75          | 142,831.75                  |                             |                 |                          |                          |                |  |
| 5/1/2030                      | 5,000            | 2.920                     | 142,831.75          | 147,831.75                  | 290,663.50                  | 64,734.73       | 225,928.77               | 239,631.56               | 13,702.78      |  |
| 11/1/2030                     |                  |                           | 142,758.75          | 142,758.75                  |                             |                 |                          |                          |                |  |
| 5/1/2031                      | 20,000           | 2.940                     | 142,758.75          | 162,758.75                  | 305,517.50                  | 68,042.91       | 237,474.59               | 239,505.25               | 2,030.66       |  |
| 11/1/2031                     |                  |                           | 142,464.75          | 142,464.75                  |                             |                 |                          |                          |                |  |
| 5/1/2032                      | 35,000           | 2.970                     | 142,464.75          | 177,464.75                  | 319,929.50                  | 71,252.66       | 248,676.84               | 251,038.23               | 2,361.40       |  |
| 11/1/2032                     |                  |                           | 141,945.00          | 141,945.00                  |                             |                 |                          |                          |                |  |
| 5/1/2033                      | 730,000          | 2.970                     | 141,945.00          | 871,945.00                  | 1,013,890.00                | 225,807.13      | 788,082.87               | 790,747.02               | 2,664.15       |  |
| 11/1/2033                     |                  |                           | 131,104.50          | 131,104.50                  |                             |                 |                          |                          |                |  |
| 5/1/2034                      | 960,000          | 3.010                     | 131,104.50          | 1,091,104.50                | 1,222,209.00                | 272,202.62      | 950,006.38               | 951,182.81               | 1,176.42       |  |
| 11/1/2034                     |                  |                           | 116,656.50          | 116,656.50                  |                             |                 |                          |                          |                |  |
| 5/1/2035                      | 1,040,000        | 3.150                     | 116,656.50          | 1,156,656.50                | 1,273,313.00                | 283,584.17      | 989,728.83               | 992,277.94               | 2,549.11       |  |
| 11/1/2035                     |                  |                           | 100,276.50          | 100,276.50                  |                             |                 |                          |                          |                |  |
| 5/1/2036                      | 1,075,000        | 3.330                     | 100,276.50          | 1,175,276.50                | 1,275,553.00                | 284,083.05      | 991,469.95               | 991,862.09               | 392.14         |  |
| 11/1/2036                     |                  |                           | 82,377.75           | 82,377.75                   |                             |                 |                          |                          |                |  |
| 5/1/2037                      | 1,110,000        | 3.480                     | 82,377.75           | 1,192,377.75                | 1,274,755.50                | 283,905.44      | 990,850.06               | 993,566.29               | 2,716.23       |  |
| 11/1/2037                     |                  |                           | 63,063.75           | 63,063.75                   |                             |                 |                          |                          |                |  |
| 5/1/2038                      | 1,910,000        | 3.570                     | 63,063.75           | 1,973,063.75                | 2,036,127.50                | 453,473.37      | 1,582,654.13             | 1,587,073.01             | 4,418.87       |  |
| 11/1/2038                     |                  |                           | 28,970.25           | 28,970.25                   |                             |                 |                          |                          |                |  |
| 5/1/2039                      | 1,605,000        | 3.610                     | 28,970.25           | 1,633,970.25                | 1,662,940.50                | 370,359.53      | 1,292,580.97             | 1,294,327.53             | 1,746.56       |  |
|                               |                  |                           |                     |                             |                             |                 |                          |                          | 4-0            |  |
| TOTALS                        | 8,520,000        | ;                         | 3,828,857.69        | 12,348,857.69               | 12,348,857.69               | 2,750,259.05    | 9,598,598.64             | 9,771,653.53             | 173,054.89     |  |
| PE%<br>AR%                    | 32.39%<br>68.76% | (Estimated)<br>(2022-2023 |                     |                             |                             |                 | Present                  | Value of 0.10%           | 90,814.58      |  |
| , 11 1 / 0                    | 00.1070          | \_022-2020                | 7)                  |                             |                             | Savings Alloca  | ation                    | Amount                   | Percentage     |  |
| Net                           | 22.27%           | Effective D               | eimbursement        |                             |                             | School District |                          | 173,054.89               | 2.05%          |  |
| , , , ,                       | LL.LI /0         | Encouve No                | Jii iibai serrierit |                             |                             | State's Share   | . o onare                | 49,584.92                | 0.59%          |  |
|                               |                  |                           |                     |                             |                             | Total Savings   |                          | 222,639.81               | 2.64%          |  |
|                               |                  |                           |                     |                             |                             | . Juli Javings  |                          | 222,000.01               | 2.04 /0        |  |



#### Disclosures:

PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company. This material is for general information purposes only and is not intended to provide or give a specific recommendation. Financial advisory services are provided by PFM Financial Advisors LLC which is a registered municipal advisor with the Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) under the Dodd-Frank Act of 2010. Swap advisory services are provided by PFM Swap Advisors LLC which is registered as a municipal advisor with both the MSRB and SEC, a commodity trading advisor with the Commodity Futures Trading Commission, and a member of the National Futures Association. Consulting services are provided through PFM Group Consulting LLC. PFM financial modeling platform for strategic forecasting is provided through PFM Solutions LLC. For more information regarding PFM's services or entities, please visit www.pfm.com.

The information and any analyses contained in this presentation are taken from, or based upon, information obtained from the recipient or from publicly available sources, the completeness and accuracy of which has not been independently verified, and cannot be assured by PFM. The information and any analyses in these materials reflect prevailing conditions and PFM's views as of this date, all of which are subject to change. To the extent projections and financial analyses are set forth herein, they may be based on estimated financial performance prepared by or in consultation with the recipient and are intended only to suggest reasonable ranges of results. Opinions, results, and data presented are not indicative of future performance. Actual rates may vary based upon market conditions at the time of pricing. The printed presentation is incomplete without reference to the oral presentation or other written materials that supplement it. To the extent permitted by applicable law, no employee or officer of PFM's financial advisory business, nor any of PFM's affiliated companies, accept any liability whatsoever for any direct or consequential loss arising from negligence or from any use of this presentation or its contents. Any municipal financial product or financial strategy referenced may involve significant risks, including, but not limited to: market, interest rate, or credit risk, and may not be suitable for all clients. The ultimate decision to proceed with any transaction rest solely with the client.