State of Illinois
General Obligation Refunding Bonds, Series A of September 2018
Annual Debt Service Savings \& Refunding vs. Refunded Cumulative Amortization Test

| Year End | Refunded Bond Debt Service ${ }^{1}$ |  |  | Refunding Bond Debt Service |  |  | Savings | Cumulative Amortization Compare |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principal | Interest | Total P\&I | Principal | Net <br> Interest | Total P\&I | Savings or (Cost) | Cumulative Refunded | Cumulative Refunding | Ahead (Behind) |
| 06/30/19 | - | 35,161,050.00 | 35,161,050.00 | - | 18,344,300.00 | 18,344,300.00 | 16,816,750.00 | - | - | - |
| 06/30/20 | - | 48,498,000.00 | 48,498,000.00 | - | 32,058,000.00 | 32,058,000.00 | 16,440,000.00 | - | - | - |
| 06/30/21 | 32,500,000.00 | 46,746,683.36 | 79,246,683.36 | 42,350,000.00 | 30,999,250.00 | 73,349,250.00 | 5,897,433.36 | 32,500,000 | 42,350,000 | 9,850,000 |
| 06/30/22 | 66,300,000.00 | 42,298,339.04 | 108,598,339.04 | 74,625,000.00 | 28,074,875.00 | 102,699,875.00 | 5,898,464.04 | 98,800,000 | 116,975,000 | 18,175,000 |
| 06/30/23 | 79,500,000.00 | 36,228,006.04 | 115,728,006.04 | 85,765,000.00 | 24,065,125.00 | 109,830,125.00 | 5,897,881.04 | 178,300,000 | 202,740,000 | 24,440,000 |
| 06/30/24 | 64,700,000.00 | 30,599,543.68 | 95,299,543.68 | 69,215,000.00 | 20,190,625.00 | 89,405,625.00 | 5,893,918.68 | 243,000,000 | 271,955,000 | 28,955,000 |
| 06/30/25 | 18,400,000.00 | 27,864,795.36 | 46,264,795.36 | 22,470,000.00 | 17,898,500.00 | 40,368,500.00 | 5,896,295.36 | 261,400,000 | 294,425,000 | 33,025,000 |
| 06/30/26 | 18,400,000.00 | 26,377,523.32 | 44,777,523.32 | 22,095,000.00 | 16,784,375.00 | 38,879,375.00 | 5,898,148.32 | 279,800,000 | 316,520,000 | 36,720,000 |
| 06/30/27 | 30,800,000.00 | 24,222,056.68 | 55,022,056.68 | 33,735,000.00 | 15,388,625.00 | 49,123,625.00 | 5,898,431.68 | 310,600,000 | 350,255,000 | 39,655,000 |
| 06/30/28 | 51,300,000.00 | 20,627,816.04 | 71,927,816.04 | 52,805,000.00 | 13,225,125.00 | 66,030,125.00 | 5,897,691.04 | 361,900,000 | 403,060,000 | 41,160,000 |
| 06/30/29 | 98,200,000.00 | 13,953,952.32 | 112,153,952.32 | 98,200,000.00 | 9,450,000.00 | 107,650,000.00 | 4,503,952.32 | 460,100,000 | 501,260,000 | 41,160,000 |
| 06/30/30 | 41,800,000.00 | 9,055,654.32 | 50,855,654.32 | 41,800,000.00 | 5,950,000.00 | 47,750,000.00 | 3,105,654.32 | 501,900,000 | 543,060,000 | 41,160,000 |
| 06/30/31 | 31,400,000.00 | 6,237,381.64 | 37,637,381.64 | 31,400,000.00 | 4,120,000.00 | 35,520,000.00 | 2,117,381.64 | 533,300,000 | 574,460,000 | 41,160,000 |
| 06/30/32 | 7,500,000.00 | 4,987,210.96 | 12,487,210.96 | 7,500,000.00 | 3,147,500.00 | 10,647,500.00 | 1,839,710.96 | 540,800,000 | 581,960,000 | 41,160,000 |
| 06/30/33 | 11,300,000.00 | 4,176,216.68 | 15,476,216.68 | 11,300,000.00 | 2,677,500.00 | 13,977,500.00 | 1,498,716.68 | 552,100,000 | 593,260,000 | 41,160,000 |
| 06/30/34 | 47,900,000.00 | 1,290,585.68 | 49,190,585.68 | 47,900,000.00 | 1,197,500.00 | 49,097,500.00 | 93,085.68 | 600,000,000 | 641,160,000 | Matured |
| Total | 600,000,000.00 | 378,324,815.12 | 978,324,815.12 | 641,160,000.00 | 243,571,300.00 | 884,731,300.00 | 93,593,515.12 |  |  |  |

 adjusted to include a post-tax reform gross-up that became effective in 2018.

| PV Settlement Date |  |  | $\begin{array}{r} 09 / 05 / 18 \\ 4.19 \% \end{array}$ |
| :---: | :---: | :---: | :---: |
|  | Par Amount | Future Value | Present Value |
| Refunded | 600,000,000.00 | 978,324,815.12 | 751,081,285.96 |
| Refunding | (641,160,000.00) | (884,731,300.00) | (673,395,059.12) |
| Savings | (41,160,000.00) | 93,593,515.12 | 77,686,226.84 |
| Present Value Savings as a Percentage of Refunded Bonds Present Value Savings as a Percentage of Refunding Bonds |  |  | $\begin{aligned} & \text { 12.95\% } \\ & \text { 12.12\% } \end{aligned}$ |

Weighted Average Maturity Comparison:

| Refunded | Refunding |  | Lengthen <br> or (Shorten) |
| :---: | :---: | :---: | :---: |
|  | 7.815 | $\mathbf{7 . 5 9 8}$ |  |

State of Illinois
General Obligation Refunding Bonds, Series B of September 2018

## Annual Debt Service Savings \& Refunding vs. Refunded Cumulative Amortization Test

|  | Refunded Bond Debt Service |  |  | Refunding Bond Debt Service |  |  | Savings |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year End | Principal | Interest | Total P\&I | Principal | Net <br> Interest | Total P\&I | Savings or (Cost) |
| 06/30/19 | - | 13,459,875.00 | 13,459,875.00 | - | 9,287,452.78 | 9,287,452.78 | 4,172,422.22 |
| 06/30/20 | - | 16,923,000.00 | 16,923,000.00 | - | 16,230,500.00 | 16,230,500.00 | 692,500.00 |
| 06/30/21 | 18,000,000.00 | 16,923,000.00 | 34,923,000.00 | 18,265,000.00 | 15,773,875.00 | 34,038,875.00 | 884,125.00 |
| 06/30/22 | 23,000,000.00 | 16,023,000.00 | 39,023,000.00 | 23,405,000.00 | 14,732,125.00 | 38,137,125.00 | 885,875.00 |
| 06/30/23 | 24,360,000.00 | 14,839,000.00 | 39,199,000.00 | 24,790,000.00 | 13,527,250.00 | 38,317,250.00 | 881,750.00 |
| 06/30/24 | 23,000,000.00 | 13,655,000.00 | 36,655,000.00 | 23,450,000.00 | 12,321,250.00 | 35,771,250.00 | 883,750.00 |
| 06/30/25 | 23,000,000.00 | 12,505,000.00 | 35,505,000.00 | 23,470,000.00 | 11,148,250.00 | 34,618,250.00 | 886,750.00 |
| 06/30/26 | 17,000,000.00 | 11,355,000.00 | 28,355,000.00 | 17,345,000.00 | 10,127,875.00 | 27,472,875.00 | 882,125.00 |
| 06/30/27 | 26,290,000.00 | 10,125,000.00 | 36,415,000.00 | 26,500,000.00 | 9,031,750.00 | 35,531,750.00 | 883,250.00 |
| 06/30/28 | 13,415,000.00 | 9,215,500.00 | 22,630,500.00 | 13,720,000.00 | 8,026,250.00 | 21,746,250.00 | 884,250.00 |
| 06/30/29 | 22,830,000.00 | 8,129,750.00 | 30,959,750.00 | 22,965,000.00 | 7,109,125.00 | 30,074,125.00 | 885,625.00 |
| 06/30/30 | 36,965,000.00 | 6,724,125.00 | 43,689,125.00 | 37,200,000.00 | 5,605,000.00 | 42,805,000.00 | 884,125.00 |
| 06/30/31 | 27,000,000.00 | 5,110,000.00 | 32,110,000.00 | 27,230,000.00 | 3,994,250.00 | 31,224,250.00 | 885,750.00 |
| 06/30/32 | 22,000,000.00 | 3,745,000.00 | 25,745,000.00 | 22,100,000.00 | 2,761,000.00 | 24,861,000.00 | 884,000.00 |
| 06/30/33 | 22,000,000.00 | 2,630,000.00 | 24,630,000.00 | 22,090,000.00 | 1,656,250.00 | 23,746,250.00 | 883,750.00 |
| 06/30/34 | 22,000,000.00 | 1,515,000.00 | 23,515,000.00 | 22,080,000.00 | 552,000.00 | 22,632,000.00 | 883,000.00 |
| 06/30/35 | 16,000,000.00 | 400,000.00 | 16,400,000.00 | - | - | - | 16,400,000.00 |
| Total | 336,860,000.00 | 163,277,250.00 | 500,137,250.00 | 324,610,000.00 | 141,884,202.78 | 466,494,202.78 | 33,643,047.22 |


|  | Par Amount | Future Value | Present Value |
| :--- | ---: | ---: | ---: |
| Refunded | $336,860,000.00$ | $500,137,250.00$ | $362,137,344.53$ |
| Refunding | $(324,610,000.00)$ | $(466,494,202.78)$ | $(343,032,106.88)$ |
| Savings | $12,250,000.00$ | $33,643,047.22$ | $19,105,237.65$ |

