Analysis of Outstanding Debt

City of Springfield, Massachusetts

January 30, 2020

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THE CITY OF SPRINGFIELD, MASSACHUSETTS

Dear Mayor Sarno and Members of the City Council:

It is my pleasure to present this year's annual analysis of the City of Springfield's existing debt. The Office of Management and Budget (OMB) publishes this study each year to serve as a user-friendly examination of current and future debt issued on behalf of the residents of the City. OMB utilizes this analysis to make informed decisions regarding the City's debt and financial position; taking into account the affordability of issuing new debt on top of existing debt obligations.

In this report, we measure the affordability of debt by determining the annual amount of debt service and other debt-like payment obligations as a percentage of general fund revenues. Debt service as a percent of general fund revenues is a commonly accepted standard for measuring debt capacity. It provides a true indication of the relative cost of the City's debt by comparing the City's debt service payments with the amount of revenue available to pay those obligations.

In recent years, the City has taken a proactive approach to debt strategy by reviewing outstanding debt for restructuring opportunities. However, changes in the Tax Cut and Jobs Act of 2017 eliminated municipalities' ability to issue tax-free debt for advanced refunding bonds. This will constrain Springfield's ability to "refinance" its debt at lower interest rates in the future. OMB continuously monitors policy changes such as these and fluctuations in the municipal bond market during the development of the City's borrowing strategy.

The City capitalized on the opportunity to pay off old debt at a lower interest rate in March 2017. This "refinancing" of 2007 bonds saved the City over $3.8 million over six years by exchanging the original interest rate of 4.263% for a lower rate of 2.0063%. In addition to previous years' efforts to restructure debt, this sale increased our capacity for future debt issuances and prevented dramatic increases in future debt payments. The City will continue to be proactive in taking advantage of similar opportunities in the future.

In addition to managing its debt, Springfield has maintained its process of continually assessing capital needs and offsetting project costs to outside funding sources whenever possible. The following debt affordability analysis will show that, consequent to these efforts, the City of Springfield is now in a position to strategically invest in its infrastructure and capital needs.

In March 2019, the City issued $27.9 million in bonds. This issuance provided funding for the City's share of multiple projects. These projects include the construction of the new East Forest Park Library, the renovation of Riverfront Park, the remodel and repair of City Hall's steps, the remodeling of Stearns Square and Duryea Way, the construction of police kiosks in downtown, repairs to the City's flood control system, and the purchase of vehicles and equipment for the Police Department and DPW. This issuance also funded the "Downtown Refresh," which included the paving of downtown streets, repair of sidewalks, upgrades to downtown lighting, and the implementation of a downtown wayfinding system, as well as $2.5 million in City-wide sidewalk repairs. The City also used proceeds from this bond sale to fund many Massachusetts School Building Authority (MSBA) school renovation projects, as well as initial work on the construction of the new joint Brightwood-Lincoln elementary schools and a feasibility study and schematic design for the new joint DeBerry-Homer elementary schools.

Having sold debt for multiple ongoing projects in 2019, the City does not plan to issue long-term debt in 2020. Rather, the City will issue short-term bond anticipation notes (BANs), to fund ongoing projects. Short-term borrowing allows the City to fund ongoing projects during their early stages, without issuing bonds. Oftentimes, the City is able to complete projects under initial budget projections, due to cost savings and value engineering. Short-term borrowing allows the City to avoid selling debt for costs it may not actually incur on a project. In general, the City issues debt for a project once it is substantially completed, to avoid incurring excess interest expenses by borrowing more than it needs for a project. However, if the City expects interest rates to rise in the future, it may issue debt earlier in a project cycle to avoid higher interest costs.

One of the established benchmarks reviewed by the municipal bond industry is the percent of outstanding principal paid off within ten years. The industry standard is between 65% and 100%; Springfield is on schedule to retire 75.2% of its outstanding principal in the next ten years. A declining debt schedule and rapid repayment of principal indicates that the City is committed to repaying its debt quickly and efficiently.

Annually, the City publishes a Capital Improvement Plan (CIP), which provides a detailed view of the capital needs within the City of Springfield. This comprehensive capital plan includes roads, sidewalks, parks, land, buildings, equipment, fleet and other capital asset needs. The CIP will serve as a guiding document for capital funding decisions in future years. The Fiscal Year 2020-2024 Capital Improvement Plan (CIP) indicates there is over $843.9 million in capital needs in the City. The Fiscal Year 2021-2025 Capital Improvement Plan process is currently underway and the updated CIP will be published in March of 2020.

Along with a strong debt strategy, the City is maximizing its ability to tackle the City's capital needs by offsetting project costs with grant awards, and funding provided by state and federal agencies. Projects that would have been unaffordable otherwise, are made possible through the City's close partnership with outside agencies. For example, by working closely with the state Board of Library Commissioners, the City was able to secure $4.9 million in funding for the East Forest Park Library project.

As often as possible, the City takes advantage of the MSBA's Accelerated Repair Program (ARP) initiative. This innovative competitive grant program represents a unique opportunity for the City. The main goals of the ARP are to improve learning environments for children and teachers, reduce energy usage, and generate cost savings for the Commonwealth's towns and cities. To date, the MSBA has invited the City to take part in this program to repair and/or replace roofs, HVAC systems, windows, and doors in twenty-five schools. Work is currently underway at Milton Bradley Elementary School (roof replacement) and the Springfield High School of Science and Technology (boiler replacement). ARP projects at Alfred G. Zanetti Montessori Magnet School, M. Marcus Kiley Middle School, Balliet Middle School, and South End Middle School have been substantially completed and are in the MSBA's closeout process.

The City is also in the process of finalizing an agreement with the MSBA for three additional ARP projects that will replace boilers at Sumner Avenue Elementary School, Fredrick Harris Elementary School, and Indian Orchard Elementary School. Work on the design of these projects is currently in progress.

The City is currently requesting funding for ARP projects at an additional twelve schools. These projects will entail the replacement of roofs, HVAC systems, windows, and doors. These projects will be submitted to the MSBA in February, 2020. The completed projects mentioned above represent a combined $31.1 million in investment into our schools, at a cost of just $9.9 million to the City.

Numerous ongoing City projects have received funding from additional outside agencies including the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), and the U.S. Department of Housing and Urban Development (HUD). The City has also made use of a donation from MGM for improvements to Riverfront Park. In total, the City anticipates eventually receiving outside reimbursements for 50.1% of the total costs of the projects for which it issued debt in March 2019. By leveraging funding through these agencies and other outside entities, the City is able to effectively double the amount of funding it has to invest in projects, while reducing its reliance on borrowing.

Despite the City's ability to leverage outside funding, its proactive steps to refinance debt at lower rates when possible, and sound borrowing policies, the City's ability to issue debt for new projects in the coming years will be constrained by a number of factors. Springfield continues to face rising non-discretionary costs. The City's budgeted pension contribution for FY20 was $43.4 million, accounting for 17.6% of the non-School Department City budget. Per the City's current funding schedule, the pension contribution will rise another 9% next year ($3.9 million). Health insurance costs and collective bargaining agreements will also be sources of significant non-discretionary budget growth in the coming years. These non-discretionary costs crowd out room in the budget for an increase in debt service payments.

Robust economic growth and low unemployment over the past several years, as well as major economic development projects such as the opening of the MGM Springfield Casino and the construction of the CRRC rail car factory have helped to boost the City's revenues. For only the second time in the past decade, the City was able to capture all new growth in its tax levy in FY20.

However, a tight labor market, and a high demand for construction supplies have also increased the City's costs for capital projects. As a result, the City has seen bids for construction projects come it at significantly higher amounts than estimates in prior Capital Improvement Plans, which were based on market conditions still affected by the aftermath of the Great Recession. At the same time, new tariffs on steel and other construction materials introduced by Washington have also driven up project costs.

These twin pressures of rising non-discretionary costs that squeeze out room for debt service in the budget, and rising project costs will be managed by the City through a careful evaluation of capital needs and a commitment to a sustainable debt structure. As debt service is itself a non-discretionary budget item, the City must be careful to ensure that its investment in capital projects today, does not result in service cuts to residents in future years.

During the City's 2019 issuance, Standard & Poor's (S&P) affirmed the City's AA- credit rating with a stable outlook which continues to be the highest rating in the City's history; steadily improving from its BBB rating a decade ago. This recent credit rating review focuses on the City's strong institutional core by highlighting Springfield's "strong management, with 'strong' financial policies and practices, adequate budgetary performance, and strong budgetary flexibility." Additionally, the City received a reaffirmed credit rating of A2 with a stable outlook by Moody's in January 2017. From 1997-2007, the City had a Baa3 credit rating, junk bond status. These rating improvements are a testament to how well the City has managed its finances throughout the economic downturn and the City's ability to make the appropriate decisions to keep the budget balanced. Moody's credited Springfield's stabilized financial position to its status as the regional economic center of western Massachusetts, having satisfactory reserves, and its continuing demonstration of conservative fiscal management and an adherence to formal financial policies.

I hope this analysis is helpful to you and welcome the opportunity to provide any additional information that would be useful to you, and the residents of our community.

Very truly yours,

Timothy J. Plante
Chief Administrative and Financial Officer

Springfield Debt Overview

Mandated by Chapter 468 of Acts and Resolves of 2008, the City of Springfield's Office of Management & Budget is required to provide a yearly review of the City's current outstanding debt. This analysis is designed to:

1. To show financial officials and citizens the current state of debt management.

2. To indicate whether the City of Springfield can afford more debt in either the current fiscal year, or future years, as debt service payments decline.

The City of Springfield has a total of $248.6 million in outstanding permanent debt. Of this, $190.9 million is principal and $57.7 million is interest payments due on the debt. This debt consists of issuances dating back to fiscal year 2009, up to the most recent debt issuance in March 2019. This study demonstrates that Springfield is currently within its debt capacity as mandated by the City's financial ordinances, Chapter 4.44.070, which states "General Fund debt service as a percentage of general fund revenues, net of debt exclusions – should not exceed eight percent (8%)". Currently, the City is at half this limit.

Debt Service as a % of General Fund Revenue		
2019 Total Debt Service	$	27,361,935
2019 General Fund Revenue	$	680,792,674
Debt Capacity	**4.0%**	

Source: First Southwest, Springfield 2019 CAFR

Analysis of City Debt

The City's net debt service totals $217.6 million over thirty years. Project balances that make up this debt range from the small - $10,100 for the Blunt Park Renovation, to the large - $14.1 million for the City's new Culinary and Nutrition Center, which provides freshly cooked meals to Springfield's 25,000+ students.

There are many different ways to examine the City's debt. This document first examines the policy questions associated with our debt: for what purpose was the debt issued and how has the City decided to structure its debt repayment schedule? The study then examines what this debt tells us about Springfield's finances.

The latter analysis, what Springfield's outstanding debt can tell us vis-à-vis the City's finances, relies on benchmarks established by the three major ratings agencies: Moody's Investors Service, Standard & Poor's, and Fitch Ratings. These benchmarks measure our ability to repay our debt, highlight areas for further investigation and public discourse, and provide an overview of the information that will be used by rating agencies to determine Springfield's future bond rating. When Springfield wants to issue bonds, its bond rating reflects the credit worthiness of the City, which in turn has a direct impact on the interest rate the City will pay on its bonds. The higher the bond rating, the lower the risk of default, and the less risk an investor is taking in purchasing our bonds.

Annual Debt Service

The City is legally obligated to pay the principal and interest associated with a bond issuance before all expenses, including salary obligations. This annual payment is known as the ***debt service payment***. Because of the mandatory nature of this expense, the City must be cognizant of debt service payments when issuing new debt and deciding whether or not the City has the ability to increase those payments.

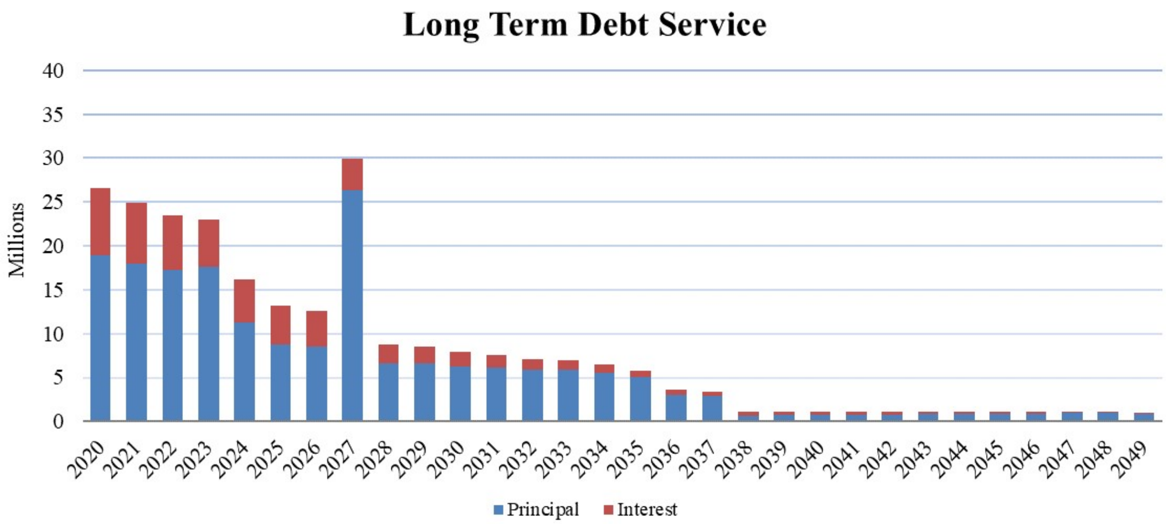

Figure 1: Debt service repayment schedule, First Southwest

The City's debt service repayment schedule, as of June 30, 2019, is outlined in the chart above (Figure 1). In fiscal year 2010, the City took advantage of the Qualified School Construction Bond (QSCB) Act. This borrowing requires a "bullet" payment at the end of a seventeen year borrowing term. This "bullet" payment is reflected in the large, $28.9 million debt service payment due in 2027. In order to prepare for this expense, the City has been, and will continue to invest the required payments ($776,910 annually) for the bond into a "sinking fund" each year. At the end of the term, the City will use the sinking fund to pay this bullet payment. Aside from this one instance, the City works to maintain a relatively smooth debt schedule, so as to not front or back load debt service payments.

As illustrated above in Figure 1, the City has entered into a declining debt service payment schedule. Each year, prior bond issuances are fully paid, and "fall off" our debt schedule, decreasing the City's annual long-term debt service obligation. This means that the City has additional bonding capacity for new capital improvement projects in future years.

In 2015, the City took advantage of this declining debt schedule and sold $50.5 million of bonds for new projects, including demolitions, street and sidewalk repairs, school improvements, and city facility construction and improvements. The next sale occurred in February 2017, when the City issued $44.3 million in debt for numerous capital improvement projects. That same year, in March 2017, the City sold bonds for Union Station. Last March, the City sold $27.9 million in bonds for additional capital projects, including the Springfield Culinary and Nutrition Center, the East Forest Park Library, $2.5 million in new roads and sidewalks, and multiple MSBA school construction and repair projects. By strategically selling debt this way, the City will continue to have a declining debt schedule and keep payments between fiscal years consistent. The City's goal is to maintain a similar level of payments each year to ensure large debt service payments are not unfairly shifted to residents in the future.

It is important to note that not selling debt for needed capital projects does not necessarily spare the City, or its taxpayers, from financial liability. For example, if a school building requires roof repairs, deferring this project to future fiscal years simply pushes the expense onto future budgets. At the same time, over the following years, the City may end up paying higher repair costs out of its operating budget, due to leaks in the roof. Thus, it can sometimes make sense to think of deferred maintenance as a form of "off the books debt," since these expenses will still be required eventually, and the City may end up paying "interest" in the form of expensive short-term repairs to maintain an asset that requires major capital investments.

In the past, the City's ability to refund some of its outstanding bonds using proceeds from new bonds sold at lower interest rates resulted in future cost savings that provide the City with a larger debt capacity each year. This larger debt capacity enables more debt to be issued for high priority capital improvement projects.

Refunding bonds works similar to the refinancing of a mortgage, and savings are achieved by lowering interest costs. Between FY15 and FY16, the City refunded debt twice, saving over $2.5 million in interest payments over fifteen years. The City also saved $1.2 million on QSCB payments through these issuances. The City refinanced bonds issued in 2007 at the same time that it financed the Union Station Project, in March 2017. By exchanging the original interest rate of 4.263% for a lower rate of 2.0063%, the City anticipates saving over $3.8 million over the next six years.

Unfortunately, a provision of the Tax Cut and Jobs Act of 2017 has limited the City's ability to refund debt in this way in future years. The City is still able to refund bonds that have reached their call date. A call date is a specified date on a bond. When the call date is reached, the issuer of the bond is allowed to refund the remaining amount of principal on the bond and thus avoid future interest payments. The City can take advantage of lower interest rates by borrowing at a lower rate to repay the principal on a bond that is within 90 days of its call date, but it can no longer take advantage of "advanced refunding issuances" which fall outside this 90 day window without issuing more expensive taxable debt.

Purpose of Issuance

Of the City's $190.9 million (principal only) debt, $102.5 million (53.7%), was issued to finance school projects and $88.4 million (46.3%), was issued for all other municipal purposes, such as public safety vehicles, trash trucks, roads, sidewalks, flood control systems, libraries, and parks.

Project/Type	Total	Percent of Total
City Facility	44,457,768	23.3%
Demolition	6,081,200	3.2%
Equipment	3,830,629	2.0%
Other	12,441,900	6.5%
Park/Land	7,927,530	4.2%
Streets/Sidewalks	13,111,450	6.9%
Technology	535,045	0.3%
City Total	**88,385,522**	**46.3%**
School Total	**102,523,478**	**53.7%**
Grand Total	***190,909,000***	***100%***

In prior years, the majority of the City's debt has been dedicated to school facilities due to the high need for repair, renovation, and construction projects. Additionally, many construction projects for school buildings are eligible for partial reimbursement from the Massachusetts School Building Authority (MSBA). This allows the City to complete school related projects at lower cost to the City's general fund.

School related debt also accounts for a larger amount of the City's outstanding principal because construction projects can be amortized across a longer period, generally 20-30 years. Many City projects have a short useful life, such as vehicles or IT equipment. The City can only issue bonds with a term as long as the maximum useful life of the item for which it is borrowing. This causes debt issued for City purposes to fall off the debt schedule more quickly than school related debt. Thus, City projects will make up a large proportion of all outstanding principal shortly after the City sells debt, but it will also tend to pay that principal off faster than School debt, which is generally issued for 20-30 year terms. OMB projects that School projects will continue to represent the majority of Springfield's outstanding debt for the next several years, due to the construction of the Brightwood-Lincoln and DeBerry-Homer collocated schools.

Other Funding Sources

The City has been strategic in leveraging funds from Federal and State agencies. The City worked collaboratively with the Federal Emergency Management Agency (FEMA), the U.S. Department of Housing and Urban Development (HUD), the Massachusetts Executive Office of Energy and Environmental Affairs (EEA), the Massachusetts Emergency Management Agency (MEMA), and the Massachusetts School Building Authority (MSBA) to maximize revenues for schools, facilities, and infrastructure improvements.

In March 2019, the City issued $27.9 million of debt for its share of cost of City projects. By leveraging funds from FEMA, MEMA, EEA, MGM, and MSBA, the City will receive 50.1% of the total costs for these bonded projects from outside sources.

FEMA has committed over $19.0 million as part of FEMA's improved projects program, aimed at restoring facilities damaged in the 2011 tornado. The chart below shows the total project costs and the breakdown between FEMA funding and City contribution with the exception of ECOS.

The Mass Mutual Foundation granted the Springfield Public School $150,000 toward the cost of building ECOS; this is reflected in the chart below. Debt for these projects was sold in February of 2017.

Project	Outside Funding	City Contribution	Total Estimated Project Cost
50 East Street Renovation	2,890,464	9,053,120	11,943,584
Raymond Jordan Senior Center	7,608,496	4,391,504	12,000,000
South End Community Center (SECC)	6,000,000	4,292,500	10,292,500
Clifford A. Phaneuf Environmental Center (ECOS)	2,682,303	1,487,689	4,169,991
TOTAL	**19,181,263**	**19,224,813**	**38,406,075**

The City anticipates an 80% MSBA reimbursement for eligible costs for nine Springfield public schools that have been invited into the MSBA Accelerated Repair Program in recent years: the Alfred G. Zanetti Montessori Magnet School, M. Marcus Kiley Middle School, South End Middle School and Balliet Middle School for the replacement of windows and doors and accessibility upgrades, the Mary Lynch Elementary School, Kensington Avenue International School, Milton Bradley Elementary School, and Thomas M. Balliet Elementary School for roof replacements and accessibility upgrades, and the Springfield High School of Science and Technology for a boiler replacement. The total estimated project cost for these schools is $28.9 million.

The City is also currently in the process of finalizing plans for additional MSBA repair projects to replace boilers at Sumner Ave. Elementary School, Frederick Harris Elementary School, and Indian Orchard Elementary School.

Springfield is also currently involved in two MSBA school construction projects to replace four elementary schools: Brightwood, Lincoln, Homer, and DeBerry. Construction of the Brightwood-Lincoln collocated schools is currently underway. The Homer-DeBerry project is in the schematic design phase.

School Project	MSBA Funding	City Contribution	Total Estimated Project Cost
Brightwood-Lincoln Elementary Schools	50,218,732	31,983,044	82,201,776
M. Marcus Kiley Middle School	7,598,889	1,899,722	9,498,611
Springfield Highschool of Science and Technology	2,848,901	2,368,182	5,217,083
Milton Bradley Elementary School	1,942,410	1,414,078	3,356,488
Alfred G. Zanetti Montessori Magnet School	2,525,137	631,284	3,156,421
Thomas M. Balliet School	1,715,810	428,953	2,144,763
Mary M. Lynch Elementary School	1,693,704	423,426	2,117,130
Balliet Middle School	1,609,775	402,444	2,012,219
Kensington International School	1,191,130	297,783	1,488,913
TOTAL	**71,344,489**	**39,848,915**	**111,193,404**

Note: Project funding agreements between the MSBA and the City for the DeBerry-Homer, Indian Orchard, Sumner Ave., and Fredrick Harris projects have not yet been completed, and final budgets are pending.

The City will continue this strategic use of federal, state, private and City funding as we make decisions about future debt issuances.

Composition of Debt

Springfield may issue debt for numerous purposes. Cities and towns deliver many services, from education and public safety, to transportation, recreation and social services. Each service has different capital needs associated with it. Education, for example, requires the construction and maintenance of buildings in which to educate children. Education debt should therefore be heavily skewed toward building and facility debt. It is rare for the City to issue debt for non-facility or grounds related projects for the School Department. As shown below in Figure 2, the City's outstanding debt is mainly comprised of debt for buildings and facilities: City facility (50.3%), Demolitions (6.9%), and Streets/Sidewalks (14.8%).

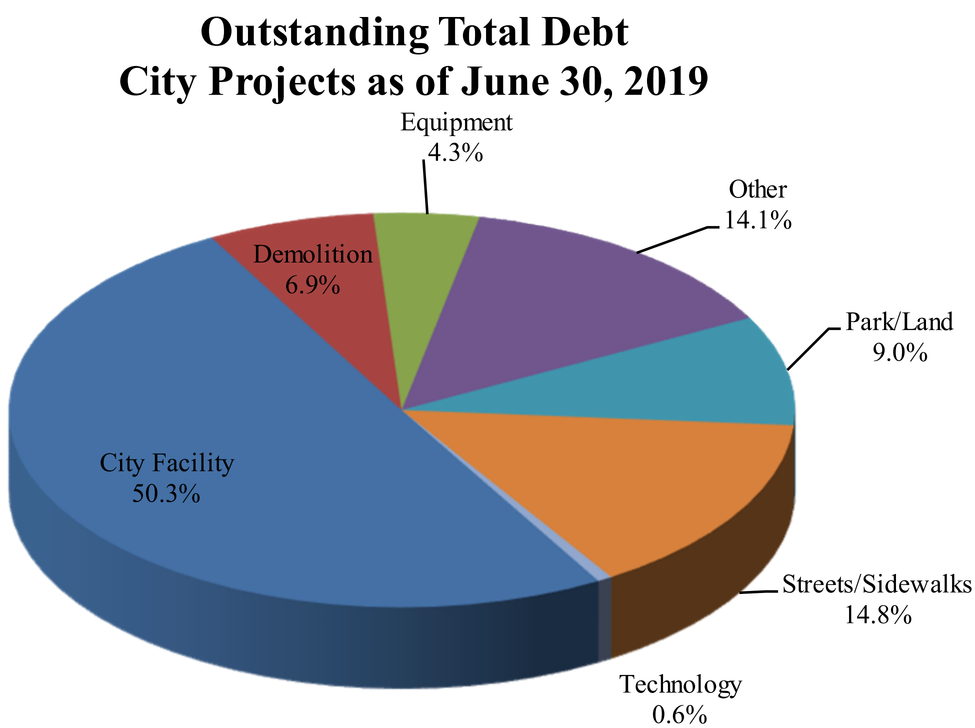

Figure 2: Breakdown of outstanding City debt, First Southwest

General government services, however, should have a much more diverse mix of facility and non-facility debt. For example, debt related to parks and recreation should include some building debt, but also substantial non-facility debt, including the renovation of fields, pools, and other projects. Public Safety debt would normally include a mix of facility and non-facility debt, with non-facility debt being comprised mainly of vehicle, apparatus, and equipment purchases. These non-facility debt categories account for 40.7% of the total City debt as shown in Figure 2 above.

Examining non-facility debt, the City has begun to make substantial investments in equipment, parks, land purchases, the demolition of blighted and condemned buildings, technology, and improvements to our road and sidewalk infrastructure. The City's Capital Improvement Plan (CIP) indicates there will be considerable funding needed in the future in these areas. These projects are also to promote economic development in Springfield. Notably, the vast majority of debt categorized as for "other" purposes, has been issued for the management of the Bondi's Island landfill and repairs to the City's flood control system.

In March 2019, the City issued debt for a number of ongoing projects. These include: the construction of the new East Forest Park Library, continued work on the School Culinary and Nutrition Center, the remodeling of Stearns Square and Duryea Way, the repair of City Hall's steps, the repaving and repair of streets and sidewalks in downtown and the installation of a pedestrian wayfinding system, the renovation of Riverfront Park, and the repair of the Mill River flood control system. Additionally, this issuance funded multiple MSBA school repair projects, and a feasibility study and schematic design for a new joint Homer-DeBerry campus.

In 2020, the City does not plan to issue any bonds. Instead, it will issue short-term bond anticipation notes (BANs) to fund multiple ongoing projects. These projects include: the construction of the Brightwood-Lincoln campus, MSBA repair projects at Milton Bradley and the Springfield High School of Science and Technology, a new computer aided dispatch and records management system for the Springfield Emergency Communications department, body-worn cameras for the Springfield Police Department department, and 23 new police vehicles. These projects will ultimately cost an estimated $94.1 million, with the City's share of the expenses being $39.1 million (42.9%). However, the City will only issue BANs for a portion of this total amount, as the projects are still ongoing.

In FY09, the City instituted another source of funding for capital expenditures: "pay-as-you-go" capital, or "pay-go." To fund pay-go, the City appropriates 1.5% of local source operating revenues to finance capital improvements via cash, in lieu of issuing debt. This appropriation is required by the City's financial ordinances and policies (Ch. 4.44.050.). Pay-go allows the City to reduce its overall borrowing costs by funding smaller, routine projects through the operating budget.

Since FY09, $28.1 million has been appropriated for capital projects through pay-go. The City uses pay-go to fund emergency infrastructure repair projects, vehicle replacements, IT upgrades for software, security and servers, and park and building renovations. Pay-go allows the City to fund design work and studies to better prepare for grant applications, and to fund appropriations for matching grants. This funding source is a major reason for the City's ability to often bear less than half of the cost of large capital projects.

Net Debt Service

As mentioned in the Purpose of Issuance section, the City of Springfield has a total outstanding debt portfolio (principal only) of $190.9 million as of June 30, 2019. When interest is included, the total cost of this debt is $248.6 million. However, this is not the actual amount that the City pays in debt service. The City receives reimbursements for certain debt-funded projects, as well as interest earnings on its QSCB sinking fund which, when subtracted from the $248.6 million in total debt service, leaves a balance of $217.6 million of liability (principal and interest). Figure 3 below shows net debt service through 2029. The 2027 spike in debt service will be funded using the QSCB sinking fund, explained previously on page eight of this report.

Figure 3: Net Debt Service payments; First Southwest

In previous years, the City had been approved to receive school construction assistance on various school construction projects under a program managed by the MSBA. Under the terms of this program, the City was required to incur general obligation debt financing for the full costs of those school construction projects. The MSBA then provided annual grant distributions to the City to offset the annual debt service costs on these projects as the City repaid the bonds.

However, in FY17, the City entered into a debt refinancing transaction in order to take advantage of favorable interest rates. The City issued $23,965,000 of general obligation refunding bonds on March 7, 2017. The proceeds of the refunding bonds, along with a refunding premium of $2.6 million and $22.6 million of lump-sum payments from the MSBA, were used to refund $48,495,000 of debt from 2007. The transaction resulted in an economic gain of $3,858,526 and a reduction of $3,806,718 in future debt service payments. The lump-sum payment from the MSBA replaced contract assistance payments that were scheduled through FY2022 on three older school projects.

Industry Benchmarks

The municipal bond industry has established benchmarks that it uses to examine cities and towns across the nation. These benchmarks are intended to provide insight into a community's ability and willingness to repay the debt it issues and can be valuable tools for communities to evaluate their financial management strategies. This analysis is intended to provide insight into our finances and our ability to support debt and public investment.

What is included in this report and what is not?
This ratio analysis looks at all debt that places a burden on our general government revenue stream, including enterprise fund debt. The City issued debt on behalf of its single enterprise fund in February 2017. This debt was issued for two pick-up trucks, and two semi-automated and

one fully-automated 31 cubic-yard trash removal trucks. Payments, which began in 2020, will stay well within the City's financial ordinances, which state in Chapter 4.44.070 that, "enterprise fund debt service as a percentage of enterprise operating revenue – should not exceed fifteen percent (15%)."

This report assumes the continuation of normal operations for the City of Springfield. OMB has calculated the following measurements as part of the analysis.

Measure	Industry Standard	FY2019	FY2020
General Fund Balance as a % of Total Revenues	15% or greater	19.2%	19.7%
Debt Service as a % of General Fund Revenue	0% - 8%	4.2%	4.0%
Debt Service as a % of General Fund Expenditures	0% - 8%	4.2%	4.0%
Percent of Debt Retired in Ten Years	65% - 100%	81.2%	75.2%
Debt as a Percentage of EQV	0% - 5%	2.3%	2.3%
Total Outstanding Debt Per Capita	$0 - $1,000	$1,179.75	$1,231.42
Total Debt as a Percentage of Total Personal Income	0% - 7%	5.9%	6.0%
Undesignated Fund Balance as a % of Revenues	10% or greater	8.8%	8.5%
Overall Net Debt as a % of Full Value	1.5% - 5%	2.6%	2.6%
Taxpayer Concentration % of Property Value Held by Top Ten Taxpayers	0% - 15%	9.8%	9.7%

Figure 5: Municipal Bond Industry Benchmarks

Debt Service as a Percentage of General Fund Expenditures

This benchmark measures the City's ability to finance debt within its current year budget. It is similar to the measurement of household income dedicated to mortgage payments that banks use when assessing borrowers. This is the most immediate measure for determining a City's ability to pay it debt service; however, it only examines the ability to pay for debt within a community's existing budget. Cities and towns that have excess levy capacity – communities that do not tax to the maximum of their Proposition 2 ½ limitation – would have greater ability to pay for debt than this measure suggests, because they have additional taxing capacity.

The City's measure of debt service as a percentage of General Fund expenditures is strong, with 4.0% of the Fiscal Year 2020 budget dedicated to debt service. This measure has been trending down over the last five fiscal years due to decreases in total debt service and an increase in the City's general fund revenue.

Each year, the City is required to fund a capital reserve account at a level equal to at least one and one half percent of property taxes from the prior fiscal year (Chapter 4.44.060). Many cities and towns that are economically comparable to Springfield have higher ratios of debt service to general fund expenditures. Springfield should continue to maintain this ratio at a similar level in future years to ensure that debt service payments do not crowd out funding for services in future budgets. The City should also aim to keep its debt service ratio from declining, as this would denote a lack of investment in long-term capital needs, which carries its own liability for the City's taxpayers due to the costs associated with deferred maintenance.

The City's relatively low ratio of debt service to general fund expenditures provides more budgetary flexibility to address financial problems as they arise. Debt payments are not discretionary. Courts have ruled these payments must be made, even before salary payments for employees. Communities with high levels of debt service relative to operating expenditures have a larger portion of their budget dedicated to payments that must be made regardless of the community's financial situation. The City has strategically restructured its debt service payments in order to have declining payments in future years. This not only makes the debt service more affordable, but also allows the City to layer on more debt in future fiscal years.

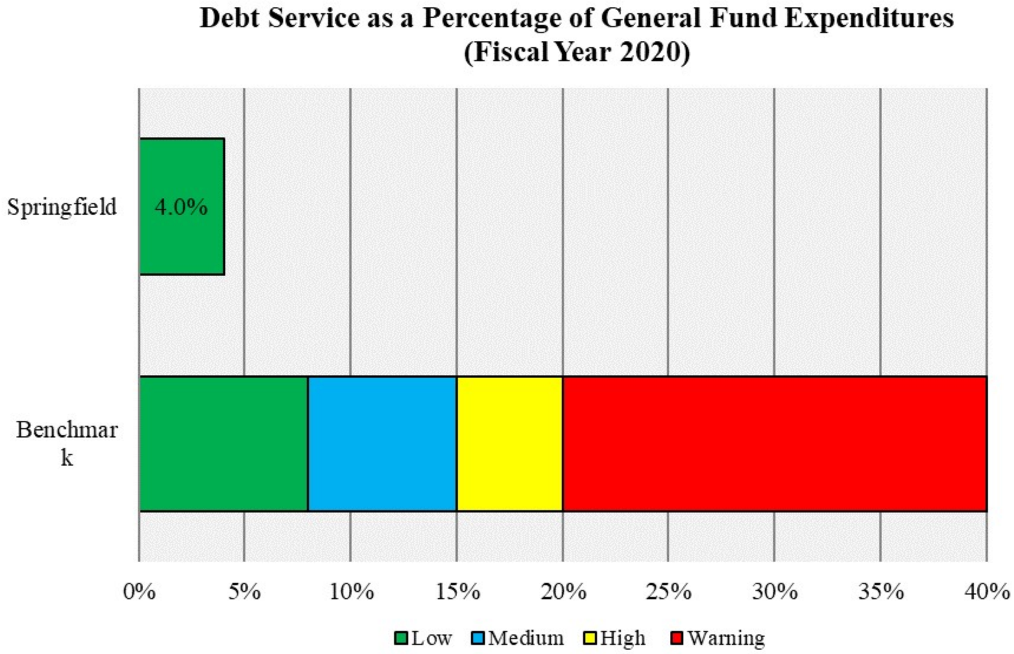

Figure 6: Ratio of 2020 Budgeted Debt Service Payments over Total General Fund Budget

Debt Service as a % of General Fund Expenditures		
2020 Total Debt Service	$	27,843,303
2020 Budgeted General Fund Expenditures	$	691,704,328
Debt Capacity		**4.0%**

Source: First Southwest, Springfield FY2020 Adopted Budget

Figure 7: Calculation of Debt Service as a percent of Budgeted General Fund Budget

Debt Retirement: Percent Retired within Ten Years

The speed with which a community retires its debt indicates a number of important factors. Included in these are:

- Willingness to repay debt: rapid repayment of principal indicates that a community is committed to repaying its debt. This "willingness to pay" is measured in a number of ways and is particularly important to those who lend money to others, as it provides them proof of the borrower's intention to repay the money they borrowed.

- Ability to repay debt: rapid repayment of principal indicates that a city or town has the financial resources necessary to repay debt quickly. This demonstrates a level of financial stability; communities that are experiencing financial difficulty are unlikely to repay their debt in an accelerated manner.

- Prevention of future problems: rapid debt retirement ensures that a community is not "back loading" its debt, as the City once did, locking itself into debt repayments that are affordable now, but that will grow unaffordable in the future. Back loading debt is a sign of poor financial management – either overspending is intentional, or managers are unable to make the difficult, short-term decisions to balance the budget using a more appropriate debt financing structure.

The percentage of debt retired within ten years is particularly important in determining whether debt has been back loaded. Back loading occurs when the cost of debt is pushed off into the future, reducing current year payments, while increasing future ones. Back loading increases the cost of debt in the long term, as cities are forced to pay interest on the principal they borrowed for a longer time. Back loading debt can result in cities being forced to reduce expenditures, cut programs, or increase taxes to make debt service payments. Prior to 2005, the City back loaded debt issuances, causing major spikes in its debt service payments in future years. This problem was alleviated through "front loading" debt and making a number of other modifications to the City's debt structure.

Failure to invest in maintenance and capital, otherwise known as deferred maintenance, can be considered a form of debt back loading because capital needs still must be addressed at some point. Avoiding the costs of maintenance or investment only delays the financing of these improvements, and it increases the likelihood that capital will fail *en masse*, resulting in unaffordable costs for future taxpayers. Delaying capital investment also tends to make projects more expensive, because costs tend to increase over time.

The City currently has an aggressive debt retirement schedule. 75.2% of the principal borrowed by the City will be repaid within ten years and all current debt will be retired by 2049, as shown in Figures 8 and 9 below. This places the City well within the "excellent" ranking established by bond rating agencies (65% and above). Because of this schedule, the City will be able to borrow additional money to continue investing in its facilities, infrastructure, and other capital projects.

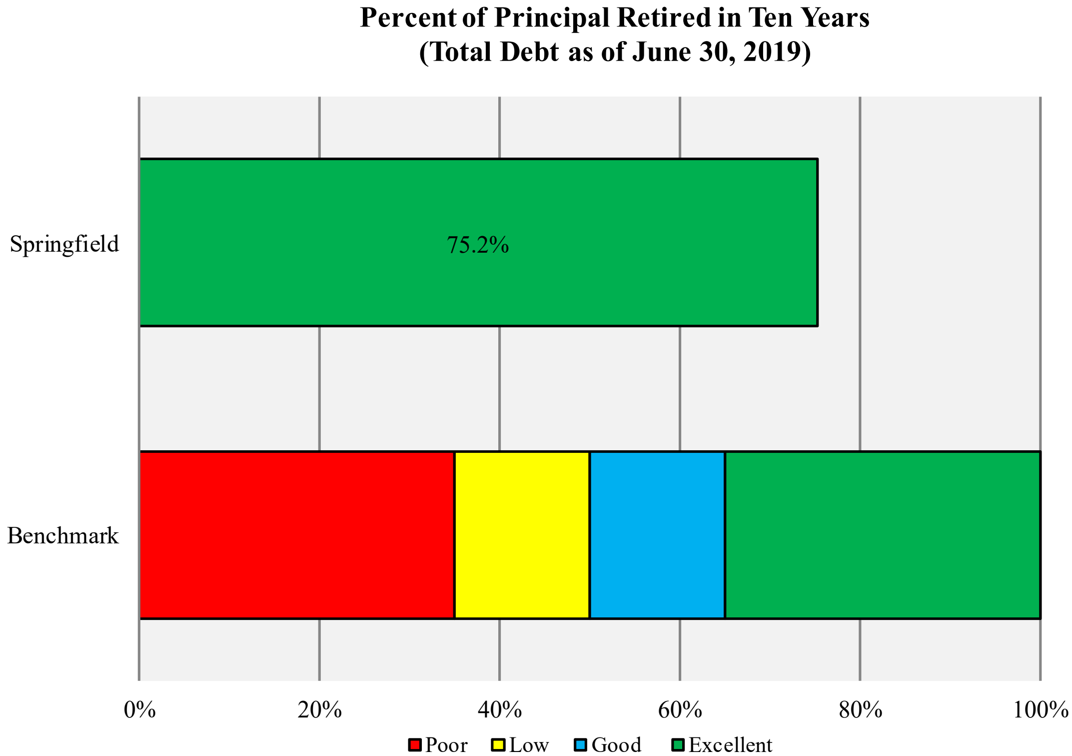

Figure 8: Percent of Debt retired in 10 years.

Percent of Debt Retired in Ten Years		
Total Debt Retired in 10 Years	$	187,015,842
Total Outstanding Debt Service	$	248,629,584
Percent of Debt Retired in Ten Years		**75.2%**

Source: First Southwest

Figure 9: Calculation of Total Debt (Principal + Interest) retired in 10 years.

Furthermore, the City's overall debt retirement ranking indicates a strong willingness to repay debt. Examining this ratio in conjunction with the City's overall debt schedule indicates that the City has not back loaded debt; the City's overall debt structure is prudent and well within the industry benchmarks.

Debt as a Percentage of Full Property Value (EQV)

Debt as a percentage of full property value (known in government finance circles as "equalized value," or EQV) measures the ability of a community's property tax base to support borrowing. The majority of revenue in Massachusetts communities comes from property taxation; therefore this ratio examines a community's debt relative to its main revenue source.

However, in Springfield, 59.9% of revenue comes from state aid, whilst just 40.1% comes from local source revenue. Thus, this measure is helpful, but not deeply informative, because it looks at total outstanding debt, not debt service payments. Examining debt as a ratio of full property value does not say much about the affordability of that debt. A small amount of debt issued at a high rate of interest can be more expensive than a larger amount of debt issued at a lower interest rate. Further, in Massachusetts communities are limited in their ability to access their property tax base by Proposition 2 ½. This measure is a helpful benchmark to compare communities to one another, but is not an absolute measure of debt affordability because of the aforementioned issues.

Mass. Gen. Laws (M.G.L) Ch. 44§10 dictates the City's debt limit be no more than 5% of the equalized value. The City's ratio of debt to property value is currently 2.3%, which is considered "medium" by rating agencies (Figure 10). As indicated above, this medium measure does not directly relate to the City's ability to pay for this debt. This ratio does not take into account debt structure (how much money is due at what point in time for each issuance), or timing of payments. Furthermore, it fails to consider the City's ability to access property values due to Proposition 2 ½.

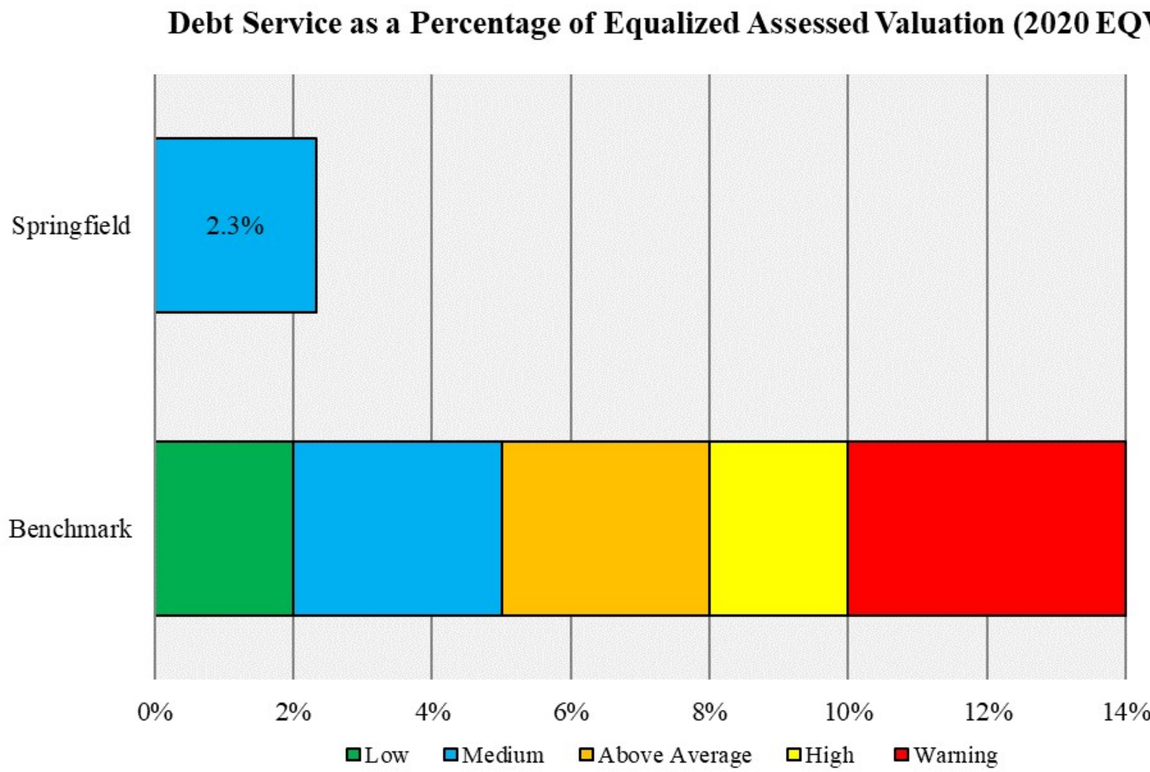

Figure 10: Ratio of Debt to Estimated Property Value

Debt as a Percentage of EQV	
Total Outstanding Debt (Principal)	$ 190,909,000
2018 EQV (Equalized Valuation)	$ 8,214,498,300
Debt as a Percentage of EQV	**2.3%**

Source: First Southwest, DLS Municipal Databank

Figure 11: Calculation of Outstanding Principal as a percent of EQV.

Debt per Capita

Debt per capita examines the amount of debt the City has issued per person in the community. This is not intended to be a literal measure, because debt is not issued to benefit individuals, but rather the community as a whole. This measure provides a sense of the cost of the capital investments in a community and, at its most extreme, how much money would be required from each resident to repay the community's debt, if for some reason immediate repayment was required.

Debt per capita can be a useful measure when examining similar communities. By and large, comparable communities should issue similar amounts of debt for various capital purposes. However, even similarly sized communities have significant differences, so this measure should not be examined in absolute terms, but rather in the context of the unique requirements and challenges facing each community. It should also be viewed in light of Proposition 2 ½, which limits a community's ability to access its property tax base. Proposition 2 ½ can force communities to issue debt for smaller projects that communities in other states would pay for in cash.

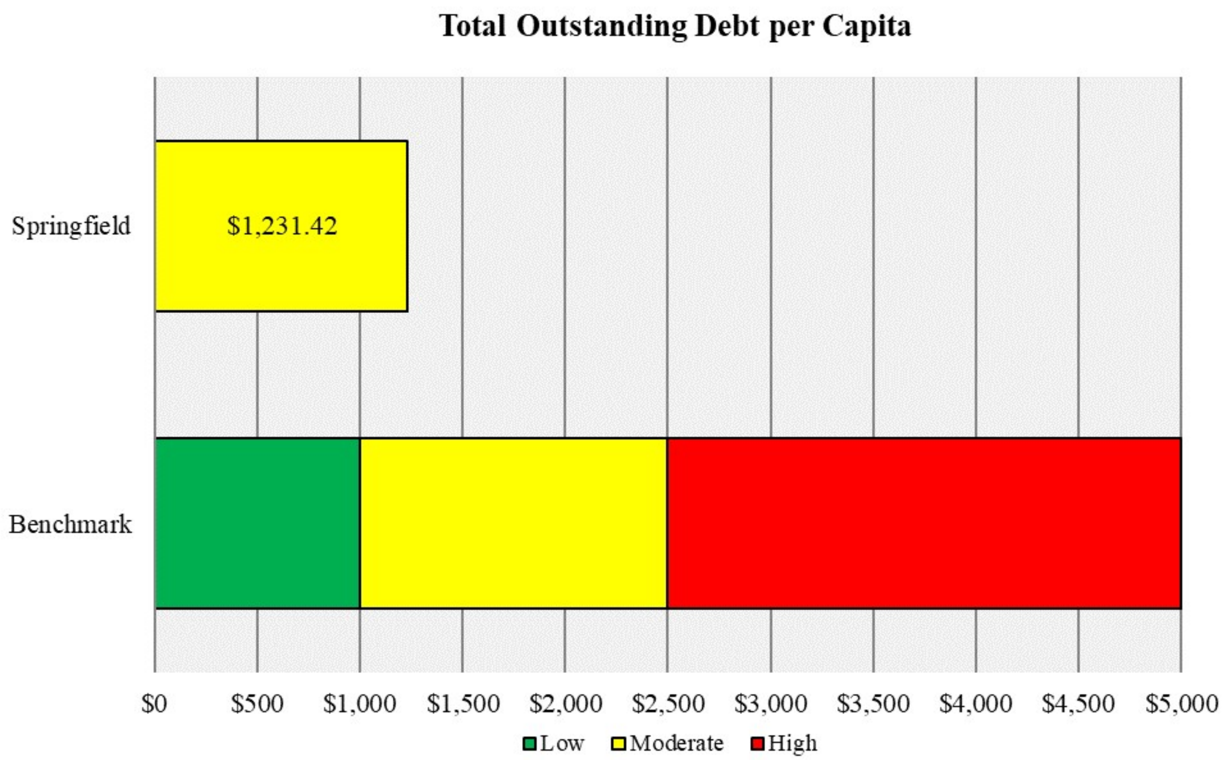

Figure 12: Estimated Debt per person.

Total Outstanding Debt Per Capita		
Total Outstanding Debt (Principal)	$	190,909,000
2019 Population Estimate		155,032
Total Outstanding Debt Per Capita	**$**	**1,231.42**

Source: First Southwest, MA Division of Local Services

Figure 13: Calculation of outstanding debt per person

The City's level of debt per capita is considered moderate by rating agencies. This rating is not completely unexpected, as the City has a large number of aging facilities (particularly schools) and infrastructure. The City is currently performing large school renovation projects, and funding the replacement of schools and other facilities. Because of the City's major capital needs, which necessitate the issuance of debt every few years, this measurement will continue to fluctuate, as it is dependent on the City's total outstanding principal.

Debt as a Percentage of Total Personal Income

Like the ratio of debt to property value, the ratio of debt to personal income is a measure of affordability of the debt issued by a community. While property values provide the base that supports property taxation, it is personal income that allows people to buy goods and services, make investments, and pay their taxes. Debt as a percentage of total personal income tells us how affordable debt is based on the income characteristics of a city or town.

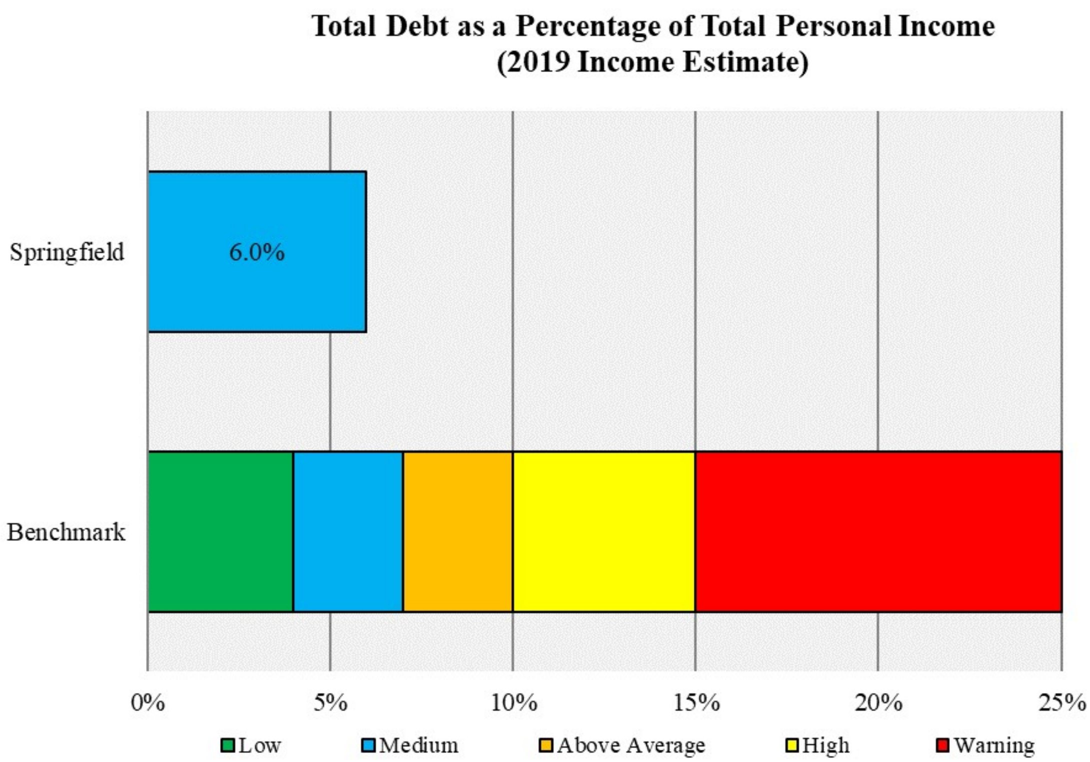

Figure 14: Ratio of debt to personal income.

Total Outstanding Debt Per Capita as a Pecentage of Total Personal Income Per Capita		
Total Outstanding Debt Per Capita	$	1,231.42
2019 Per Capita Income	$	20,544
Total Outstanding Debt Per Capita as a Percentage of Total Personal Income Per Capita		**6.0%**

Source: U.S. Census Bureau, First Southwest

Figure 15: Calculation of debt to personal income.

Springfield's ratio of debt to personal income is considered "average" by credit rating agency standards. This means that the City's debt is comparable to a moderate share of a residents' income. Unlike the prior measure, however, this does not examine the cost of the debt, but focuses on the amount of debt issued. In other words, this measure does not take into account the net debt service or timing of debt payments.

The ratio of debt to personal income appears to be less favorable than that of debt to total property value, which indicates a disparity between home values and income. This variance is caused by the inclusion of commercial and industrial property values that are included in the debt to total property value calculation, but not in the debt to personal income ratio. The City would not be able to provide the same level of services and investment in infrastructure without commercial and industrial property tax revenues. This highlights the need for economic development to be a top priority of the City.

Overall Net Debt as a percentage of Full Value

Overall Net Debt as a percentage of full value, sometimes referred to as the "Debt Burden" of the community, measures the value of a city's debt compared to the value of a city's assessed real property. This is a ratio measuring the value of the municipality's net debt compared to the total EQV of the City.

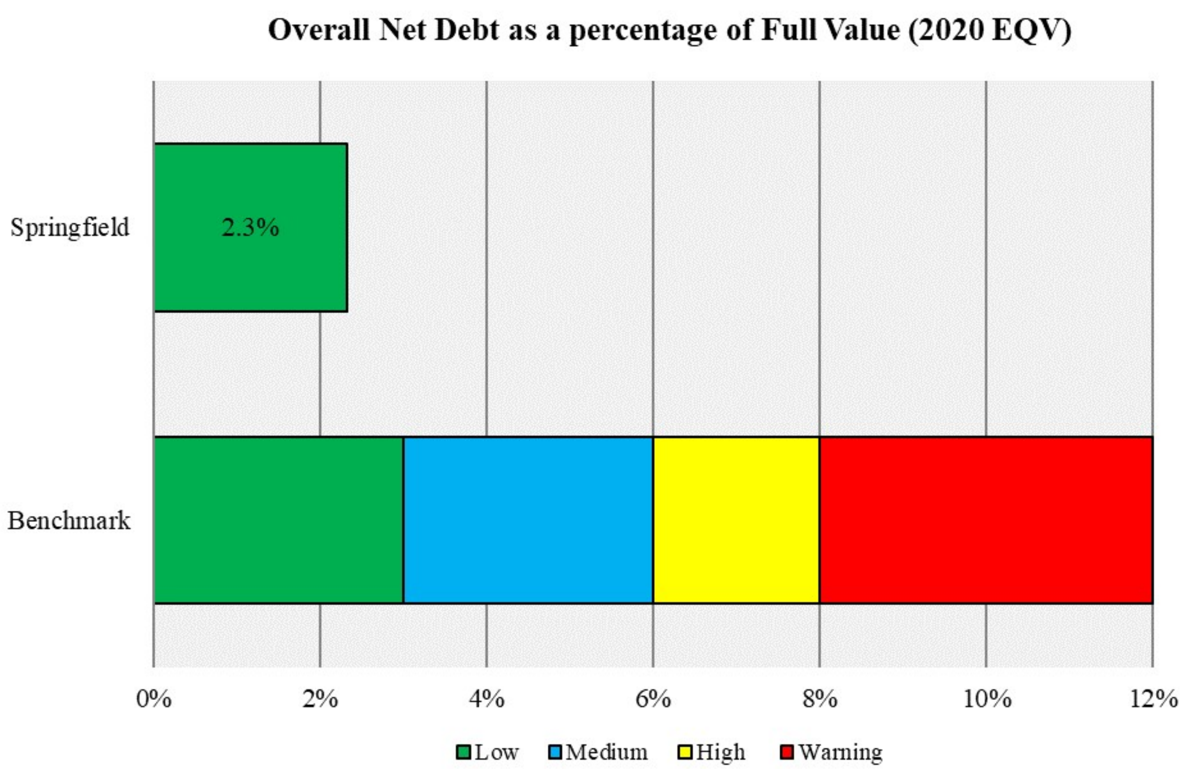

Figure 16: Ratio of Net Debt to EQV.

Overall Net Debt as a percentage of EQV	
Total Outstanding Net Debt	$ 217,622,995
2018 EQV (Equalized Valuation)	$ 8,214,498,300
Overall Net Debt as a percentage of EQV	**2.6%**

Source: First Southwest, MA Division of Local Services

Figure 17: Calculation of net debt to EQV.

This is one of the factors which determine the quality of a municipal bond issue. The lower the City's debt is relative to the assessed value of its property, the less risky its bonds are deemed to be. Ultimately, the more leveraged a tax base is, the more difficult it is to afford additional debt. Debt burdens that range from 0-3% tend to be viewed as low. The City's level of debt burden is 2.6%.

Conclusion

Since Fiscal Year 2005, the City of Springfield has strengthened its financial position by instituting clear and strict financial policies, passing responsible budgets, and continually reassessing capital needs through a comprehensive five-year capital investment plan; all within the fiscal constraints illustrated in this debt affordability analysis.

During our last debt issuance in 2019, Standard and Poor's (S&P) affirmed the City of Springfield's AA- rating, with a stable outlook, a high investment grade. This demonstrates that Standard & Poor's strongly believes in the City's financial management and ability to make difficult decisions to balance the budget. S&P credited the City for having strong budgetary flexibility, with an available fund balance of 19.2% of operating expenditures, very strong management with "strong" financial policies and practices, and an experienced and capable management team. The S&P rating continues to be the highest rating in the City's history, and one that the City has maintained for the last six years. Credit ratings have an integral role in the municipal bond market and are one factor that affects the interest rates the City pays on its debts.

The low debt service to general fund expenditures ratio in the City's budget demonstrates our ability to pay our debts. This is the most important short-term measure of our ability to pay our debts; however, it only examines the ability to pay for debt within a community's existing budget. With only 4.0% of the Fiscal Year 2020 budget dedicated to debt service, the City's measure of debt service as a percentage of General Fund expenditures is strong. This measure has been trending down consistently over the last six fiscal years (6.5% in FY15, 5.8% in FY16, 5.3% in FY17, 4.6% in FY18, 4.2% in FY19) even as the City has issued more debt, due to strong revenue growth. However, OMB expects debt service payments as a share of the budget to increase following the issuance of new debt for the Brightwood-Lincoln and Homer-DeBerry projects. These major projects will reduce the ability of the City to issue more debt.

According to the measures presented in this analysis, the City is in a solid debt position, but can still improve its finances. One way to improve the City's ability to take on debt is to foster an environment that promotes jobs and increase citizens' wealth. These policies will help decrease the ratio of debt to total income and decrease debt per capita. This will bring Springfield more in line with other communities in the Commonwealth. Springfield has been improving on these measures due to lower unemployment over the last three years, and significant private sector investment in the City, such as the construction of the CRRC rail factory and MGM Springfield casino, which have provided new employment opportunities to our residents.

As noted above, Springfield continues to take advantage of funding from state and federal agencies, such as FEMA, HUD, DOT, MSBA, and EEA. As a result, the City has generally been responsible for less than half of the funding on the projects it issues debt for over the past five years. The opening of the MGM Springfield casino in August 2018 has also increased the City's revenues, and thus its ability to fund capital projects. As part of Springfield's host-community agreement with the MGM, MGM also provided $1 million in funding towards the ongoing Riverfront Park project, further reducing the City's need to issue debt.

However, despite its access to outside funding, increasing revenues, and strong stewardship of its debt, the City still needs to be conservative in how it decides to invest in future projects. As mentioned in the opening of this report, rising non-discretionary costs continue to crowd out room for debt service in the budget, while project costs have been increasing due to market factors in recent years. Springfield remains very close to its Proposition 2 ½ levy ceiling, and is thus more vulnerable to the effects of a future economic downturn. With the Massachusetts Department of Revenue projecting continued a slowdown in economic growth in FY21, the City has had to be conservative in its debt strategy, to ensure that debt service payments do not become an undue burden on the City's finances.

The City is steadily and strategically moving in the right direction. Our high credit rating allows us to pay back loans at a lower interest rate, which in turn allows the City to issue more debt for citywide projects. The more capital projects the City can afford to invest in, the more the City can work to spur economic development in Springfield. When we invest in our infrastructure and economy, the spin off effects are new business investment and rising property values– resulting in more funding for the maintenance of streets, parks, libraries, and public buildings. A healthy economy positively affects school graduation rates, job creation, poverty, unemployment rates, and crime. All of these positive effects increase citizens' morale and make Springfield a more attractive city for current and future residents.

Appendix A
Debt Analysis Definitions

Consistent with the City's financial policies as well as standard business practices, the City of Springfield has only issued debt to finance capital investment. Appendix B of this report is a summary of all projects financed by debt that are currently outstanding. Each of these projects is a capital project, and the expenditures are considered capital investments.

The City of Springfield defines **capital** as buildings, facilities, land, infrastructure or major equipment with an estimated useful life of at least ten years and costs at least $25,000. Similarly, any improvements to capital which would extend the useful life of capital being improved by at least five years may be considered capital if it costs at least $25,000.

A **capital investment** is the expenditure of funds to improve existing City infrastructure, extend its useful life, buildings, or acquire new capital assets. This is considered an investment because the funds expended are used to reduce costs and/or improve services over a multi-year timeframe.

Debt Service is the cost of repaying debt that has been issued. This includes principal and interest payments. Move definitions to appendix at end.

Municipal debt: usually bonds and notes – is a tool for financing investments in the infrastructure and capital equipment that permits government to provide services to the public. In its most basic form, debt occurs when a city or town borrows from lenders. The money that is borrowed is usually repaid over a number of years, and the lender usually charges interest to the borrower as compensation for allowing someone else to use their money. To begin to understand municipal borrowing, a few key terms are important:

Bond: A long-term financing tool that allows a community to borrow money to finance certain investments. Municipal bonds in Massachusetts are generally issued with a fixed interest rate and carry a term of between 10 and 30 years.

Note: A financing tool generally used for short-term needs, such as "bridge financing" during construction. In Massachusetts, notes are generally issued as one-year debt which can be "rolled" for a maximum of five years.

Term: The length of time a bond or note is outstanding. In other words, if a community borrows money for 20 years to finance the construction of City Hall, the "term" of the debt is 20 years. In five years, the "remaining term" would be 15 years.

With rare exception – exceptions which are authorized by the Commonwealth on a case-by-case basis through special legislation – municipal debt can only be incurred for investment in the capital needs of a community. State finance law permits communities to issue debt for the following purposes:

Public Works

- Construction and reconstruction of roads, bridges, sidewalks, walls and dikes, and for the acquisition of land
- Construction and reconstruction of municipal buildings, including schools
- Traffic signals, public lighting, fire alarm and police communication equipment

Municipal Equipment

- Departmental equipment, including fire equipment and heavy equipment such as graders, street sweepers, trash trucks, and semi-automated recycling trucks.
- Costs for design, development and purchase of computer software and equipment

Energy

- Energy conservation, to pay for energy audits or to implement alternative energy technologies

Environmental

- Asbestos abatement in municipal buildings
- Preservation and restoration of lakes and ponds

Recreational

- Construction of parks and playgrounds
- Construction of skating rinks, outdoor swimming pools, golf courses, tennis courts and other outdoor recreational facilities

Debt should be issued to finance capital improvements that will maintain or improve the rate of return on taxpayer dollars. Stated another way, debt should be issued to finance capital projects that prevent things from getting worse, make things better or improve operations, services or efficiency.

There are a number of reasons to issue debt to finance capital investment. As the City recovered from the June 2011 tornado and October 2011 snow storm, certain projects, such as the construction and reconstruction of the heavily damaged Elias Brookings Elementary and Mary Dryden Elementary Schools, could only be afforded by spreading their cost over many years. The MSBA Grant Program requires the City to appropriate the full cost of the project, before any reimbursements from MSBA can be requested, which required the issuance of debt.

The issuance of debt to finance projects with a long life is also considered "fair." This equity concern is grounded in the argument that today's taxpayers should not pay the entire cost of projects that will benefit future residents; rather, the people who benefit from the project should pay for its costs. As benefits from the investment will accrue over time, the costs should be paid over time as well. This requires the issuance of debt.

As an example, the City has bonded for the construction of a new Brookings Elementary School that could provide educational services for 50 years. It would not be "fair" to finance the project through direct cash appropriation because today's taxpayers would pay for its entire cost. Those who moved into Springfield in two years could receive 48 years of benefit without paying any of the cost, and those who moved out of Springfield in five years would have paid 50 years of cost but received only five years of benefit.

Similarly, it would not be "fair" or cost effective to bond for the project and structure the debt in such a way that the City would not pay the starting costs associated with the construction until 20 years from now. In other words, as the City issues debt, it begins paying back the principal and interest as to not back load the debt service schedule for future years to fund. The City's financial policies require the City to structure its debt in such a way that the City pays for the construction based on the depreciation of that building.

Debt management is the application of financial knowledge to ensure that our debt is structured in the manner that saves as much money as possible for our residents and protects our taxpayers from the risks associated with debt. Proper debt management can help the City take advantage of opportunities that suddenly arise and can help us predict and resolve problems before they occur. Specifically, proper debt management allows the City to plan additional debt issuances. The benefit of this is to allow the City to determine those projects that would be viewed as top priorities.

Debt management also helps a community ensure the cost of its debt is fair and equitable. Part of this fairness is issuing debt whose term does not exceed the useful life of the asset it finances. This reduces overall costs by placing a limit on the term of the debt and ensures that taxpayers will not be required to pay for assets that no longer exist, and therefore are no longer providing a public benefit.

Proper debt management should incorporate communication with the public to ensure the people we serve are fully informed of the ways in which their government is financed. This analysis continues the City's efforts to improve communication about public finances.

Appendix B
Current Outstanding Debt Issuances

City of Springfield, Massachusetts

Long-Term Debt Outstanding as of June 30, 2019

General Fund Tax-Supported

Date	Principal	Interest	Total P+I	Federal Subsidy QSCB	Net D/S
6/30/2020	18,945,000	7,684,778	26,629,778	(966,442)	25,663,336
6/30/2021	17,940,000	6,972,446	24,912,446	(966,442)	23,946,004
6/30/2022	17,300,000	6,188,234	23,488,234	(966,442)	22,521,792
6/30/2023	17,580,000	5,441,709	23,021,709	(966,442)	22,055,267
6/30/2024	11,335,000	4,795,209	16,130,209	(966,442)	15,163,767
6/30/2025	8,780,000	4,353,309	13,133,309	(966,442)	12,166,867
6/30/2026	8,575,000	3,961,834	12,536,834	(966,442)	11,570,392
6/30/2027	26,309,000	3,581,159	29,890,159	(966,442)	28,923,717
6/30/2028	6,575,000	2,170,544	8,745,544		8,745,544
6/30/2029	6,615,000	1,912,619	8,527,619		8,527,619
6/30/2030	6,285,000	1,672,169	7,957,169		7,957,169
6/30/2031	6,155,000	1,462,669	7,617,669		7,617,669
6/30/2032	5,885,000	1,265,669	7,150,669		7,150,669
6/30/2033	5,940,000	1,069,269	7,009,269		7,009,269
6/30/2034	5,565,000	884,719	6,449,719		6,449,719
6/30/2035	5,065,000	706,638	5,771,638		5,771,638
6/30/2036	3,000,000	572,447	3,572,447		3,572,447
6/30/2037	2,925,000	470,031	3,395,031		3,395,031
6/30/2038	690,000	373,794	1,063,794		1,063,794
6/30/2039	720,000	351,369	1,071,369		1,071,369
6/30/2040	750,000	327,969	1,077,969		1,077,969
6/30/2041	775,000	297,969	1,072,969		1,072,969
6/30/2042	810,000	266,969	1,076,969		1,076,969
6/30/2043	840,000	234,569	1,074,569		1,074,569
6/30/2044	875,000	200,969	1,075,969		1,075,969
6/30/2045	910,000	165,969	1,075,969		1,075,969
6/30/2046	930,000	134,119	1,064,119		1,064,119
6/30/2047	960,000	101,569	1,061,569		1,061,569
6/30/2048	995,000	67,969	1,062,969		1,062,969
6/30/2049	880,000	31,900	911,900		911,900
Total	**190,909,000**	**57,720,584**	**248,629,584**	**(7,731,539)**	**240,898,045**

Par Amounts Of Selected Issues June 30, 2019	**Amount**
April 15 2009 Series A SQ -White Street Fire Station (ISQ)............	370,000
April 15 2009 Series A SQ -Chapman Valve Eco. Dev. (ISQ)............	120,000
April 15 2009 Series A SQ -Old First Church (ISQ)............	135,000
April 15 2009 Series A SQ -Forest Park Maintenance (ISQ)............	90,000
April 15 2009 Series A SQ -Administrative Expenses (ISQ)............	50,000

June 24 2010 QSCB (Taxable)..	17,864,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Remodel Public Buildings (ISQ....................	370,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Dep.Equip.Fac.Mgmt & Park(ISQ...............	88,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Public Building Reno (ISQ)........................	1,402,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Roof Repairs - School (ISQ)........................	288,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Boston Road/Parker St (ISQ).......................	74,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Public Build.ADA Require (ISQ.................	702,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Repairs to Public Build (ISQ)......................	678,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Repairs to School Build (ISQ).....................	328,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Emergency School Repair (ISQ)..................	702,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Library & Museum Remodel (ISQ...............	10,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Repairs to Muni Garage (ISQ)....................	2,534,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Final Phase Tapley St (ISQ).......................	736,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 School Build Repairs (ISQ)........................	1,009,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Public Building Repairs (ISQ).....................	171,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Rebecca Johnson School (ISQ)...................	347,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Demo of Former Tech HS (ISQ).................	752,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Facility Construction (ISQ).........................	69,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Landfill Closure (OSQ)..............................	1,451,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Departmental Equip (ISQ)..........................	91,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Urban Renewal 1 (OSQ)............................	207,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Park Improve 1 (ISQ)................................	599,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Park Improve 2 (ISQ)................................	1,258,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Cyr Arena (ISQ).......................................	186,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Fire/Safety Complex (ISQ).........................	594,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Library & Museum (ISQ)...........................	885,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Urban Renewal 2 (OSQ)............................	889,000
December 20 2012 SQ Refunding -Adv Ref July 7 2005 Park Improve 3 (ISQ)................................	275,000
February 12 2015 Series A SQ -Forest Park Middle School Renovation (OSQ)................................	2,790,000
February 12 2015 Series A SQ -Landfill Closure (OSQ)...	880,000
February 12 2015 Series A SQ -Elias Brookings Elementary School Replace. (OSQ)........................	1,435,000
February 12 2015 Series A SQ -Mary Dryden Veterans Memorial School Remodel (OSQ)................	1,925,000
February 12 2015 Series A SQ -Union Station (OSQ)...	1,920,000
February 12 2015 Series A SQ -Central HS Science Lab Remodeling (OSQ)....................................	5,430,000
February 12 2015 Series A SQ -Boston Rd. Corridor Improvements I (ISQ)......................................	3,750,000
February 12 2015 Series A SQ -Boston Rd. Corridor Improvements II (ISQ).....................................	1,265,000
February 12 2015 Series A SQ -School Roof Replacement - HS of Science/Tech (OSQ)...................	540,000
February 12 2015 Series A SQ -Ells School Roof Replacement (OSQ)...	170,000
February 12 2015 Series A SQ -South End Middle School Roof Replacement (OSQ).........................	130,000
February 12 2015 Series A SQ -Springfield Public Day HS Roof Replacement (OSQ).......................	155,000
February 12 2015 Series A SQ -Pine Point Library Design & Construction I (ISQ)............................	660,000
February 12 2015 Series A SQ -Pine Point Library Design & Construction II (ISQ)...........................	570,000
February 12 2015 Series A SQ -Chestnut Middle School Roof (OSQ)..	400,000
February 12 2015 Series A SQ -Chestnut Middle School Demolition (OSQ).....................................	1,635,000
February 12 2015 Series A SQ -Chestnut Middle School Medallions (OSQ).....................................	140,000
February 12 2015 Series A SQ -School Remodeling - Green Communities (OSQ).............................	25,000
February 12 2015 Series A SQ -Putnam School (OSQ)..	5,205,000
February 12 2015 Series A SQ -ESCO Phase II (ISQ)..	8,880,000
February 12 2015 Series A SQ -Parker St. Road Improvements (ISQ)..	840,000
February 12 2015 Series A SQ -City Hall HVAC Improvements (ISQ)...	1,465,000
February 12 2015 Series A SQ -Land Acquisition/Remediation - Catherine St. (ISQ).........................	2,540,000
February 12 2015 Series B SQ (Taxable)..	320,000

February 12 2015 Series C SQ -Adv Ref 2-7-07 Putnam School Renovation (ISQ)............................	504,950
February 12 2015 Series C SQ -Adv Ref 2-7-07 Our Lady Hope School Reno (ISQ).........................	1,545,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Various School & Water (ISQ)..............................	200,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Demolition 1 (ISQ)...	1,185,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Demolition 2 (ISQ)...	995,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Demolition 3 (ISQ)...	1,225,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Financial Software (ISQ).......................................	49,995
February 12 2015 Series C SQ -Adv Ref 2-7-07 Fire Station Land Acquisition (ISQ)........................	219,305
February 12 2015 Series C SQ -Adv Ref 2-7-07 Fire Upgrades (ISQ)...	260,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Library Upgrades (ISQ)...	270,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Police Dept Renovation (ISQ)................................	2,719,400
February 12 2015 Series C SQ -Adv Ref 2-7-07 Police - Fire Design (ISQ).....................................	738,900
February 12 2015 Series C SQ -Adv Ref 2-7-07 Hope-Baptist Land Acq. (ISQ)................................	124,625
February 12 2015 Series C SQ -Adv Ref 2-7-07 Greenleaf Park Building (ISQ)................................	28,850
February 12 2015 Series C SQ -Adv Ref 2-7-07 Treetop Park Renovation (ISQ)...............................	105,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Marshall Roy Park Renovation (ISQ)......................	95,000
February 12 2015 Series C SQ -Adv Ref 2-7-07 Land Acquisition (ISQ)...	124,650
February 12 2015 Series C SQ -Adv Ref 2-7-07 Project Management (ISQ)....................................	76,850
February 12 2015 Series C SQ -Adv Ref 2-7-07 ESCO (ISQ)..	5,907,475
October 1 2015 -Cur Ref 7-7-05 Adv Ref 99 School 1 (OSQ)..	2,370,000
October 1 2015 -Cur Ref 7-7-05 Adv Ref 99 Chestnut Sch Land (ISQ)..	115,000
October 1 2015 -Cur Ref 7-7-05 Adv Ref 99 Urban Renewal (OSQ)..	645,000
October 1 2015 -Cur Ref 7-7-05 Adv Ref 99 Demolition (OSQ)..	195,000
October 1 2015 -Cur Ref 7-7-05 Adv Ref 99 Public Building 1 (ISQ)..	110,000
October 1 2015 -Cur Ref 7-7-05 Adv Ref 99 Public Building 2 (ISQ)..	120,000
February 23 2017 -Emergency Borrowing (Tornado/ Snowstorm) (OSQ)..	4,079,300
February 23 2017 -School Dense Wireless (Hardware) (ISQ)..	851,500
February 23 2017 -School Dense Wireless (Software) (ISQ)...	1,173,900
February 23 2017 -Kennedy School - Windows & Doors (ISQ)..	1,364,500
February 23 2017 -Kensington School - Windows & Doors (ISQ)...	463,100
February 23 2017 -Daniel Brunton Elementary School (ISQ)..	504,200
February 23 2017 -Mary M. Walsh School - Windows & Doors (ISQ)..	500,700
February 23 2017 -Public Day High School - Windows & Doors (ISQ)..	319,000
February 23 2017 -STEM Middle School - Roof Rpelacement (ISQ)...	397,000
February 23 2017 -Food Service Building (ISQ)...	6,635,500
February 23 2017 -50 East Street Planning (ISQ)..	615,700
February 23 2017 -50 East Street Renovation (ISQ)...	7,978,400
February 23 2017 -Senior Center Planning (ISQ)...	758,900
February 23 2017 -Senior Center Construction (ISQ)..	3,407,750
February 23 2017 -South End Community Center Planning 1 (ISQ)..	593,500
February 23 2017 -South End Community Center Planning 2 (ISQ)..	92,000
February 23 2017 -South End Community Center Construction (ISQ)..	3,364,000
February 23 2017 -Skill & Technical Training Facility (ISQ)...	1,638,000
February 23 2017 -ECOS (ISQ)..	1,411,700
February 23 2017 -Police Vehicles 2017 (ISQ)..	1,016,000
February 23 2017 -DPW Vehicles 2015 (ISQ)...	817,300
February 23 2017 -Landfill (Bondis Island) (OSQ)...	1,736,600
February 23 2017 -Demolition 1 (ISQ)...	467,300
February 23 2017 -Demolition 2 (ISQ)...	493,300
February 23 2017 -Demolition 3 (ISQ)...	921,000
February 23 2017 -Roads/Sidewalks 1 (ISQ)..	2,436,500

February 23 2017 -Roads/Sidewalks 2 (ISQ)	258,350
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Chestnut School (ISQ)	3,005,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Commerce School (ISQ)	910,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Aerial Mapping (ISQ)	96,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Park Improvements(ISQ)	106,100
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 GIS (ISQ)	52,200
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Park Restoration (ISQ)	165,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Street Construct (ISQ)	255,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Department Equip (ISQ)	136,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Street Construct2(ISQ)	126,600
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Sidewalk Const (ISQ)	106,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Harris School Des(ISQ)	145,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 VanSickleSchConst(ISQ)	760,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Bowland LC Des (ISQ)	100,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Bowland LC Land (ISQ)	95,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Harris Sch Const (ISQ)	1,010,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Library (ISQ)	742,500
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Bowland LC Const (ISQ)	905,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Fire&SafetyComplex(ISQ	930,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 01 Demolition (ISQ)	479,600
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 03 Harris School (ISQ)	875,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 03 Bowland LC (ISQ)	1,570,000
March 15 2017 -Cur Ref Feb 7 07 Adv Ref 03 Van Sickle School(ISQ)	4,680,000
March 15 2017 -Union Station	3,105,000
March 28 2019 -East Forest Park Library Construction (ISQ)	2,637,718
March 28 2019 -Marcus Kiley Middle School Windows & Doors (OSQ)	1,550,000
March 28 2019 -Kensington Ave School Windows & Doors (OSQ)	347,636
March 28 2019 -Mary Lynch Elementary School Windows & Doors (OSQ)	349,873
March 28 2019 -Alfred Zanetti Magnet School Windows & Doors (OSQ)	650,158
March 28 2019 -Balliet Elementary School (OSQ)	517,286
March 28 2019 -Balliet Middle School (OSQ)	300,000
March 28 2019 -DeBerry Elementary School Feasibility Study (OSQ)	300,000
March 28 2019 -Food Service Building Phase II (ISQ)	7,500,000
March 28 2019 -City Hall Remodeling (ISQ)	1,000,000
March 28 2019 -Downtown Police Kiosks (ISQ)	500,000
March 28 2019 -Stearns Sq Park & Duryea Way Redevelopment (ISQ)	1,500,000
March 28 2019 -Riverfront Park Reconstruction (ISQ)	1,600,000
March 28 2019 -Citywide Vehicles & Equipment (ISQ)	1,682,329
March 28 2019 -Downtown Revitalization- Main Street (ISQ)	1,500,000
March 28 2019 -Roads and Sidewalks (ISQ)	2,500,000
March 28 2019 -City Flood Control System (ISQ)	3,500,000
Total	**190,909,000**