



PORTLAND PUBLIC SCHOOLS
OFFICE OF THE DEPUTY SUPERINTENDENT

501 North Dixon Street / Portland, OR 97227
Telephone: (503) 916-3380 / Fax: (503) 916-2123
Mailing Address: P. O. Box 3107 / 97208-3107

Date: August 28, 2018
To: Board of Directors and Superintendent Guerrero
From: Claire Hertz, Deputy Superintendent of Business and Operations
Subject: Bond Program Finance Update

Introduction

Portland Public Schools (PPS) has established Education Specifications which are a set of building design characteristics that establish how facilities support programs and curriculum. These specifications also establish a baseline of equitable facilities standards for school construction efforts across PPS. PPS campuses are located in established urban neighborhoods, and therefore do not have open acreage as might be available in the suburbs. As a master plan is developed for each major project, site constraints have an impact on both the development of the master plan and on the financial resources.

This financial update will include:

- An updated process for Annual Performance Audit for the Bond Program
- Updated Financial Summaries for the 2012 and 2017 Bond Programs
- Staff recommendations for alignment of resources with district facility needs
- An Appendix defining acronyms and financial terms

Annual Performance Audit

As costs continue to increase for the Bond Program, there is a need to look back and understand why and update cost control strategies for future projects. The district solicited a Request for Proposals for annual performance audits using Generally Accepted Government Auditing Standards (GAGAS), commonly referred to as the "Yellow Book", by the Government Accountability Office (GAO). The standards apply to both financial and performance audits of government agencies. The district has updated its audit processes based on recommendations from the citizen-led Bond Accountability Committee.

The District has awarded the contract to Sjoberg Evashenk Consulting to perform annual performance audits over the next four years, with an option to extend an additional 4 years. The firm will review the 2012 and 2017 Bond Program performance to support the district's continuous improvement process and implementation of best practices. The district will receive the next performance audit report by March 31, 2019

Financial Summary

In recent presentations, School Modernization staff have updated the bond program costs expended and future projected costs for the 2012 and 2017 programs. This financial summary will expand the narrative to add potential funding resources to offset the increased costs.

2012 Financial Summary

For the 2012 bond program, the total forecasted costs are currently \$580,257,321, potential funding sources are \$583,027,861 leaving a positive balance of \$2,770,540.

2012 BOND COST FORECAST	CURRENT FORECAST
FRANKLIN	113,384,695
GRANT	150,786,805
ROOSEVELT	106,711,270
ROOSEVELT - MODULARS	186,749
FAUBION	50,433,098
IMPROVEMENT PROJECTS	65,164,841
MASTER PLANNING- BENSON	398,642
MASTER PLANNING - LINCOLN	357,094
MASTER PLANNING - MADISON	324,080
MARSHALL - SWING SITE	4,070,103
TUBMAN - SWING SITE	1,164,776
EDUCATION SPECIFICATIONS	275,168
LOAN REPAYMENT - ROSA PARKS AND OTHER CAPITAL IMPROVEMENTS	45,000,000
BOND PROGRAM MANAGEMENT	42,000,000
TOTAL	580,257,321

POTENTIAL FUNDING SOURCES	
BOND PRINCIPAL	482,000,000
PROGRAM CONTINGENCY	-
BOND PREMIUM (EARNED)	56,936,558
EARNED INTEREST (TO DATE)	5,300,000
EARNED INTEREST (FORECAST)	400,000
PARTNERSHIP RESOURCES	15,703,885
CONSTRUCTION EXCISE TAX	23,091
FUNDING FROM OTHER FUNDS	4,894,116
QUALIFIED ZONE ACADEMY BONDS (QZAB) LOW-COST LOANS	4,000,000
GRANTS - SRGP	5,832,390
GRANTS - SB1149	1,615,095
GRANTS - ETO	862,574
RISK MANAGEMENT FUNDS	44,072
OSM FUNDS (OFFICE OF SCHOOL MODERNIZATION)	87,225
FAM FUNDS (FACILITIES AND ASSET MANAGEMENT)	328,855
REDEPLOYMENT OF FUNDS FOR ROOSEVELT MAKER SPACE	5,000,000
TOTAL	583,027,861
<i>DELTA</i>	<i>2,770,540</i>

The resources listed incorporate decisions made since 2012 to current including numerous grants and district funding sources. The Roosevelt Maker Space is an outstanding decision that needs to be made. Staff will recommend a combination of funding sources to support this project.

2017 Bond Financial Summary

For the 2017 bond program, total forecasted costs are \$977,000,000, while potential funding sources are \$844,700,000. This leaves a negative balance of \$132,300,000.

2017 BOND COST FORECAST	CURRENT FORECAST
MADISON	199,000,000
LINCOLN	242,000,000
KELLOGG	58,000,000
BENSON	269,000,000
HEALTH & SAFETY IMPROVEMENTS	150,000,000
GRANTS OSCIM SEISMIC IMPROVEMENTS	8,000,000
PROGRAM CONTINGENCY	-
BOND PROGRAM MANAGEMENT	40,000,000
MIDDLE SCHOOL CONVERSION	11,000,000
TOTAL	977,000,000
POTENTIAL FUNDING SOURCES	
BOND PRINCIPAL	790,000,000
PROGRAM CONTINGENCY (INCLUDED IN PRINCIPAL)	-
BOND PREMIUM (EARNED)	1,200,000
EARNED INTEREST (TO DATE)	6,500,000
EARNED INTEREST (FORECASTED) 2017 ISSUANCE	13,500,000
EARNED INTEREST (FORECASTED) FUTURE ISSUANCE	14,000,000
GRANT - OSCIM	8,000,000
CONSTRUCTION EXCISE TAX	11,500,000
TOTAL	844,700,000
<i>DELTA</i>	<i>(132,300,000)</i>

Voters granted the district the authority to issue \$790,000,000 in bonds for the 2017 Bond Program. To date, \$348,700,000 in bonds have been issued, and an additional \$441,300,000 will be issued as needed based on cash flow projections. The funding sources above include interest earnings for the 2017 bond issuance as well as a conservative projection of interest earnings for the future issuance. Staff will recommend the board consider using the current Construction Excise Tax collections as a source of funding for the Middle School Conversion instead of bond funds and this recommendation is incorporated in the \$132,300,000 balance above. Staff will also recommend the possible use of future Construction Excise Tax funds for enrollment growth needs. The total 2017 Bond costs do not include a budgeted program contingency, which typically range from 5-10% of total program cost.

Recommendations

As the district works to remedy the increased costs of the bond program, staff makes the following recommendations to reconcile the bond fund:

1. Update the Bond Program's annual performance audit to the Generally Accepted Government Auditing Standards (GAGAS). Incorporate performance audit recommendations in the district's Bond Program.
2. Change the resolution that sets aside Construction Excise Tax funds for maintenance of modernized schools to support the middle school renovation program and portable classrooms needed for enrollment growth
3. Support the Roosevelt Maker Space with a combination of funding from Measure 98 Career and Technical Education (CTE) grant and 2012 bond funds
4. Use additional resources generated from increased assessed value with a level levy rate of \$2.50/\$1,000 of assessed values to offset the Bond Program shortfall
5. Incorporate a change in school safety standards to include vestibule entryways in remaining schools in the next bond program
6. Provide 21st century learning environments by increasing technology infrastructure capacity in the next bond program

Recommendation #4 will be detailed in the presentation from the district's financial advisor, PiperJaffray and is an accompaniment to this memo. Recommendation #5 is an initial concept to address equity between school sites due to changing Education Specifications. Recommendation #6 is a recognition of the lack of resources to respond to current instructional needs. It will require capital funds to bring district technology infrastructure to the 21st Century classroom standards.

Appendix – Definitions

Bond Premium – Depending on bond market conditions, when the district issues bonds a bond premium may be paid by investors. A premium bond is a bond trading above its par value. A bond trades at a premium when it offers a coupon rate higher than prevailing interest rates. This is because investors want a higher yield and will pay more for it. Premiums are generally only available in markets when interest rates are low.

Construction Excise Tax – In 2007, the Oregon State Legislature passed a law (SB1036) that allows Oregon school districts to pay for a portion of the cost of new or expanded school facilities by taxing new residential and non-residential development.

Earned Interest (to date) – When the district issues bonds, the proceeds are invested to earn interest, subject to certain limitations under federal tax law. Interest earned to date is interest the district has already received from investments, deposited into our accounts to pay for construction projects or reinvested for future capital needs.

Earned Interest (Forecasted) – This is the projection of interest the district will earn on future investments of bond proceeds.

FAM – Facilities and Asset Management Department

Grants ETO – Grant from the Energy Trust of Oregon

Grants OSCIM – Oregon School Capital Improvement Match – Funds are being used for roofs

Low cost loan QZAB – U.S. government program – Qualified Zone Academy Bond – is a program for school districts to receive zero percent/low percent financing on bonds to renovate school facilities.

Grants SB1149 – State grant sourced by a public purpose charge from large utility companies providing electricity services.

Grants SRGP – State of Oregon Seismic Rehabilitation Grant Program

OSM – Portland Public Schools Office of School Modernization

August 27, 2018

Memorandum

TO: Claire Hertz, Deputy Superintendent for Business and Operations

FR: Carol Samuels, Managing Director
Lauren MacMillan, Senior Vice President

RE: **Options for financing additional facilities costs**

You have asked Piper Jaffray, as the District's Municipal Advisor, to identify options for financing additional costs associated with the District's 2017 general obligation bond projects. This memorandum is provided to respond to that request.

Background

Starting in 2003, the District began to develop a long term capital financing strategy in which all District facilities would be upgraded over an extended period. The intention was to request voter approval of a new bond measure in 2004 to coincide with the expiration of a bond measure approved in 1995. However, that timing was interrupted by various efforts to secure operating funding.

Efforts began anew in 2009, when the District designed a comprehensive strategy of renovating/rebuilding/upgrading each and every District building over a 30+ year period. The plan contemplated seeking voter approval every four years in order to maximize accountability and update projections and cash flows with actual data. The first step in the plan was the successful approval of the 2012 bond authorization.

The comprehensive plan anticipated that the District would start with the high schools, with a goal of targeting three per bond issue until all were completed. However, there was recognition that flexibility was important given the vagaries of PPS' older building stock coupled with uncertain construction timelines, interest rates and assessed value growth into the future. **That said, the District's commitment was, and always has been, to touch and improve every single building in the District's portfolio, regardless of which specific bond issue targeted which specific project.** Although costs originally estimated to be covered by the 2017 issue have risen, we assume that commitment has not changed. In fact, the 2017 issue's contents underscore the need for flexibility given new emphasis on health and safety projects which were estimated to consume \$150 million of the \$790 million authorization.

Financing Options

The District has several options for providing funds to complete 2017 projects. These include:

1. Issuing "Full Faith and Credit" obligations that use existing resources to pay debt service costs. This type of obligation is not subject to voter approval; as a consequence, the District may not

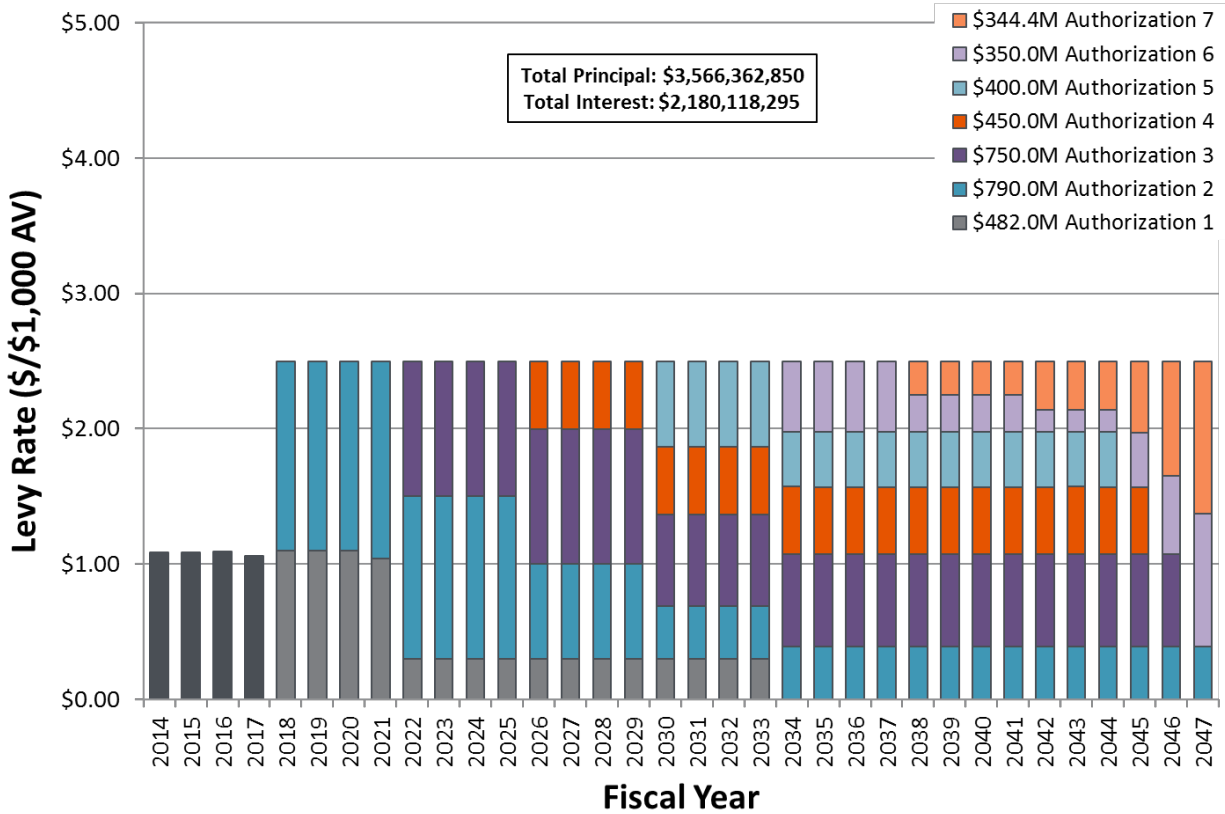
levy additional taxes to repay principal and interest. The payment of debt service would therefore compete with other operating costs from the general fund for District dollars.

2. Seek voter approval for a new general obligation bond that covers the additional costs. Assuming the District intends to follow the anticipated four year cycle of elections in any case, the next election date will be November 2020, with funds provided early in 2021. We have been advised that this timing would be sufficient to keep projects at Benson on track with no interruption. Assuming the District does not wish to increase the projected levy rate above the target \$2.50/\$1,000, using the 2020 bond issue to finance 2017-related costs will inevitably reduce amounts available for other projects in the next bond issue. However, recent strong growth in assessed values and changes in interest rate assumptions both reduced the cost of existing authorizations and provide more future financial capacity than previously calculated. Any costs not covered in the 2020 bond will be financed through a subsequent issue, adjusting the timeline for when certain projects are funded but maintaining the District's pledge to upgrade every school building.

Analysis

Pre-2017 General Obligation Bond Election Pro-forma

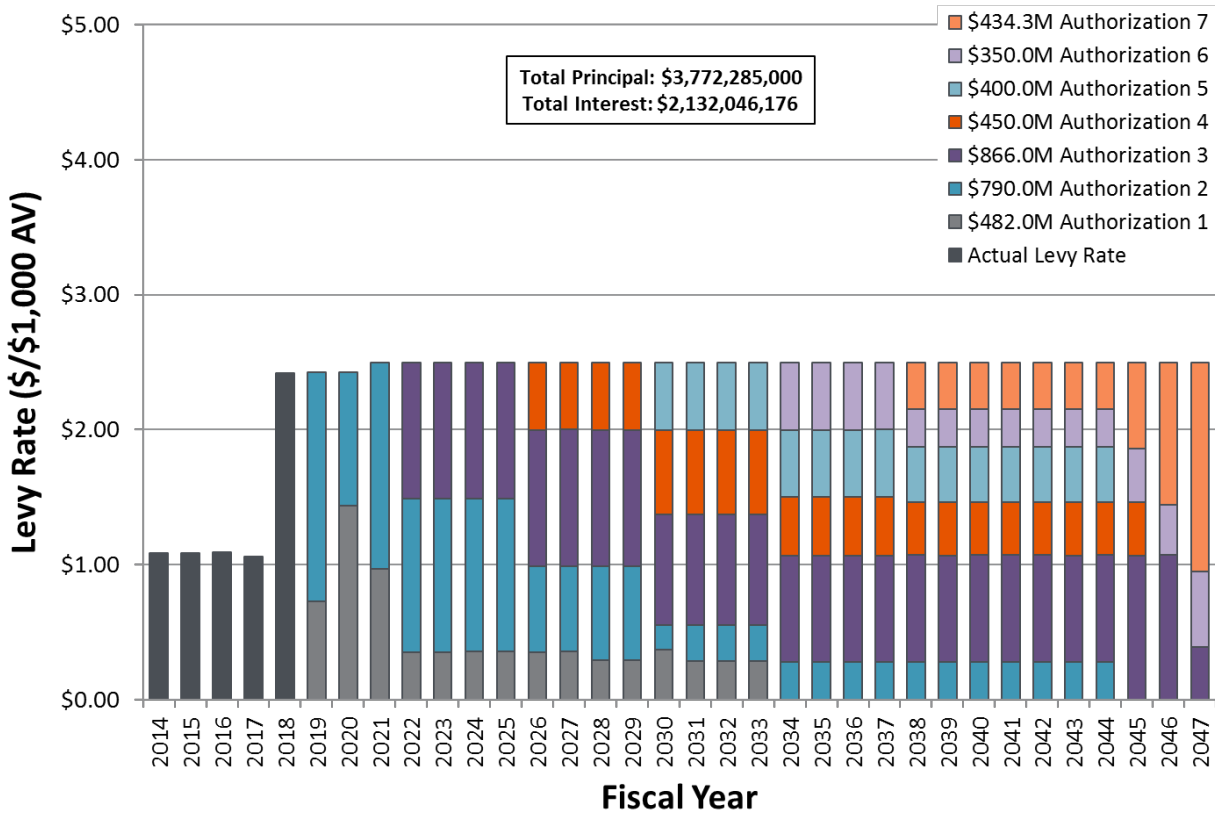
Prior to the 2017 election, our long term projection estimated the following potential issuance plan, whereby the 2017 Authorization (“Authorization 2”) generated \$790 million, and the 2020 Authorization (“Authorization 3”), was sized to produce approximately \$750 million:



The total principal and interest generated is approximately \$5.75 billion.

2018 General Obligation Bond Proforma with Same Structure

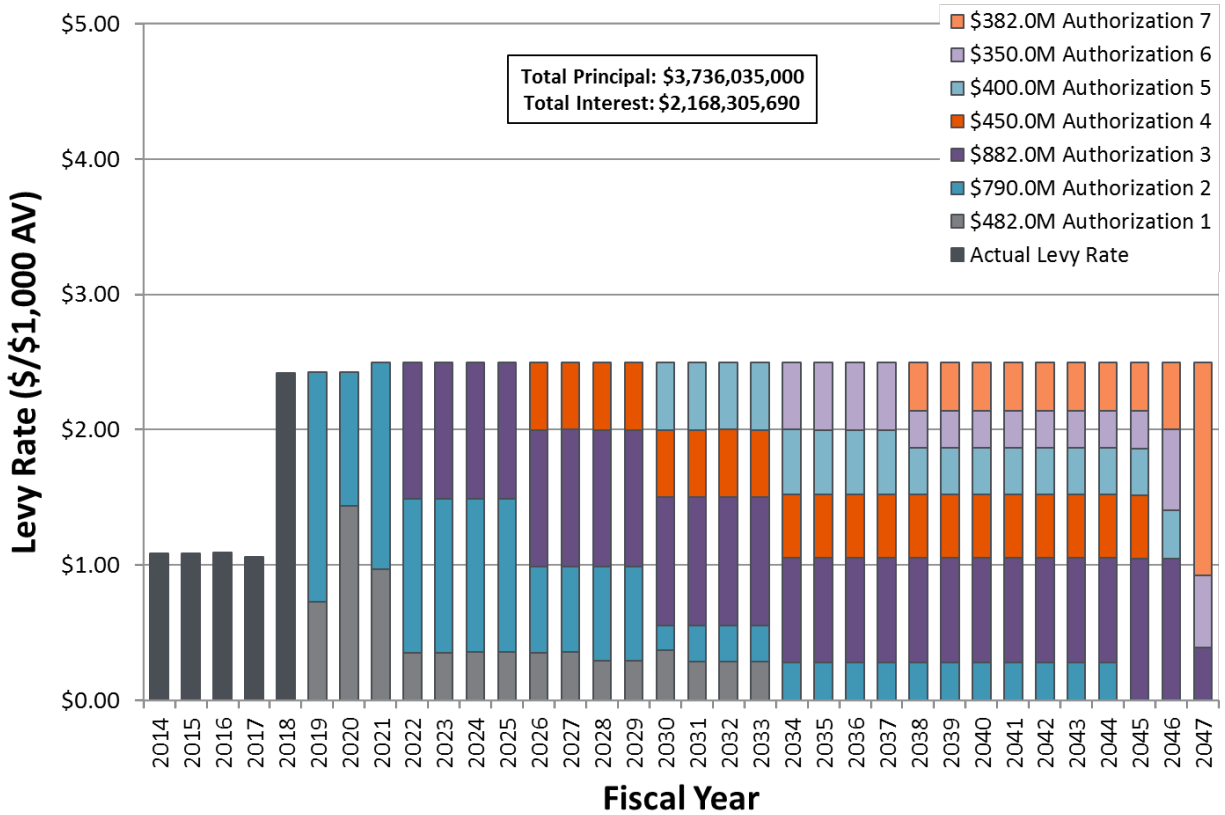
Using the same structure as above but adjusting for the actual costs of the 2017 bond sale, actual growth in assessed value, and an increase in the assumed FY 2019 AV growth rate, the cost of Authorization 2 is projected to be less than previously estimated. This thus provides additional capacity that can be utilized by Authorization 3 without causing an increase in the projected levy rate. Under this option, Authorization 3 has grown to \$866 million, and overall capacity has increased from \$3.57 billion to \$3.77 billion through FY 2047:



The size of authorizations 4, 5 and 6 were kept the same as in the previous analysis. The changes in assumptions also yield additional future capacity for Authorization 7. The total principal and interest generated is now approximately \$5.9 billion, an increase of roughly \$150 million.

2018 General Obligation Proforma with Revised Structure

Given that utilizing the same structure generates only \$116 million, and the estimated need is \$132 million, the District could choose to modify the structure to generate the additional needed proceeds in the 2020 issue. The additional \$16 million capacity is borrowed from future authorizations and the repayment structures are slightly extended through Authorization 5. The size of authorizations 4, 5 and 6 were kept the same so the reduction is isolated to Authorization 7. The overall capacity at the \$2.50 projected levy rate of \$3.74 billion under this model continues to exceed projections prior to the 2017 election of \$3.57 billion. The total principal and interest generated remains approximately the same as Scenario 1 at \$5.9 billion.



Premiums and other cautions

Note that in the previous analysis we have not taken into account any expectation of future bond premiums on the remaining authorization of the 2017 bonds, which is expected to be sold in FY 2020. Should such premiums be available, it could further reduce the size of the shortfall. However, the availability of bond premiums is wholly dependent on market conditions and bond structure, and is therefore difficult to predict.

Further, it is important to recognize that the structure of each individual bond measure, the interest rates incurred and the actual rate of assessed value growth can affect the projections significantly.

Please do not hesitate to contact us if you have questions or would like to see refinements of any of these scenarios.

ISSUER COMMENT

22 August 2018

 Rate this Research

Analyst Contacts

Patrick Liberatore +1.415.274.1709
 AVP-Analyst
 patrick.liberatore@moody's.com

Eva Bogaty +1.415.274.1765
 VP-Sr Credit Officer/Manager
 eva.bogaty@moody's.com

Leonard Jones +1.212.553.3806
 MD-Public Finance
 leonard.jones@moody's.com

CLIENT SERVICES

Americas 1-212-553-1653
 Asia Pacific 852-3551-3077
 Japan 81-3-5408-4100
 EMEA 44-20-7772-5454

Multnomah County School District No. 1J (Portland Public Schools), OR

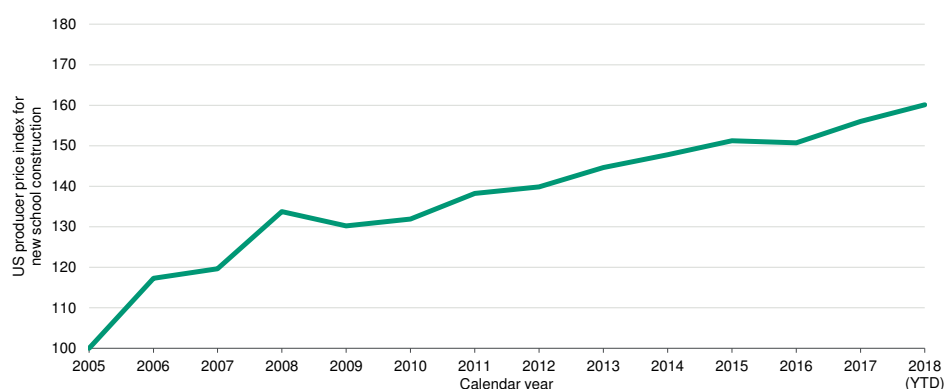
Escalating construction costs strain capital plans

On August 14, the board of Oregon's [Portland Public Schools](#) (Aa2 stable) was advised that the district will need nearly \$200 million more to complete a broad scope of projects that involve rebuilding schools, and security and seismic upgrades. The increasing costs are modestly credit negative for the school district. The district expected to finance the projects with a \$790 million bond authorization, but escalating construction costs have left it short of funds and facing politically difficult options that include scaling back plans, deferring some projects or returning to voters for additional debt authorization. Positively, the district has a low debt burden and a large, growing tax base, providing capacity to take on additional debt.

The cost pressures facing Portland Public Schools follow a nationwide trend of rising costs for school construction (see Exhibit 1). The \$790 million initiative is part of the district's 30-year, \$5.5 billion capital plan, which may require added funding if construction costs continue to increase.

Exhibit 1

Rising construction costs are making it more difficult for school districts to address capital needs



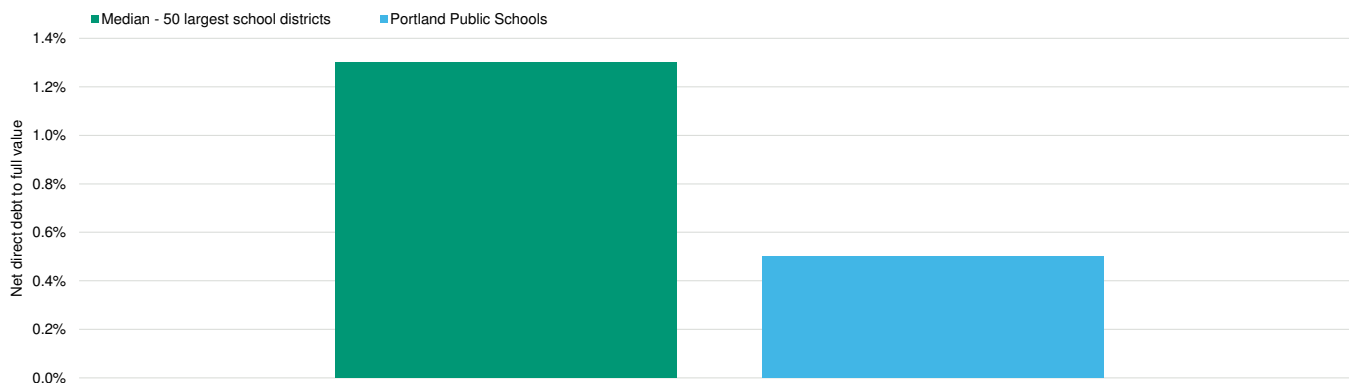
Base year for index is 2005

Source: US Bureau of Labor Statistics

Still, Portland Public Schools benefits from a low debt burden of approximately \$606 million that equates to just 0.5% of the real market value of its very large tax base of \$121.7 billion, or only 0.9x fiscal year 2017 (ended June 30, 2017) operating revenues. The district's debt burden is low compared to many of the other 50 largest school districts nationally, which indicates that it has capacity to finance projects with tax-supported bonds amid rising construction costs (see Exhibit 2).

Exhibit 2

Portland Public Schools' low debt burden allows greater capacity for additional borrowing needs



50 largest school districts by operating revenues

Source: Moody's Investors Service

Voters approved the \$790 million general obligation bond authorization in May 2017 to finance the various capital projects. Costs are now projected to be nearly \$200 million more to complete the projects with the higher construction costs, partly due to strong demand for construction in the booming Portland area as well as recent steel and aluminum tariffs amid the [US' international trade tensions](#). The district's first issuance under the 2017 bond program was a \$349 million issuance last year, leaving \$441 million of remaining bond authorization expected to be issued in 2020.

Portland Public Schools' large and long-range capital plan indicates the magnitude of its capital needs. The district's capital asset condition is weaker than the median for the 50 largest school districts, using the latest audited data. The estimated average age of capital assets for the Portland district was 18 years compared to a median of 13 years, and the estimated useful life of capital assets was 16 years for the district compared to a median of 20 years.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody.com for the most updated credit rating action information and rating history.

© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJJK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJJK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJJK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJJK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJJK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJJK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJJK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454



Portland Public Schools Options for Financing Capital Costs



Claire Hertz
Deputy Superintendent for Business and Operations
PPS

Carol Samuels
Managing Director
Piper Jaffray

2012 Bond Cost Forecast

2012 Bond Cost Forecast Total \$580,257,321

Potential Funding Sources Total \$583,027,861

Delta \$2,770,540

2017 Bond Cost Forecast

2017 Bond Cost Forecast Total \$977,000,000

Potential Funding Sources Total \$844,700,000

Delta (\$132,300,000)

PIPER JAFFRAY | 3

Staff recommendation

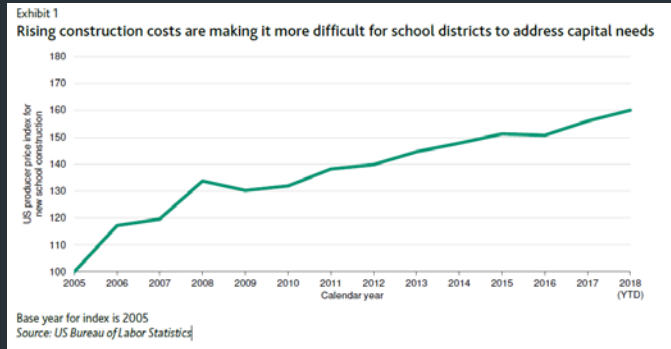
1. Update the Bond Program's annual performance audit to the Generally Accepted Government Auditing Standards (GAGAS). Incorporate performance audit recommendations in the district's Bond Program.
2. Change the resolution that sets aside Construction Excise Tax funds for maintenance of modernized schools to support the middle school renovation program and portable classrooms needed for enrollment growth
3. Support the Roosevelt Maker Space with a combination of funding from Measure 98 Career and Technical Education (CTE) grant and 2012 bond funds
4. Use additional resources generated from increased assessed value with a level levy rate of \$2.50/\$1,000 of assessed values to offset the Bond Program shortfall
5. Incorporate a change in school safety standards to include vestibule entryways in remaining schools in the next bond program
6. Provide 21st century learning environments by increasing technology infrastructure capacity in the next bond program

PIPER JAFFRAY | 4

Moody's Investors Service Report

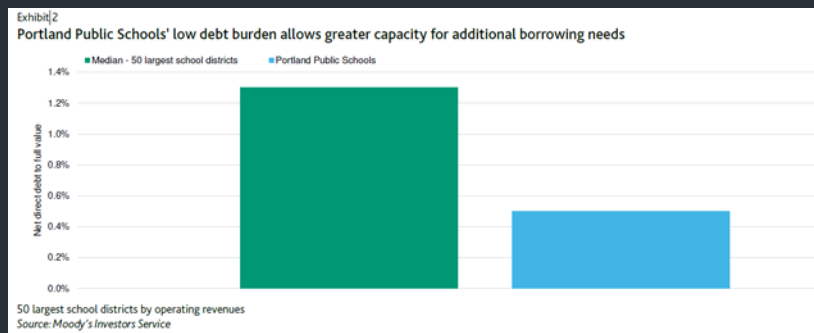
From Issuer Comment dated August 22, 2018:

"The cost pressures facing Portland Public Schools follow a nationwide trend of rising costs for school construction (see Exhibit 1). The \$790 million initiative is part of the district's 30-year, \$5.5 billion capital plan, which may require added funding if construction costs continue to increase."



Moody's Investors Service Issuer Comment (cont'd)

"Still, Portland Public Schools benefits from a low debt burden of approximately \$606 million that equates to just 0.5% of the real market value of its very large tax base of \$121.7 billion, or only 0.9x fiscal year 2017 (ended June 30, 2017) operating revenues. The district's debt burden is low compared to many of the other 50 largest school districts nationally, which indicates that it has capacity to finance projects with tax-supported bonds amid rising construction costs (see Exhibit 2)."



Capital cost philosophy

- In accordance with Ed Specs (more from Claire)
- Long-term commitment – each and every school building will be renovated/rebuilt/ upgraded over the next 30+ years.
- Have flexibility in plan to address new developments (such as health and safety priorities in 2017 issue), uncertain construction timelines, interest rates and assessed value growth into the future.
- Maintain ‘capital levy’ at projection of \$2.50/\$1,000 of assessed value.

Financing options

PPS has two key options for providing additional funds to complete 2017 projects. These include:

- **“FFC” obligations** - use existing resources to pay debt service. Not subject to voter approval; therefore, District may not levy additional taxes to repay P&I. Debt service costs would compete with other operating costs.
- **New GO bond** - Next anticipated election is November 2020, with funds provided early in 2021; timing would allow Benson projects to continue with no interruption.

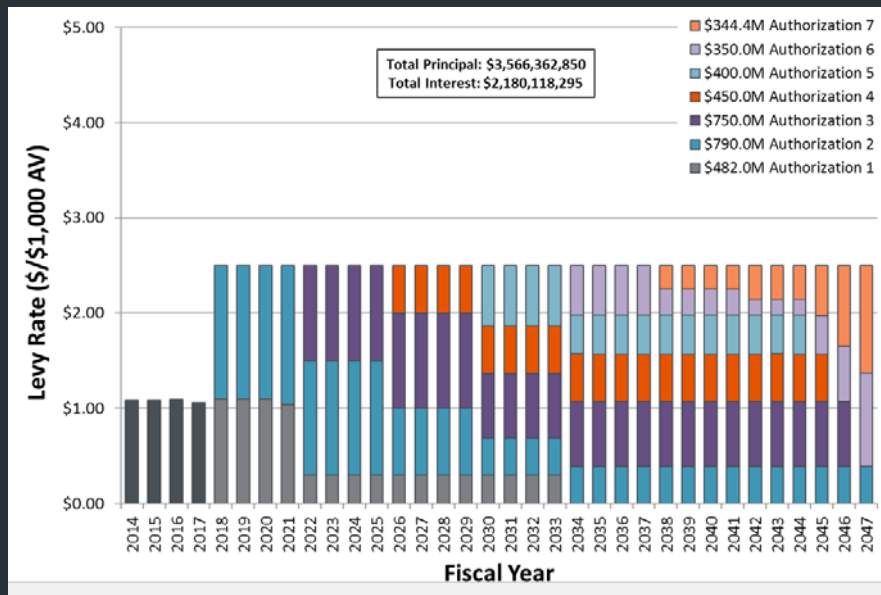
Analysis

Pre-2017 GO Election Pro-forma

Pre-election, long-term projections estimated following issuance plan over 30 years:

- 2017 Authorization (“Authorization 2”) generated \$790m;
- 2020 Authorization (“Authorization 3”) generated \$750m;
- Total capacity equaled \$3.57b.

Pre-2017 Election Pro-forma (cont'd)



PIPER JAFFRAY | 11

2018 GO Pro-forma with Same Structure

Using same structure but adjusting for:

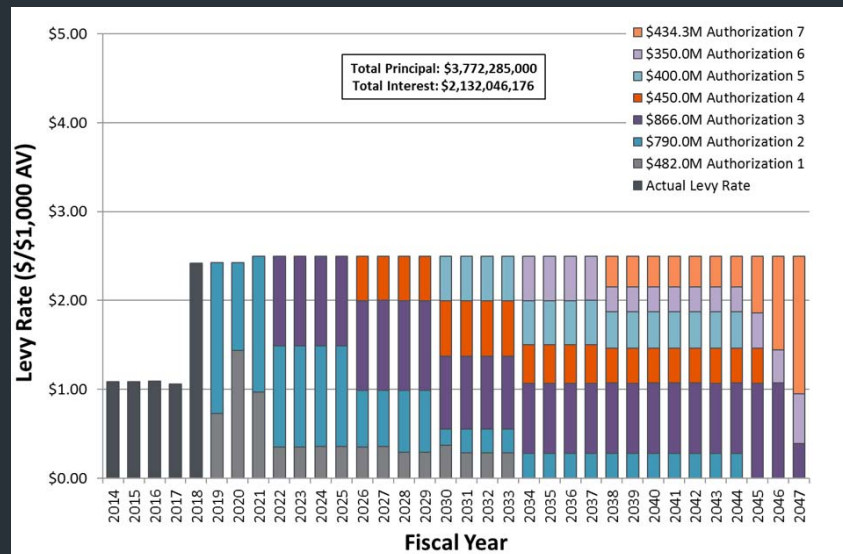
- Actual costs of first sale of 2017 bonds
- Actual assessed value growth
- Increased assumed growth rate for FY 2019 AV

Results:

- Cost of 2017 bond authorization projected to be reduced
- Additional capacity provided for 2020 bond authorization without an increase in projected levy rate.
- **2020 Authorization projected to grow to \$866 million, generating extra \$116 m with no increase in levy rate.**
- Overall capacity projected to increase from \$3.57b to \$3.77b through FY 2047

PIPER JAFFRAY | 12

2018 Pro-forma with Same Structure (cont'd)



Authorizations 4, 5 and 6 are unchanged from previous analysis; increased capacity assumed to be used in Authorization 7.

PIPER JAFFRAY | 13

Financing \$16m balance with FFC

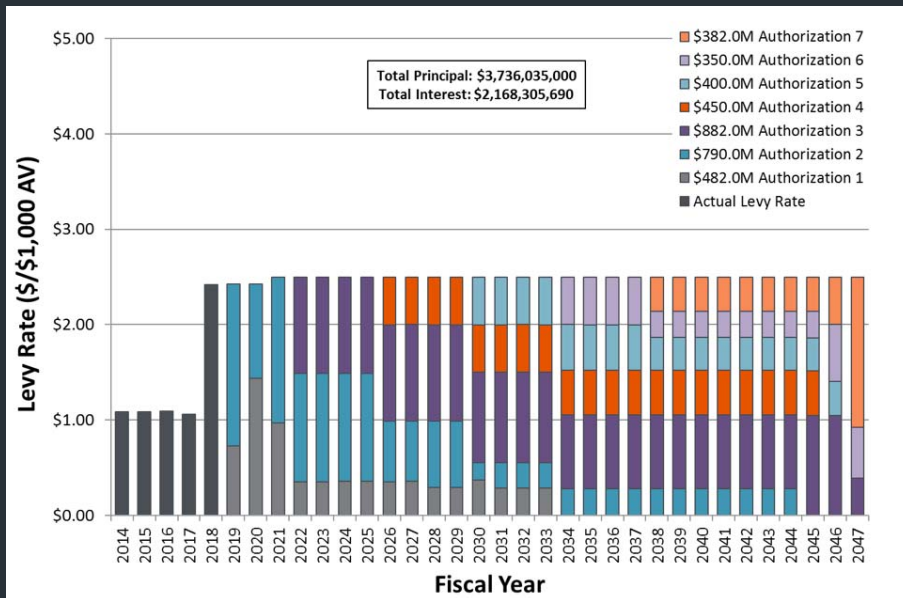
- Because GO bond proceeds with existing assumptions are insufficient to cover estimated total costs of \$132 million, balance could be financed with Full Faith and Credit Obligation.
- Estimated debt service on 20 year obligation is approximately \$1.33m annually.
- Debt service would need to be paid out of existing resources.

PIPER JAFFRAY | 14

2018 GO Pro-forma with Revised Structure

- District could alter 2020 Authorization amount to generate additional proceeds to cover remaining \$16m in 2017 project costs.
- Capacity is borrowed from future authorizations and repayment structures are slightly extended through Authorization 5, reducing capacity to \$3.74b.
- Capacity still exceeds pre-election estimate of \$3.57b.
- Reduction is isolated to Authorization 7, which declines from \$434m to \$383m.

2018 GO Pro-forma with Revised Structure (cont'd)



Bond Premiums and other Cautions

- Analyses have not made any projection of future bond premiums on remaining 2017 authorization, which is expected to be sold in FY 2020.
- Should premiums be available, could further reduce shortfall.
- Availability of bond premiums is wholly dependent on market conditions and bond structure, and is therefore difficult to predict.
- Changes in structure of each individual bond measure, actual interest rates incurred and actual rate of assessed value growth can affect the projections significantly.

Questions?