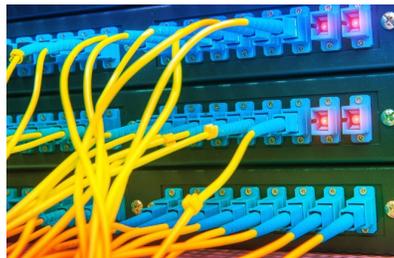


Town of West Hartford, Connecticut
**PROGRAM FOR
CAPITAL IMPROVEMENTS
2017-2028**



Major CIP projects:

- ◆ Final construction phase of the new Charter Oak International Academy
- ◆ A new public safety radio system
- ◆ Science Labs
- ◆ Fiber Optic Internet Connectivity of all 16 schools to the town-owned municipal fiber network
- ◆ Road Improvements



Adopted by the Town Council

Capital Improvement Program

West Hartford
Connecticut



ADOPTED
2017-2028

April 25, 2016

Honorable Town Council
Honorable Town Plan & Zoning Commission

I am pleased to transmit the Town's Capital Improvement Program (CIP) totaling \$209,083,000 for fiscal years 2017-2028. This plan was prepared in accordance with the general guidelines associated with the Town's capital financing policy.

The foundation of this plan is the premise that in order to properly preserve the Town's capital assets, annual investments are vital. The difficulty rests with deciding what needs to be done, when it needs to be done, and most importantly, how much it will cost. This plan is the culmination of a rigorous review process aimed at answering all of those important questions. As in the past, the quality of Town schools, parks, buildings and transportation infrastructure represent the willingness of elected officials to make those required investments. Without these capital investments, infrastructure would decay and annual maintenance costs would multiply resulting in additional financial burden on the Town's operating budget.

In addition to recurring projects, there are several non-recurring projects worthy of special note.

- **Replacement and renovation of the Hall High School science labs:** The existing program space does not meet the needs of the current and projected science program. This project will fund the building of eight new classroom/lab combination spaces for Biology and Chemistry and renovation of the existing space to both "dry" lab space (Earth Sciences and Physics) and flexible classroom space. The total estimated cost of \$12,800,000 is offset by projected State grant reimbursement of \$5,120,000, resulting in local bond funding of \$7,680,000. The project request is over a two year period; \$6,400,000 in year one (FY 2016-17) and \$6,400,000 in year two (FY 2017-2018).
- **Purchase and installation of a new Town radio system:** This project is included in year one at a cost of \$4,900,000. An additional \$400,000 is included in year two of the CIP. If approved, it is anticipated that the public solicitation and contract negotiation process will be completed in the fall of 2016 and the system will be purchased and made operational by the spring of 2017.
- **Park Road/Interstate 84 Interchange Project:** Construction is scheduled to begin on the Park Road/Interstate 84 Interchange project in fiscal year 2017. The grant funding of \$4,579,000 and the Town's \$509,000 cost are included in year one.

I believe this program successfully balances the need for these necessary capital investments against the costs associated with their implementation. As all taxpayers and visitors can attest, we take pride in the appearance and condition of our capital assets by ensuring, to the best of our abilities, that they are safe, and in proper condition to successfully support the many programs and services provided by the Town of West Hartford.

Sincerely,



Ronald F. Van Winkle
Town Manager



TOWN OF WEST HARTFORD 50 SOUTH MAIN STREET
WEST HARTFORD, CONNECTICUT 06107-2431
(860) 561-7440 FAX: (860) 561-7429
<http://www.west-hartford.com>

**CAPITAL IMPROVEMENT
PROGRAM**

TABLE OF CONTENTS

	<u>Page</u>
<u>Capital Financing</u>	
Capital Financing Summary.....	1
Capital Financing Policy	9
<u>Program Years 1-3</u>	
Program Years 1-3 Summaries	13
<u>Program Year 1 (2016-2017)</u>	
Program Summary	15
Detailed Project Descriptions.....	16
<u>Program Year 2 (2017-2018)</u>	
Program Summary	45
Detailed Project Descriptions.....	46
<u>Program Year 3 (2018-2019)</u>	
Program Summary	75
Detailed Project Descriptions.....	76
<u>Program Years 4-6</u>	
Program Summary	101
Transportation & Circulation Projects	103
Education Projects.....	106
Parks & Recreation Projects	111
Town Building Improvement Projects.....	114
Miscellaneous Improvement Projects	116
<u>Program Years 7 - 12</u>	
Program Summary	119
<u>Transportation & Circulation</u>	
Project Category.....	121
<u>Education</u>	
Project Category.....	129
Enrollment Projections.....	137
<u>Parks & Recreation</u>	
Project Category.....	171
<u>Town Building Improvements</u>	
Project Category.....	175
<u>Miscellaneous</u>	
Project Category.....	177

**CAPITAL IMPROVEMENT
PROGRAM**

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**CAPITAL IMPROVEMENT
PROGRAM**

CAPITAL FINANCING SUMMARY

The 2017-2028 Capital Improvement Program (CIP) invests \$209,083,000 in the West Hartford community over the next twelve years. These funds will be invested in Town and School buildings, transportation and infrastructure, parks and recreational projects and capital equipment.

While the CIP is comprised primarily of recurring projects whose purpose is to maintain the infrastructure of the Town and prevent expensive repairs, there are a few non-recurring projects as well.

- **Transportation and Circulation** – Construction is scheduled to begin on the Park Road/Interstate 84 Interchange project in fiscal year 2017; the grant funding (\$4,579,000) and Town’s cost (\$509,000) are included in year 1 of the CIP. Year 1 also includes funding for Phase 5 of the Troutbrook Trail (Farmington Avenue to Fern Street) with a total cost to the Town of \$106,000. The remainder of the project cost, \$224,000, will be funded through grant dollars. North Main Street Bridge has been identified as in need of significant rehabilitation, and funding is included in fiscal years 2018 and 2019 (years 2 and 3) for this project.
- **Education** – Years 1 and 2 provide for the replacement and renovation of the Hall High School science labs. The existing program space is original (1970) to the building and does not meet the needs of the current and projected science program. The plan is to build 8 new CLABS (Classroom/Lab combination spaces) for Biology and Chemistry and renovate the existing space to both “dry” lab space (Earth Science and Physics) and flexible classroom space. The total anticipated cost of the science labs is \$12,800,000. The Town expects to receive a total of \$5,120,000 in State Aid to offset the total cost.
- **Miscellaneous** – Year 1 includes \$4,900,000 and year 2 \$400,000 for replacement of the Town’s radio system. In addition, \$200,000 in grant funds through the State’s Remedial Action and Redevelopment Municipal Grant Program is programmed in year 1 for environmental assessment, site investigation and hazardous buildings materials assessment. Year 3 includes \$2,500,000 for a Recycling Center at the Public Works facility. Also included in the twelve year plan is planned replacement of fire apparatus totaling \$3,420,000.

The Town utilizes four main financing sources for projects in the CIP: long-term debt (General Obligation Bonds), the Capital and Non-Recurring Expenditure (CNRE) Fund, State and Federal grants, and “other” funds. Projects being financed via other funds include projects at Rockledge Golf Course, which will be financed through capital projects user fees, and projects at Westmoor Park, which will be financed through use of the Westmoor Park fund balance.

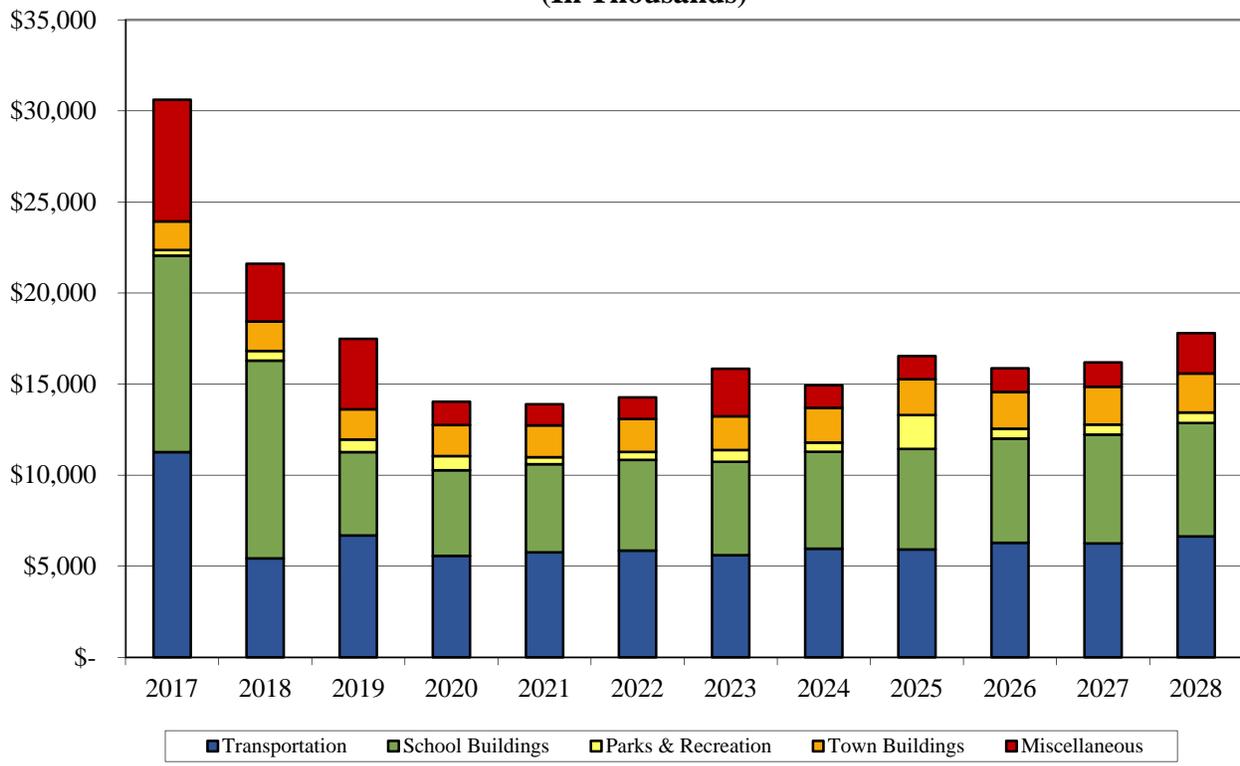
Twelve-year summaries of the Capital Improvement Plan by planning category and by financing source are found on the following pages.

**CAPITAL IMPROVEMENT
PROGRAM**

Town of West Hartford
Capital Improvement Plan 2017-2028
Summary by Planning Category
(In Thousands)

<u>Fiscal Year</u>	<u>Transportation & Infrastructure</u>	<u>School Buildings</u>	<u>Parks & Recreation</u>	<u>Town Buildings</u>	<u>Miscellaneous</u>	<u>Total</u>
2017	11,265	10,790	303	1,570	6,688	\$30,616
2018	5,434	10,850	537	1,614	3,172	21,607
2019	6,691	4,575	693	1,659	3,867	17,485
2020	5,572	4,700	774	1,706	1,283	14,035
2021	5,763	4,840	380	1,754	1,159	13,896
2022	5,857	4,984	436	1,804	1,186	14,267
2023	5,606	5,128	643	1,855	2,614	15,846
2024	5,960	5,325	501	1,908	1,243	14,937
2025	5,919	5,525	1,859	1,962	1,273	16,538
2026	6,283	5,725	542	2,018	1,304	15,872
2027	6,252	5,975	550	2,076	1,335	16,188
2028	<u>6,634</u>	<u>6,225</u>	<u>584</u>	<u>2,135</u>	<u>2,218</u>	<u>17,796</u>
TOTAL	\$77,236	\$74,642	\$7,802	\$22,061	\$27,342	\$209,083

**CIP 2017-2028
Summary by Planning Category
(In Thousands)**

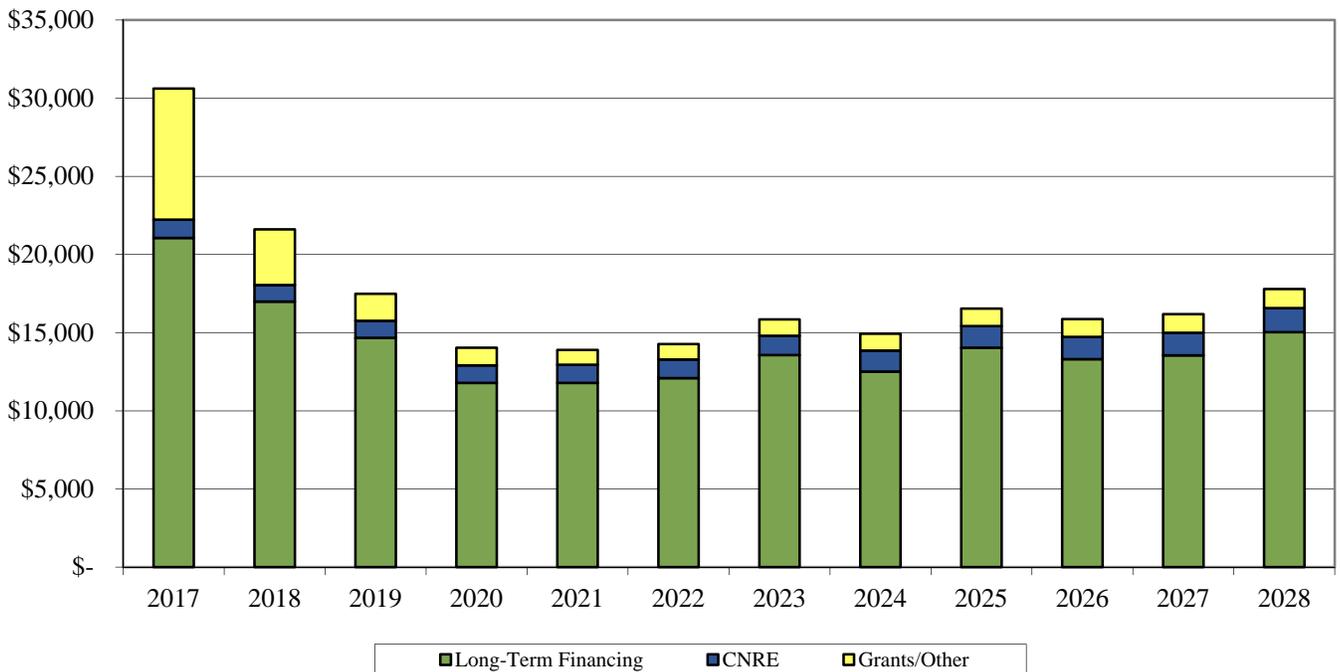


**CAPITAL IMPROVEMENT
PROGRAM**

Town of West Hartford
Capital Improvement Plan 2017-2028
Summary by Financing Source
(In Thousands)

<u>Fiscal Year</u>	<u>Long-Term Debt</u>	<u>CNRE</u>	<u>Grants</u>	<u>Other</u>	<u>Total</u>
2017	\$21,060	\$1,173	\$8,383	\$	\$30,616
2018	16,991	1,053	3,463	100	21,607
2019	14,666	1,086	1,733		17,485
2020	11,790	1,120	925	200	14,035
2021	11,788	1,155	953		13,896
2022	12,095	1,190	982		14,267
2023	13,568	1,227	1,051		15,846
2024	12,515	1,342	1,080		14,937
2025	14,036	1,382	1,120		16,538
2026	13,308	1,424	1,140		15,872
2027	13,547	1,451	1,190		16,188
2028	<u>15,036</u>	<u>1,530</u>	<u>1,230</u>	<u>—</u>	<u>17,796</u>
TOTAL	\$170,400	\$15,133	\$23,250	\$ 300	\$209,083

**CIP 2017-2028
Summary by Financing Source
(In Thousands)**

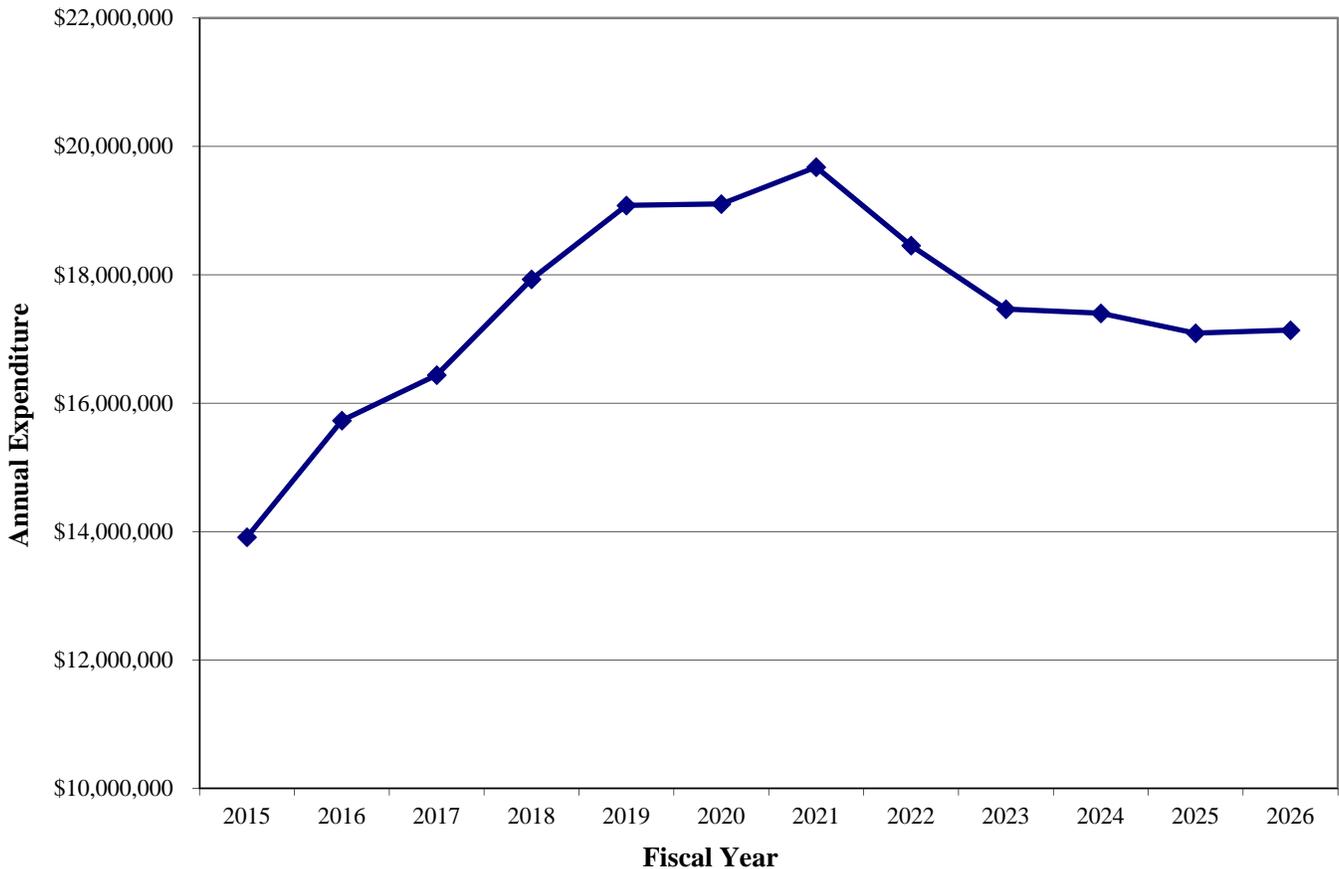


**CAPITAL IMPROVEMENT
PROGRAM**

In order to ensure the CIP adheres to the Town’s Capital Financing Guidelines, a capital financing model is maintained. This model utilizes project cost, timing and financing information from the CIP and develops information as to the timing and amount of bond issuances, anticipated debt service costs, and the financial impact on the General Fund. In addition, financial debt indicators such as debt service as a percentage of General Fund expenditures, percentage of principal repaid within ten (10) years and outstanding debt per capita are computed in this model. These indicators are then reviewed to ensure that the Town is in compliance with its capital financing guidelines.

Based upon the CIP presented, it is expected that debt service, excluding the Blue Back Square (BBS) issuance being repaid by special services district revenues, will vary from a low of \$16,438,411 in fiscal year 2017 to a high of \$19,677,483 in fiscal year 2021. These figures assume a general obligation bond interest rate of 2.75% in fiscal year 2017, 3.0% in fiscal years 2018, 2019 and 2020, an increase to the rate of 0.25% every three years thereafter, with an average term of 15 years, consistent with the type of projects being financed. The Town issued \$14,000,000 in general obligation bonds with a 15 year term in February 2016 at a rate of 2.030%. Debt service (exclusive of BBS) totals \$16,438,411 for fiscal year 2017, \$15,988,411 of which will be funded via a transfer from the General Fund and \$450,000 from bond premiums received in prior issuances.

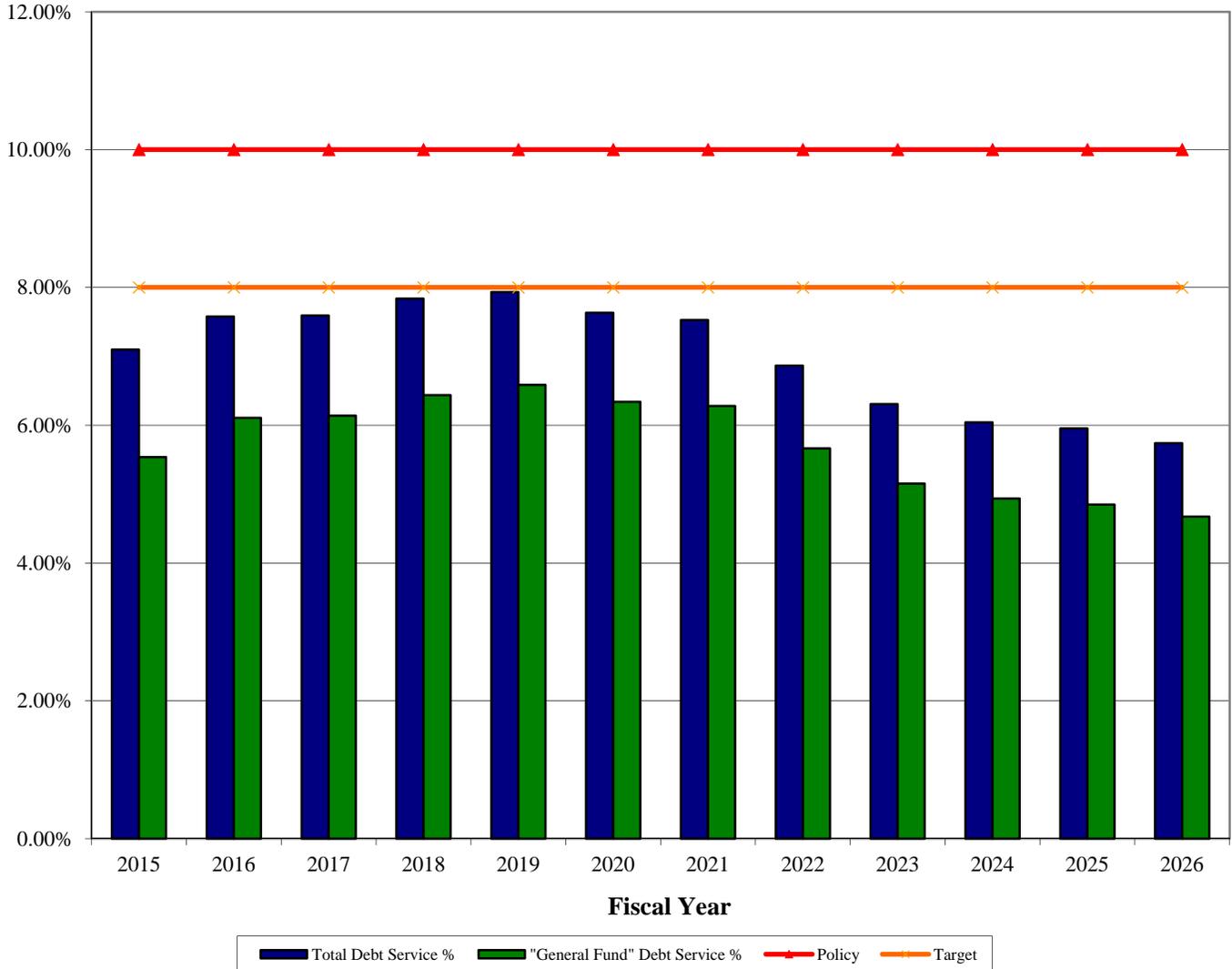
**Town of West Hartford
General Fund Debt Service Projection
(Excludes BBS)**



**CAPITAL IMPROVEMENT
PROGRAM**

The Town's Capital Financing Guidelines state that debt service as a percentage of General Fund expenditures shall not exceed 10% and is targeted to be 8% or less. The CIP is in compliance with the 10% policy and 8% target over the entire twelve-year period of this CIP.

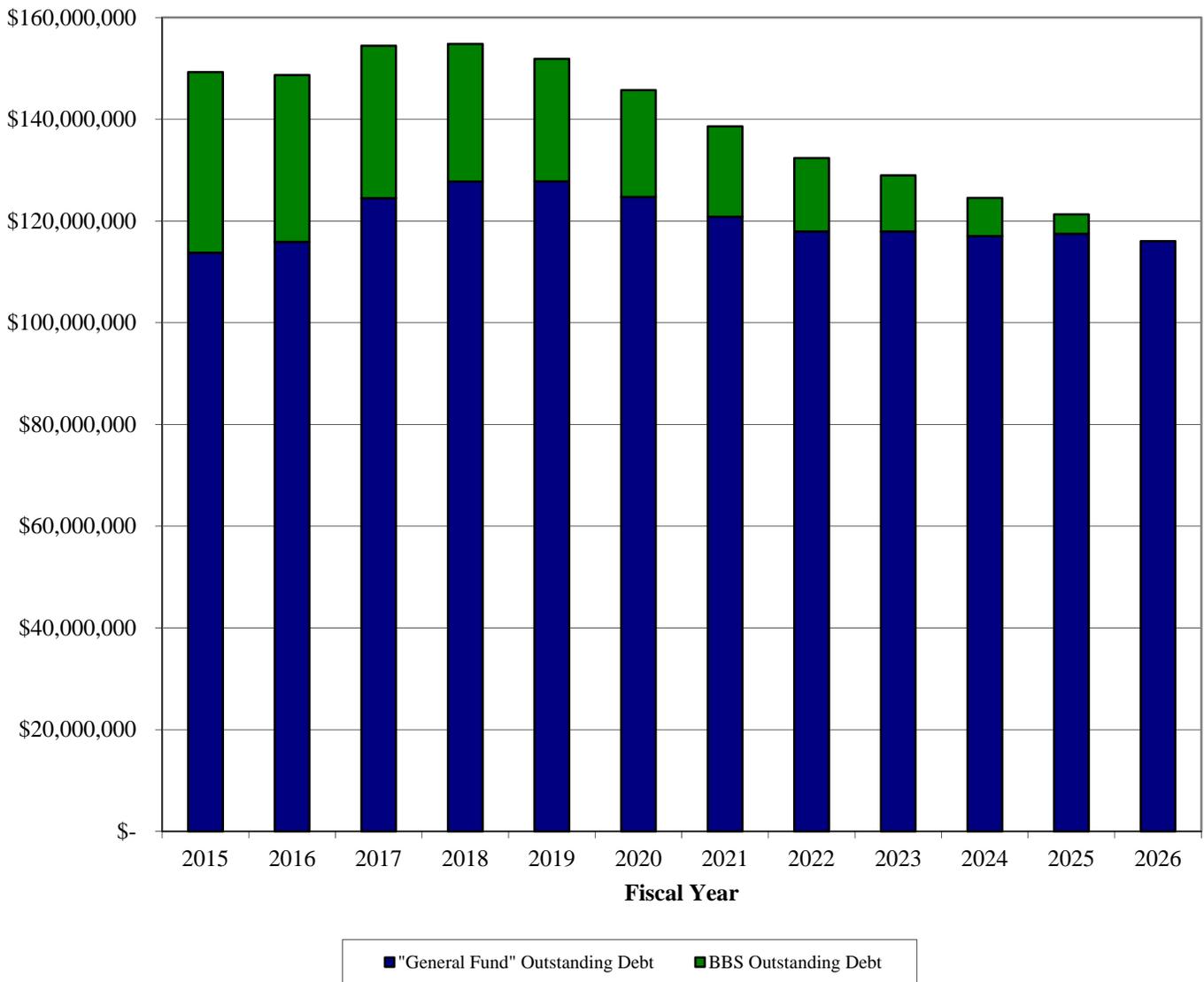
**Town of West Hartford
Debt Service as a % of General Fund Expenditures Projection**



**CAPITAL IMPROVEMENT
PROGRAM**

Total outstanding debt (including the BBS issuance) will peak at \$154,820,000 at the end of fiscal year 2018, after the bond issuances including Charter Oak School, Hall High School science laboratories, the Town's radio public safety system, energy project, and the Recycling Center demolition and abatement. It is expected to decline over the remainder of the period presented.

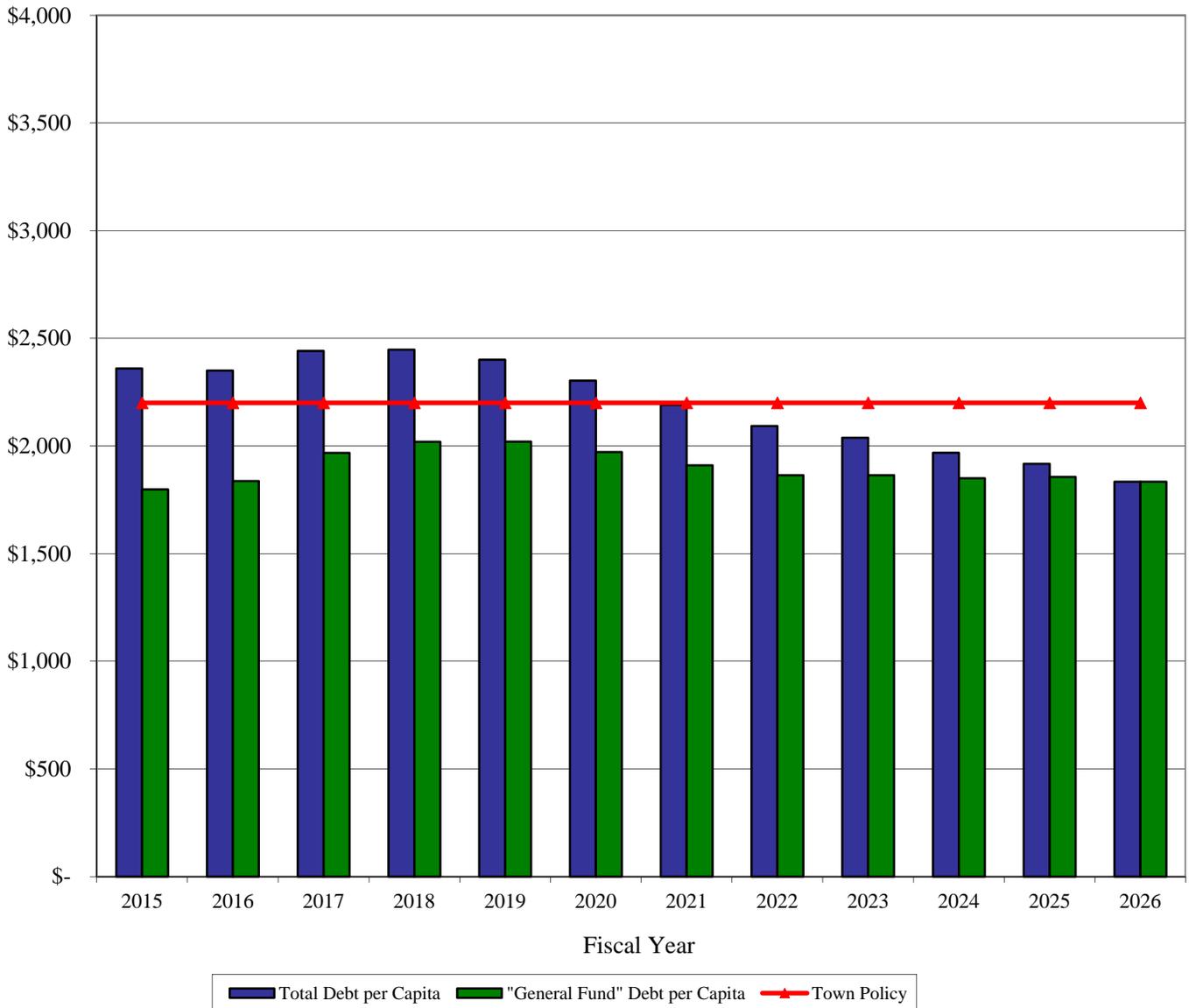
**Town of West Hartford
Outstanding Debt Projection**



**CAPITAL IMPROVEMENT
PROGRAM**

Per the Capital Financing Guidelines, debt per capita should not exceed an amount equal to \$2,709 in 2017 dollars (adjusted 3% annually for inflation) or 5% of per capita income, currently \$2,200. As detailed in the graph below, the Town's debt per capita excluding the BBS issuance is within this parameter over the time period presented and beginning in fiscal year 2021 debt per capita for total debt is in compliance as well.

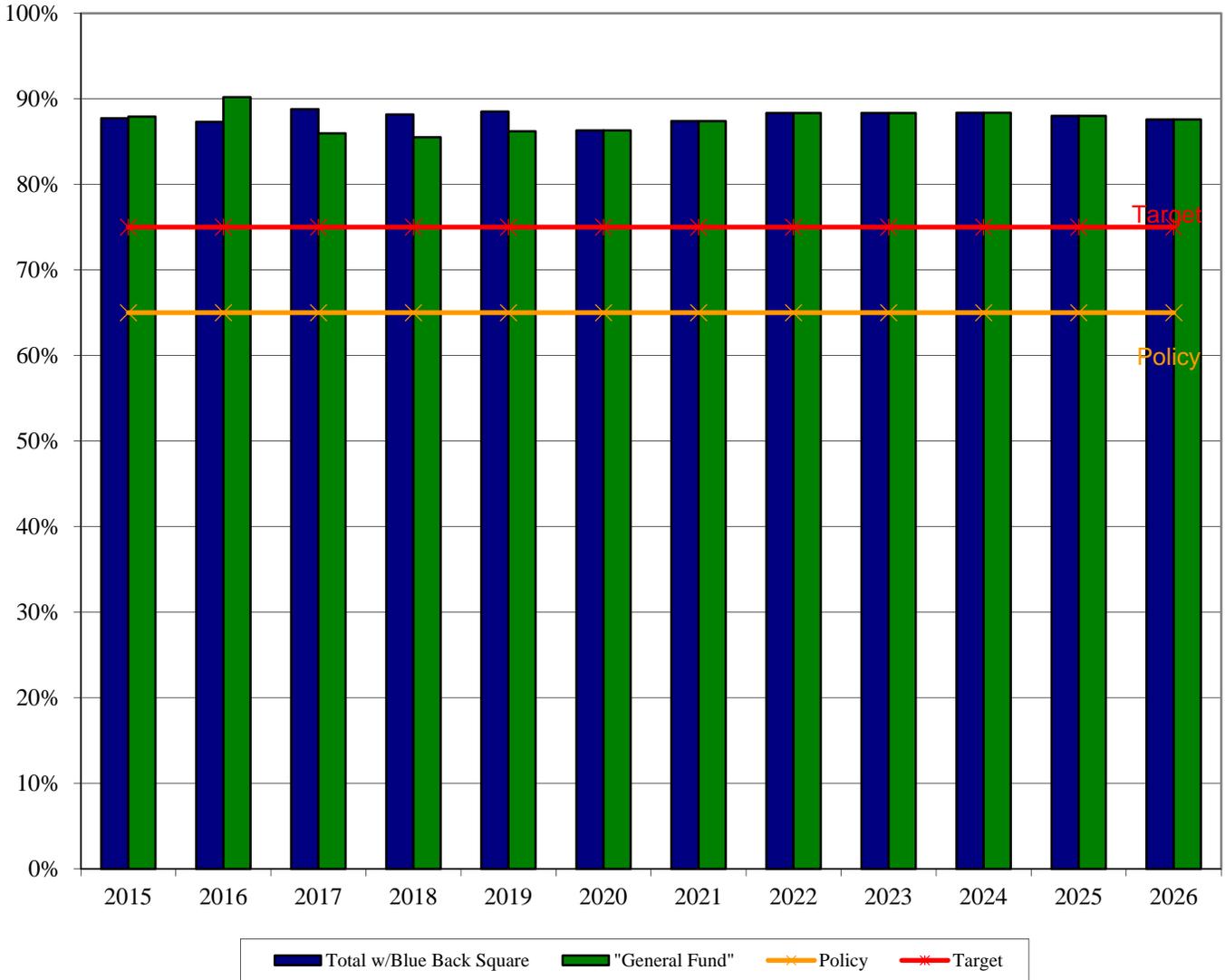
**Town of West Hartford
Debt per Capita Projection**



**CAPITAL IMPROVEMENT
PROGRAM**

The Capital Financing Guidelines state that principal retired within 10 years shall be 65% or higher and is preferred to be above 75%. As detailed in the chart below, the CIP adheres to the policy and meets the target for all years.

**Town of West Hartford
Principal Retired within Ten Years**



The Capital Improvement Plan presented continues the Town’s investment in the infrastructure of the community, while adhering to the Town’s Capital Financing Guidelines and balancing such improvements against the financial health and stability of the Town.

**CAPITAL IMPROVEMENT
PROGRAM**

**Town of West Hartford, Connecticut
Comprehensive Capital Financing Policy**

March 2016

General Policy: The policy of the Town Council is that the development of a comprehensive Capital Improvement Plan is based primarily on economic considerations of affordability and the establishment of capital development needs and priorities. As such, this policy statement is designed to:

- (1) make a strong commitment to the strategic management of our capital financing process,
- (2) to delineate the acceptable parameters of debt issuance and management, and
- (3) to provide a framework for monitoring capital financing practices and results.

Strategic Management Policies:

1. In order to minimize debt service expenditures, the Town shall take the appropriate actions to maintain its “Aaa/AAA” credit rating.
2. For each capital project submitted for consideration, the Town shall identify potential financing methods available, making use of long-term debt the option of last choice.
3. Capital projects financed through the issuance of general obligation bonds shall be financed, when practical, for a period which does not exceed the useful life of the asset.
4. Flexibility should be maintained when determining general obligation bond issuance amounts, maturities and market timing, with consideration given to the existing and future bond market in order to obtain the most advantageous net interest rate.
5. The capital financing amounts shall be determined for each year of the Capital Improvement Plan based upon the policies relating to debt indicators adopted in the general obligation debt section of this policy. The development of the financial plan shall be based solely on financial capacity without regard to program need.
6. The Capital Improvement Plan shall present programmatic needs and priorities and will present a twelve (12) year plan that is divided into three sections:
 - A. Years 1-3 will contain specific individual project and financial plans. Council will adopt the first two years of the CIP for implementation and year three for final plan preparation.
 - B. Years 4-6 will present individual and aggregate costs and financing of projects during this three-year period and present them according to five categories of projects: Transportation and Circulation; Education; Town Building Improvements; Parks and Recreation; and Miscellaneous Improvements. Council review of the project priorities will determine which projects emerge from the 4-6 year period to create the new year 3 of the CIP.
 - C. Years 7-12 will present allocated costs and financing for each year by project categories rather than individual projects. The capital financing model will produce the funding amounts available each year and these amounts will be allocated by category of projects. Review and discussion of these projects shall identify those projects that will enter the 4-6 year period for more detailed planning and design.

**CAPITAL IMPROVEMENT
PROGRAM**

General Obligation Debt Policies

1. Annual debt service as a percentage of General Fund expenditures shall not exceed 10% and is targeted to be 8% or less.
2. Debt per capita should not exceed \$2,709 in FY 2017 (adjusted 3% annually for inflation) or 5% of per capita income.
3. Authorized but unissued debt will decrease below \$5,000,000 by fiscal year 2011 and remain below \$5,000,000 thereafter.
4. Principal retired within 10 years shall be 65% or higher and is preferred to be above 75%.
5. All projects with a useful life of 10 or more years will be bonded with 10-year maturities except major building renovations and additions, street reconstruction and roofing & masonry construction, which will be reviewed to determine the duration based on their useful life and bond financing regulations.
6. All projects with a useful life of less than 10 years or a cost of less than \$100,000 should not, whenever possible, be financed with long-term debt and in any case shall be financed for a period which does not exceed the useful life of the asset.
7. The Town may use short-term financing in the form of bond anticipation notes (BANS) to provide temporary financing for capital projects. BANS will be retired either through cash reserves or through the issuance of long-term bonds as soon as market conditions permit, or otherwise in accordance with sound financial planning.
8. The Town shall not fund current operations from the proceeds of general obligation funds. The use of Town or Board of Education employees for capital projects will be minimized and directly related to a capital project. The Town Manager will determine if it is more cost effective to use such employees for a particular project.
9. The Town will issue bonds in book entry form only; to avoid the expense of certificated issues.
10. The Town will follow a policy of full disclosure in every financial report and official financing statement.
11. The Town will comply with all federal regulations for tax-exempt status and will utilize permissible exclusions from federal regulations on the issuance of tax-exempt debt when advantageous to the Town.

Capital and Non-Recurring Expenditure (CNRE) Fund Policies

1. CNRE shall be used for two primary purposes:
 - A. For planning, construction, reconstruction or acquisition of any capital improvement project that is non-recurring, has a useful life of less than 10 years, or a cost of less than \$100,000.
 - B. For the acquisition of any specific item of equipment.
2. The Town shall not fund current operations from CNRE funds. The Town or Board of Education employees will not be used for CNRE funded capital projects unless the Town Manager determines that it is most cost effective to use such employees for a particular project.
3. Receipts into the CNRE Fund include, but are not limited to:
 - A. transfers of General Fund cash;
 - B. a transfer of surplus cash from any other reserve for capital expenditures;
 - C. any reimbursement of expense for any capital project that has been closed;
 - D. proceeds from the sale of Town property;
 - E. unexpended balances of completed projects in the Capital Projects Fund;
 - F. interest on investments; and,
 - G. a specific tax levy not to exceed four (4) mills.
4. CNRE funds shall be invested in accordance with the Connecticut General Statutes Section 7-362.

**CAPITAL IMPROVEMENT
PROGRAM**

Budgeting and Accounting Guidelines

The following are a list of specific budgeting and accounting practices related to CIP, debt and CNRE Fund transactions:

1. On the first day of the fiscal year, the General Fund appropriation to the CNRE Fund will be transferred, if applicable.
2. On the first day of the fiscal year, the CNRE Fund transfer to the Capital Projects Fund will be executed.
3. All bond proceeds will be deposited directly into the Capital Projects Fund, with the exception of the bond proceeds relating to Blue Back Square which will be transferred to the Capital Projects Fund as expenditures are incurred.
4. Proceeds from the sale of Town property will be deposited directly into the CNRE Fund upon receipt.
5. Interest earned by the Capital Projects Fund for the entire fiscal year will be transferred to the CNRE Fund on the last day of the fiscal year, if applicable.
6. School construction grant reimbursements for projects approved by the General Assembly of the State of Connecticut before 7/1/96 will be deposited as revenue into the General Fund.
7. School construction progress payments for projects approved by the General Assembly of the State of Connecticut after 7/1/96 will be deposited into the Capital Projects Fund.
8. All debt service payments and debt issuance costs will be paid from the General Fund and/or Debt Service Fund, with the exception of the debt service payments and debt issuance costs relating to Blue Back Square, which will be paid via the Blue Back Square Fund.
9. All capital projects expenditures will be paid directly from the Capital Projects Fund.

**CAPITAL IMPROVEMENT
PROGRAM**

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**CAPITAL IMPROVEMENT
PROGRAM**

CAPITAL IMPROVEMENT PROGRAM

PROGRAM YEARS 1 – 3

The first three years of the Capital Improvement Program (CIP) contain detailed project descriptions for each project and specific costs associated with each project. It is expected that in the first three years of the CIP, priorities are well established and the nature of the work to be undertaken with each project is fully defined. The capital financing model produces funding amounts for each year, which are then used to establish annual project priorities. The Town Council's adoption of the first two years of the CIP improves the ability to plan and execute projects in these two years. The focus in the first three years is the development of the new program year 3, which emerges from consideration of all the projects contained in prior year's 4-6 of the CIP. This section includes project descriptions, justifications and funding amounts for each project included in the first three years.

PROGRAM YEARS 1 – 3

FINANCING SUMMARY

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Total</u>
Long-Term Debt Funding	\$21,060,000	\$16,991,000	\$14,666,000	\$52,717,000
CNRE Contribution	1,173,000	1,053,000	1,086,000	3,312,000
Grants	8,383,000	3,463,000	1,733,000	13,579,000
Other	<u> </u>	<u>100,000</u>	<u> </u>	<u>100,000</u>
TOTAL	\$30,616,000	\$21,607,000	\$17,485,000	\$69,708,000

PROGRAM YEARS 1 – 3

PLANNING SUMMARY

	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Total</u>
Transportation & Circulation	\$11,265,000	\$ 5,434,000	\$ 6,691,000	\$23,390,000
Education	10,790,000	10,850,000	4,575,000	26,215,000
Parks & Recreation	303,000	537,000	693,000	1,533,000
Town Building Improvements	1,570,000	1,614,000	1,659,000	4,843,000
Miscellaneous Improvements	<u>6,688,000</u>	<u>3,172,000</u>	<u>3,867,000</u>	<u>13,727,000</u>
TOTAL	\$30,616,000	\$21,607,000	\$17,485,000	\$69,708,000

**CAPITAL IMPROVEMENT
PROGRAM**

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TOWN COUNCIL ADOPTED
SUMMARY OF CAPITAL IMPROVEMENTS
PROGRAM YEAR 2016-2017
(IN THOUSANDS)

	BONDS	CNRE	GRANTS	OTHER	TOTAL
<u>TRANSPORTATION & CIRCULATION</u>					
Arterial Street Reconstruction	\$1,390	\$	\$	\$	\$1,390
Neighborhood Street Reconstruction	1,532				1,532
Park Road Interchange	509		4,579		5,088
Pedestrian & Bicycle Management	848		224		1,072
Storm Water Management	373	255			628
Street Resurfacing	1,473				1,473
Traffic System Management	<u> </u>	<u>82</u>	<u> </u>	<u> </u>	<u>82</u>
Sub-Total	6,125	337	4,803	0	11,265
<u>EDUCATION</u>					
Asbestos Removal	155		70		225
Computer Infrastructure		300			300
Exterior School Building Improvements	690		460		1,150
Furniture & Equipment Replacement		175			175
Hall Science Labs	3,840		2,560		6,400
Heating & Ventilation Systems	800				800
Interior School Building Improvements	750		190		940
School Security	250		100		350
Site and Athletic Field Improvements	250				250
Stage & Auditorium Renovations	<u>200</u>	<u> </u>	<u> </u>	<u> </u>	<u>200</u>
Sub-Total	6,935	475	3,380	0	10,790
<u>PARKS & RECREATION</u>					
Outdoor Pool Improvements		75			75
Park & Playfield Improvements	100				100
Park & Playscape Management		78			78
Sitework – Recreational Facilities	<u>50</u>	<u> </u>	<u> </u>	<u> </u>	<u>50</u>
Sub-Total	150	153	0	0	303
<u>TOWN BUILDING IMPROVEMENTS</u>					
Energy Conservation	100				100
Town Building Improvements	<u>1,470</u>	<u> </u>	<u> </u>	<u> </u>	<u>1,470</u>
Sub-Total	1,570	0	0	0	1,570
<u>MISCELLANEOUS IMPROVEMENTS</u>					
Communications Infrastructure	500	208			708
Public Safety Facility	100				100
Public Works Rolling Stock	780				780
Radio System Replacement	4,900				4,900
Recycling Center	<u> </u>	<u> </u>	<u>200</u>	<u> </u>	<u>200</u>
Sub-Total	6,280	208	200	0	6,688
TOTAL	<u>\$21,060</u>	<u>\$1,173</u>	<u>\$8,383</u>	<u>\$0</u>	<u>\$30,616</u>

Town of West Hartford Capital Improvement Program

Project Title		Arterial Street Reconstruction	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,390,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$1,390,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This Capital Improvement Program provides the funding necessary to address the reconstruction needs of an arterial/collector roadway. The Town of West Hartford roadway network is primarily classified as arterial, collector, or local roadways. Approximately 59 of 217 miles of roadway are classified as arterial/collector roadways or major roadways. These major roadways service greater numbers of vehicles, pedestrians and other transportation modes compared to local roadways or neighborhood streets. Therefore, these reconstruction projects typically require additional treatments and infrastructure beyond a neighborhood street reconstruction project. These typically include greater pavement widths for turning lanes and on-street parking, drainage systems, and more sustainable curbing material.

Some examples of Town-maintained major roadways are North/South Main Street, Farmington Avenue, Boulevard, Park Road, King Philip Drive, Asylum Avenue, Fern Street, etc. Work on King Philip Drive from Parsons Drive to Mohawk Drive is planned in 2016.

On an annual basis, the Engineering Division performs pavement condition evaluations, which rates the entire Town-maintained roadway network into 5 categories; Excellent, Good, Fair, Poor, and Extremely Poor. Based on this year's evaluation, 39 percent or 23 miles of major roadways are rated poor or extremely poor. Arterial Street Reconstruction involves the following: coordination with utility companies to ensure underground facilities are not in need of repair or replacement; replacement of curbing; replacement of failing concrete or brick sidewalk; replacement of concrete or brick driveway aprons; replacement of drainage structures and pipes; re-establishment of the roadway base material; and roadway repaving. In order to sustain the Town's major roadway network, a suitable goal is to annually reconstruct 1 mile of the Town's major roadways. Some of the remaining poor condition major roadway will be repaved under the Street Resurfacing Capital Improvement Program.

Town of West Hartford Capital Improvement Program

Project Title		Neighborhood Street Reconstruction	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,532,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$1,532,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This Capital Improvement Program addresses the reconstruction needs of the neighborhood streets or local roadways in the Town's 217 mile roadway network. Approximately 158 miles of roadway are considered local roadways. Based upon the annual pavement condition evaluation, 34 percent or 53 miles of local roadways are rated poor or extremely poor.

These neighborhood streets provide access to thousands of residential properties and in addition to their function, they enhance the overall neighborhood appeal and value. Neighborhood Street Reconstruction may include the replacement of existing curbing with granite curbing; the replacement of existing driveway aprons with concrete aprons; sidewalk and drainage structure replacement as necessary; re-establishment of the roadway base material; replacement of the road surface; and in some warranted cases, incorporation of traffic calming elements. The Neighborhood Street Reconstruction program provides a lasting refreshment of the neighborhood's appearance that is often petitioned by entire neighborhoods.

The goal is to annually reconstruct 1 mile of the Town's neighborhood streets. Some of the roadways planned for reconstruction in 2016 include Thomson Road, Milton Street, and Lemay Street.

Town of West Hartford Capital Improvement Program

Project Title			
Park Road Interchange			
Department	Community Services	Funding Schedule	
		Program Year:	\$5,088,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$5,088,000
Project Duration	Single	Funding Source(s)	
		Bonds	\$ 509,000
		Grants	\$4,579,000
 Description & Justification			
<p>This project will fund capacity, safety and operational improvements at the Park Road Interchange with Interstate 84. These improvements will include road widening; milling and overlay on Park Road to accommodate turning lanes; relocation and widening of ramps; and, a new traffic signal system on Park Road at Trout Brook Drive, the Interstate 84 Ramps, and Raymond Road.</p> <p>Construction on the Park Road at Interstate 84 Interchange project is anticipated to start in 2017 and may extend into 2019. The construction cost is estimated to be \$5.09 million, with the cost funded by Federal (80%), State (10%) and Town (10%) sources.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Pedestrian and Bicycle Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,072,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$1,072,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$848,000
		Grants	\$224,000

Description & Justification

This capital program addresses the needs of the pedestrians and bicyclists throughout the Town. The Town of West Hartford maintains an extensive system of 300 miles of sidewalks. These sidewalks provide a safety benefit to pedestrians in lieu of walking in the street. The Town receives and completes approximately 300 sidewalk work orders each year. However, there is an outstanding list of approximately 1,300 sidewalk work orders. The sidewalk system also provides a neighborhood enhancement and benefits school children, patrons of businesses throughout town, and recreational users.

In addition to the sidewalk system, the Town will continue to design and construct on and off street bicycling options across the Town, such as the Trout Brook Multi-Use Trail, which when complete will stretch from Asylum Avenue to New Park Avenue. To date, the trail is complete from Farmington Avenue to Park Road and from Jackson Avenue to New Park Avenue. The Town received approval to design and construct the trail section from Farmington Avenue to Fern Street through the Connecticut Department of Energy and Environmental Protection's Recreation Trails Program. The estimated construction cost is \$330,000 with grant funds of \$224,000 and the balance funded by the Town. In addition, the Town received a commitment to fund the trail section from Fern Street to Duffield Drive at a construction cost of \$355,000. The Town will fund design costs for this section.

For on-street bicycling options, the Town intends to evaluate and appropriately sign and mark suitable roadways.

In order to address the upcoming trail construction, the ever increasing number of sidewalk deficiencies, retaining wall failures, and the increasing demand for a comprehensive bicycling network, the funding schedule for this project was increased.

Town of West Hartford Capital Improvement Program

Project Title		Storm Water Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$628,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$628,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$373,000
		Capital Non-Recurring Expenditure Fund	\$255,000

Description & Justification

This capital program maintains the complex Town-wide drainage system which includes 13 bridges, 73 culverts, 7,600 drainage structures, and 180 miles of pipe. In the next few years, the Town plans to complete a comprehensive mapping of the entire drainage system.

Most of the Town's bridges and some of the Town's culverts are inspected every two years by the State Department of Transportation. The Engineering Division performs periodic inspections of the remaining bridges and culverts. All Town bridges and culverts are in safe, working order.

This program will include the creation of a new Stormwater Management Plan, as required by the State of Connecticut Department of Energy and Environmental Protection, which includes a Town-wide storm drainage system inventory.

Inspections of the Town's storm pipes occur annually and on an as needed basis to investigate flooding or pavement failures especially prior to a road repaving project. These annual video assessments cost approximately \$30,000. Inevitably, the pipe investigations lead to necessary pipe repairs, which average \$210,000 per year.

The Public Works Department replaces all necessary catch basins in conjunction with the Town's street programs. On the average, 150 catch basins are replaced every year at a cost of approximately \$100,000.

Town of West Hartford Capital Improvement Program

Project Title		Street Resurfacing	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,473,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$1,473,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>The Town strives to repave 10 or more miles of roadway each year, via this program. Due to the escalating cost of asphalt over the past five years, the Town has only been able to resurface an average of 7.5 miles during this period of time.</p> <p>The street selections for resurfacing are based on the annual pavement condition evaluation. Of the Town's 217 miles of roadway, 35 percent or 76 miles is in poor or extremely poor condition. Selections are also based on geographical considerations to balance the repaving throughout Town. The Street Resurfacing Program includes: milling to partially remove the existing pavement; sweeping the roadway clean; and paving the roadway. In some cases, bituminous curbing and driveway aprons are also replaced. The Town also coordinates all work with the utility companies.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Traffic System Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$82,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$82,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	

Description & Justification

This Capital Improvement Program addresses the replacement of the Town's 61 traffic signals, 1,200 traffic control signs, 30 miles of pavement markings, 2 miles of guiderail, and the Town's street lighting system. Proper operating condition of these traffic control devices greatly improves safety to the mobile public.

In the past 7 years, 45 of the Town's traffic signals were replaced. Of the remaining 16 traffic signals, 3 are at the end of their useful life, which is 30 years. The goal of this program is to replace 1 traffic signal every other year, make necessary traffic signal improvements such as pedestrian signal upgrades, and to replace all necessary pavement markings affected by the repaving program and replenish others throughout Town. Guiderail and signage are also replaced as necessary.

Town of West Hartford Capital Improvement Program

Project Title		Asbestos Removal	
Department	Public Schools	Funding Schedule	
		Program Year:	\$225,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$225,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$155,000
		State Grant	\$70,000

Description & Justification

Asbestos Containing Material (ACM) has been found throughout the district in locations documented in the Board of Education's Asbestos Management Plan. The annual appropriation is used to support many other recurring projects, such as boiler replacement. Ideally, the removal precedes the designated recurring construction activity. These funds pay for asbestos removal project specifications, diagrams, hygienists, actual removals, testing results and final reports.

Funding is allocated toward the removal of asbestos identified during renovations, flooring replacements and heating improvements.

Inert asbestos containing material can be encapsulated rather than removed. Construction and/or renovation activities, however, often make inert materials friable and removal provides for safer, more predictable working conditions. Additionally, when asbestos containing materials are encountered on a work site, all activities must cease until the removal of the asbestos has been completed. Therefore, we are better able to project construction/renovation schedules and cost with the asbestos removed in advance.

Town of West Hartford Capital Improvement Program

Project Title		Computer Infrastructure	
Department	Public Schools	Funding Schedule	
		Program Year:	\$300,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$300,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	
 Description & Justification			
<p>All West Hartford Public Schools are connected to a fiber-optic metropolitan area network (MAN). The internal connections at each school consists of layer 2 switches and layer 3 routers to bring the network and internet resources to all offices and classrooms. Servers, switches, telecommunications equipment and other appliances will require proactive replacement to improve mean time between failures and reduce mean time to recovery. Additionally, these funds are used to annually replace the oldest computers in the district for newer models capable of meeting the demands of current administrative and educational software. These funds, combined with funding in the operating budget, constitute our technology investment in the schools.</p> <p>The ongoing investment in educational and administrative computing is a critical element in providing what has become basic functionality in today's technology reliant education environment.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Exterior School Building Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$1,150,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$1,150,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$690,000
		State Grant	\$460,000

Description & Justification

With 16 buildings of varying age exterior school improvements are an annual requirement. Exterior school improvements may include roofing, masonry, window upgrades and exterior door replacement, as well as other structural improvements. Re-roofing includes removal of existing materials and in many cases, insulating with thicker, denser materials to provide for increased energy conservation. It also includes the installation of necessary flashings, counter flashings, drainage improvements and related masonry repairs. A systematic re-roofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset. Masonry includes restoration and re-pointing of building facades. Window upgrades replace single pane windows with energy efficient window systems.

The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces and exterior building envelopes, left unchanged, exposes buildings to water damage and long-term structural damage.

This year's appropriation will be dedicated to the partial roof replacement at King Philip.

Town of West Hartford Capital Improvement Program

Project Title		Furniture and Equipment Replacement	
Department	Public Schools	Funding Schedule	
		Program Year:	\$175,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$175,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	

Description & Justification

The Furniture and Equipment Replacement program provides for the periodic replacement of furniture and equipment district-wide as the inventory becomes worn out, unable to be repaired, or unsafe. There are four categories of items included in this replacement program.

Classrooms and Laboratories– There are approximately 617 classrooms in the 16 schools that comprise the district. Classroom and laboratory furniture have a life span of approximately 20 years. This category of furniture includes student desks and chairs, teacher desks and chairs, laboratory tables and chairs. These items have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools as needed. Adjustable desks are specified for the elementary schools so that furniture can be transferred to different grade levels within an elementary school.

Administrative – Each of the 16 schools have main offices along with support staff operations that have furniture requirements including desks, chairs, tables, filing cabinets, and permanent dividing walls. Office furniture has a typical life span of 20 years.

Cafeteria – Each of the 16 schools has a cafeteria that requires tables and chairs for students. In many instances, these spaces are also used for additional classroom space, assemblies and meetings. These items have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools. Cafeteria furniture has a typical life span of 15 years.

Equipment – Items in this category include appliances and folding dividing walls. Appliances have a life span of between 10 and 15 years and dividing walls have a typical life span of approximately 30 years.

Lockers – Element of the school building design which is subject to excessive wear and tear as generations of students make use of these temporary storage receptacles. Because certain lockers cannot be repaired further, there is a need for lockers district-wide for the next several years. New lockers are specified to be wider and deeper than existing ones and they are usually specified to have a more limited number of moving components, thereby limiting our future repairs and maintenance.

Furniture has a limited useful life. Much of the Town’s inventory has been pushed well beyond that life span. Furthermore, as classrooms are added to a school (modulars, reconfiguring existing spaces, etc.) additional furniture is needed. As many older pieces become obsolete, the Town can no longer obtain repair parts. Finally, as educational methods change, furniture needs change.

This funding will go toward the replacement of furniture and equipment throughout the system.

Town of West Hartford Capital Improvement Program

Project Title		Hall Science Labs	
Department	Public Schools	Funding Schedule	
		Program Year:	\$6,400,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$6,400,000
Project Duration	Year 1 of 2	Funding Source(s)	
		Bonds	\$3,840,000
		State Grant	\$2,560,000

Description & Justification

This project provides for the replacement and renovation of the Hall High School Science Labs. The existing program space is original (1970) to the building and does not meet the needs of the current and projected science program. The plan includes 8 new CLABS (Classroom/Lab combination spaces) for Biology and Chemistry and renovation of the existing space to both “dry” lab space (Earth Science and Physics) and flexible classroom space.

In the recent New England Association of Schools and Colleges’ certification review and assessment, Hall’s science labs were cited as being outdated and unable to meet the learning needs of students and curriculum. Both the Next Generation Science Standards and The College Board require different space and lab configurations than when the current labs were built 45 years ago. The current science labs are undersized and lack the infrastructure to support today’s technology. The NSTA recommends 1,440 square feet for each lab, while the current science labs at Hall average 1,100 square feet each. Additionally, the current labs lack both the preparation and storage space for the safe implementation of the science curriculum for the number of students and classes at Hall.

The total anticipated cost of the Hall Science Labs is \$12,800,000. The Town expects to receive a total of \$5,120,000 in State aid to offset the total cost.

Town of West Hartford Capital Improvement Program

Project Title		Heating and Ventilation Systems	
Department	Public Schools	Funding Schedule	
		Program Year:	\$800,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$800,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This program provides for the replacement of existing boilers and upgrades to existing HVAC systems some of which have performed well beyond their useful life. Replacement boilers are typically more energy efficient and include a greater amount of programmable auxiliary controls. Reconfigured piping is often necessary. New temperature controlled gas burners are included, as are requisite improvements to the gas piping. Associated breeching, dampers and needed chimney repairs are included.

Good preventive maintenance practice dictates that major building components be repaired or replaced, if necessary, before problems arise. Few components of a building are as essential as a dependable boiler. Boiler failures can cause major problems to the educational process as well as unanticipated major expense during the middle of a fiscal year.

This funding will go toward the replacement of the boiler at Smith School.

Town of West Hartford Capital Improvement Program

Project Title		Interior School Building Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$940,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$940,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$750,000
		State Grant	\$190,000
 Description & Justification			
<p>School building improvements consist of facility needs that are not specifically outlined as a separate capital project. These expenditures include replacement of fire alarm systems, handicap accessibility improvements, lighting system upgrades, HVAC control system replacements, and building and fire code related improvements.</p> <p>The school system has 11 elementary schools, 3 middle schools, and 2 high schools, that together comprise more than 1.75 million square feet of educational facilities. These facilities require regular investment to maintain their existing infrastructures and upgrade their system. This appropriation continues the Town's reinvestment in its schools and a commitment to maintain them in good condition.</p> <p>Improvements this year will include floor replacement at Sedgwick and Wolcott, refurbishment of the Smith science lab, replacement of the Conard gym floor, and painting at Wolcott and Sedgwick.</p>			

Town of West Hartford Capital Improvement Program

Project Title		School Security	
Department	Public Schools	Funding Schedule	
		Program Year:	\$350,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$350,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$250,000
		State Grant	\$100,000
 Description & Justification			
<p>This project will address various security improvements at all school facilities. Included in the project are card access entry systems, exterior lock changes, installation of a “panic button” and automatic building wide notification systems at all schools. The project will also upgrade the existing exterior camera systems at secondary schools to provide for secure internet access to video by administrative and public safety personnel.</p> <p>These investments will improve the security at all school buildings. This year’s allocation will go toward replacement of classroom doors throughout the system.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Site and Athletic Field Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$250,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$250,000
Project Duration	Recurring	Funding Source(s)	Bonds
 Description & Justification			
<p>The school fields and site infrastructure have experienced significant wear and tear. Most of these facilities were originally constructed more than fifty years ago. Funding is used to upgrade facilities to ensure their continued usefulness.</p> <p>West Hartford's athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. Much of the site infrastructure is also in need of replacement. The purpose of these improvements is to provide safe playing and pedestrian conditions. A long-term athletic field and site infrastructure improvements program is needed to prevent further deterioration and to preserve these important community resources.</p> <p>The funding will go toward replacement of Conard bleachers.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Stage & Auditorium Renovations	
Department	Public Schools	Funding Schedule	
		Program Year:	\$200,000
Category	Education	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$200,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

Every school facility in West Hartford has an auditorium and all but Smith School have a type of traditional stage. Many of the stage components and systems have outlived their useful life and are either non-functional or have been made inoperable due to safety concerns. Furthermore, many stages have lighting panels which require updating by code.

The West Hartford Public Schools curriculum has been distinguished by its emphasis on excellence in academics, athletics and the arts. Theater, acting and stagecraft are all part of the curriculum. Our auditoria are the scene of many Town-wide events, such as the Pops and Jazz Concerts and the Winter Concerts. Furthermore, the safety of the stages as well as their versatility is important to those renting our facilities. The middle schools offer a full program of artistic events to their communities year round. The fact that many of our stages require significant repairs limits the kinds of productions we can offer the community and the teaching experiences we can offer our students.

Funding will be allocated this year for seating at Norfeldt in the summer of 2016 and resurfacing of the stage floors at Conard and Hall.

Town of West Hartford Capital Improvement Program

Project Title		Outdoor Pool Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$75,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$75,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	
 Description & Justification 			
<p>The money for this project will be used to repair filtration systems, underground pipes and concrete decks where necessary. This is an ongoing program to address facility issues within our neighborhood pools.</p> <p>This project will allow for improvements at the Town's five outdoor pools and four spray decks. Funding under this program will assist the department in maintaining visitor safety as well as upgrading the appearance of the outdoor pools by completing minor projects not addressed through the operating budget.</p> <p>The outdoor pool season is a summer program of limited duration. This program will allow the Town to minimize down-time at the outdoor pools, thus assuring the community has use of their pools during the summer months.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Park & Playfield Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$100,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$100,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This is a cooperative program between the Town and the Board of Education to expand, upgrade and improve West Hartford's athletic fields. It is the intent of both the Town and schools to prioritize the major needs and attempt to address concerns as funding becomes available. Recommendations include a reorganization of certain fields, total reconstruction of poor fields, irrigation, regrading and re-seeding of designated fields.

West Hartford's parks and athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. The purpose of these improvements is to provide safe playing conditions so that interscholastic and youth league injuries can be minimized. In addition, the number of youths participating in community youth leagues has increased over the years. A long-term athletic field improvements program is needed to prevent further deterioration and to preserve these important community resources within Town parks.

Town of West Hartford Capital Improvement Program

Project Title		Park & Playscape Management	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$78,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$78,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	\$78,000

Description & Justification

Funds for this project will be used to repair and/or replace existing playscapes and playground equipment at Town parks. This is an ongoing program to address facility improvements. A priority list of playscape improvements will be updated yearly.

The existing structures and equipment are ten to fifteen years old and are in need of significant maintenance and repair. The replacement of the existing equipment will provide for an accessible playground, improve safety and better serve the needs of the neighborhoods. The new equipment will conform to current standards for playground equipment.

Town of West Hartford Capital Improvement Program

Project Title		Sitework – Recreational Facilities	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$50,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$50,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>This project will repair and repave parking lots at recreational facilities that are deemed in poor condition. The goal of the project is to improve safety and accessibility for the elderly and residents who are handicapped.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Energy Conservation	
Department	Facilities Services	Funding Schedule	
		Program Year:	\$100,000
Category	Building Improvements	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$100,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This project will fund energy conservation improvements to Town and school buildings as part of the Town's overall energy management strategy. Each year, capital improvements will be identified based upon recommendations of the Town's energy specialist that will reduce the consumption and cost of energy. Based upon a priority ranking and payback schedule, those improvements that will have the best return will be implemented. Improvements may include more efficient equipment, energy management control systems, financial incentive programs for improvements from the utility companies, implementing separate heating and cooling systems within buildings and taking advantage of new technologies.

Natural gas and electricity costs had stabilized over the past few years but will be increasing over time. Investments need to be made that reduce the consumption of energy to manage energy costs. This dedicated project for energy conservation improvements establishes these investments as a priority rather than competing with other building improvement projects and priorities.

Town of West Hartford Capital Improvement Program

Project Title		Town Building Improvements	
Department	Facilities Services	Funding Schedule	Program Year: \$1,470,000
Category	Building Improvements	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$1,470,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

Town building improvements are facility needs not addressed under other capital projects and include the categories of heating, ventilation and cooling (HVAC) systems, roofing and masonry, interior finishes, fixtures and furnishings, and code compliance. This program allows for improvements to the Town's municipal buildings, such as completing minor projects and replacing equipment and building amenities, to maintain and upgrade the systems and appearance of the buildings.

Heating, Ventilation and Cooling (HVAC) Systems - HVAC systems provide heating, cooling and air circulation to users of buildings. Air temperature and indoor air quality are important issues to building occupants in regard to their personal comfort and health. The periodic replacement of boilers, furnaces, chillers, cooling towers, air handlers, and ventilation systems is required as these systems wear out and/or become obsolete. New HVAC systems also provide the Town an opportunity to install more energy efficient equipment and to install modern direct digital controls which provide greater control and will lower operating costs.

Roofing and Masonry - Proper maintenance of the exterior building shell is required to prevent water and air penetration into the building. Water damage can cause significant damage to a building and potential health hazards to building occupants. Air penetration causes heating and cooling losses and interferes with the proper operation of HVAC equipment and can lead to excessive wear and tear of the equipment and higher operating costs. Building roofs have a life span of approximately 20 to 25 years.

Interior Finishes, Fixtures and Furnishings - Interior finishes include wall, floor and ceiling surfaces; fixtures include restroom toilets, sinks, partitions, and kitchen sinks; and furnishings include appliances such as stoves, ovens, refrigerators, and water fountains, benches and other miscellaneous items that are permanently installed in buildings.

Code Compliance - Code compliance includes fire and life safety, handicap accessibility, elevator and public health codes in Town buildings. Codes periodically change or it is discovered that we are not in compliance with the code and we must make repairs, enhance systems or modify buildings to meet the requirements of the code.

Town of West Hartford Capital Improvement Program

Project Title		Communications Infrastructure	
Department	Information Technology Services	Funding Schedule	
		Program Year:	\$708,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$708,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$500,000
		Capital Non-Recurring Expenditure Fund	\$208,000

Description & Justification

This project represents the continued investment in the organization's communications infrastructure supporting voice and data communication for town departments and the public schools. The maintenance of the infrastructure requires annual investments to replace obsolete hardware and software and enhancements are required to maintain the performance of the infrastructure to support the continued and expanded utilization of voice and data communications. This project also finances investments in hardware and software for all Town departments.

The communications infrastructure supports applications that utilize voice and data communication to improve organizational performance. Improved performance is the result of extending access to information throughout the organization making employees information independent in accessing resources to solve problems and provide customer service. The communications infrastructure supports applications that provide customers direct access to electronic services eliminating their dependencies on employees to receive customer service. Continued investment is required to maintain the infrastructure to support new applications and increased utilization while maintaining the security integrity of the infrastructure.

Town of West Hartford Capital Improvement Program

Project Title		Public Safety Facility	
Department	Fire Services & Police Services	Funding Schedule	Program Year: \$100,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$100,000
Project Duration	Single	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>Currently, Fire and Police Services utilize space at Brixton Street as a training site. At this time the space, built in 1980, is in need of repair. Funds will be used to study the best use of this space to maximize utilization for both public safety departments and will determine what repairs or renovations are required. The future of the Town's police range, dog pound, fire tower and public safety classroom space will all be considered as part of this study.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Public Works Rolling Stock	
Department	Public Works	Funding Schedule	
		Program Year:	\$780,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$780,000
Project Duration	Recurring	Funding Source(s)	Bonds
 Description & Justification			
<p>The Department of Public Works utilizes a variety of rolling stock to perform a diverse array of community maintenance services. Equipment in good repair is critical to the productive use of the department's resources. The Town has developed a multi-year plan to replace rolling stock based upon the condition of existing inventory and expected useful life. Timely replacement of rolling stock contributes to the efficiency and effectiveness of community maintenance services provided by the staff of the Department of Public Works.</p> <p>Also included in this appropriation is \$620,000 for equipment that will be needed to comply with Connecticut Department of Energy and Environmental Protections' Municipal Separate Storm Sewer System (MS4) permit requirements. It is anticipated that the Town will need to purchase a street sweeper (\$220,000) and a vactor (\$400,000) in order to perform necessary services. The remainder of the funding will be used for the replacement of other existing rolling stock.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Radio System Replacement	
Department	Police Services	Funding Schedule	
		Program Year:	\$4,900,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$4,900,000
Project Duration	Year 1 of 2	Funding Source(s)	Bonds

Description & Justification

The Town's current 3-site, 800 megahertz analog radio system backbone was purchased and installed in 1999. Between 2008 and 2010, the Town replaced many of its portable and mobile radios as part of a national re-banding program at no cost to the Town. Some components of that backbone infrastructure (controllers and GPS units) were upgraded with Capital Improvement Funding in 2009 and 2010 to keep the system operational until 2015, when Motorola support for the existing system would expire. During that same period, the Town also replaced the remaining portable and mobile radios that were outdated and could no longer be supported by the equipment maintenance contract. Through a Federal fire grant the Town also invested in a microwave communications system that replaced the original T-1 telephone communications system. This system coordinates the remote radio sites and the master site located at Raymond Road. Since its installation, the system has operated flawlessly through snowstorms, recent hurricanes and Winter Storm Alfred. The Town has also re-located its main radio tower site to the WCCC tower site on Albany Avenue in West Hartford.

After 2015, Motorola, the manufacturer and maintainer of the Town's system equipment, will no longer guarantee replacement parts for the current backbone components of the Town's radio system. The Town can continue operating in this mode, but jeopardizes system operation in the event of a failure in the equipment or equipment components located at the main equipment site on Raymond Road or at any of the three remote sites (Albany Avenue, Hamilton Heights & Avery Heights in Hartford). This is especially critical for the Public Safety radio system users (approximately 250 mobiles and portables) who rely on the radio system for emergency communications and support.

Anticipating the need to replace the current radio system, representatives from Motorola were asked to provide the Town with an estimated cost for migrating to a digital radio system, utilizing existing backbone equipment and field units wherever possible.

As part of the process, the Town hired a radio system consultant, utilizing existing Radio System CIP funds, to review the components of the Motorola proposal and make recommendations for opportunities in migrating to a digital format, including broadband data capability and interoperability with Towns that border West Hartford. The consultant may also assist the Town in preparing an RFP for a new digital radio system, reviewing the proposal submitted and working with the Town to oversee the installation.

Town of West Hartford Capital Improvement Program

Project Title		Recycling Center	
Department	Public Works	Funding Schedule	
		Program Year:	\$200,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2016-2017	Total Cost:	\$200,000
Project Duration	Year 1 of 2	Funding Source(s)	Grants

Description & Justification

The Recycling Center Modernization Project is envisioned to be a long-term solution to help the Town meet disposal and recycling needs for West Hartford well into the future. The project envisions wide-ranging improvements to the facilities located at 25 Brixton Street that will expand the green recycling program and recycling capabilities, and enhance the Center's capabilities by improving our on-site recycling facility with modern-day technology. A request for information (RFI) to parties interested in formulating a public/private partnership will be issued. The site is the former site of the Town's waste incinerator and associated ash landfill. The incinerator facility has been dormant since 1974. The compactor and transfer station operation have not been operational since 1990. The scale house and ash landfill have been used as a quasi-public organic volume reduction and composting operation since 1990. The organic management operation receives both commercial and municipal generated green waste such as woody vegetation, leaves, and other organic landscaping waste. The incinerator building is not operational and currently offers no or limited opportunity for re-use. The building poses a potential environmental and health risk to the town in its current condition.

Funds included in year one will fund an environmental assessment, site investigation and hazardous buildings materials assessment. These first phases will be funded by a grant awarded by the State, through the Department of Economic and Community Development's Remedial Action and Redevelopment Municipal Grant Program.

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TOWN COUNCIL ADOPTED
SUMMARY OF CAPITAL IMPROVEMENTS
PROGRAM YEAR 2017-2018
(IN THOUSANDS)

	BONDS	CNRE	GRANTS	OTHER	TOTAL
<u>TRANSPORTATION & CIRCULATION</u>					
Arterial Street Reconstruction	\$1,442	\$	\$	\$	\$1,442
Neighborhood Street Reconstruction	1,578				1,578
North Main Street Bridge Rehabilitation	200				200
Pedestrian & Bicycle Management	470				470
Storm Water Management	454		63		517
Street Resurfacing	943				943
Traffic System Management	<u>200</u>	<u>84</u>	—	—	<u>284</u>
Sub-Total	5,287	84	63	0	5,434
<u>EDUCATION</u>					
Asbestos Removal	155		70		225
Computer Infrastructure		300			300
Exterior School Building Improvements	890		560		1,450
Furniture & Equipment Replacement		175			175
Hall Science Labs	3,840		2,560		6,400
Heating & Ventilation Systems	800				800
Interior School Building Improvements	840		210		1,050
Site and Athletic Field Improvements	250				250
Stage & Auditorium Renovations	<u>200</u>	—	—	—	<u>200</u>
Sub-Total	6,975	475	3,400	0	10,850
<u>PARKS & RECREATION</u>					
Outdoor Pool Improvements		80			80
Park & Playfield Improvements	125				125
Park & Playscape Management		182		50	232
Rockledge Improvements				50	50
Sitework – Recreational Facilities	<u>50</u>	—	—	—	<u>50</u>
Sub-Total	175	262	0	100	537
<u>TOWN BUILDING IMPROVEMENTS</u>					
Energy Conservation	100				100
Town Building Improvements	<u>1,514</u>	—	—	—	<u>1,514</u>
Sub-Total	1,614	0	0	0	1,614
<u>MISCELLANEOUS IMPROVEMENTS</u>					
Communications Infrastructure	500	232			732
Financial Management System	250				250
Fire Apparatus	1,170				1,170
Public Works Rolling Stock	620				620
Radio System Replacement	<u>400</u>	—	—	—	<u>400</u>
Sub-Total	2,940	232	0	0	3,172
TOTAL	<u>\$16,991</u>	<u>\$1,053</u>	<u>\$3,463</u>	<u>\$100</u>	<u>\$21,607</u>

Town of West Hartford Capital Improvement Program

Project Title		Arterial Street Reconstruction	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,442,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$1,442,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This Capital Improvement Program provides the funding necessary to address the reconstruction needs of an arterial/collector roadway. The Town of West Hartford roadway network is primarily classified as arterial, collector, or local roadways. Approximately 59 of 217 miles of roadway are classified as arterial/collector roadways or major roadways. These major roadways service greater numbers of vehicles, pedestrians and other transportation modes compared to local roadways or neighborhood streets. Therefore, these reconstruction projects typically require additional treatments and infrastructure beyond a neighborhood street reconstruction project. These typically include greater pavement widths for turning lanes and on-street parking, drainage systems, and more sustainable curbing material.

Some examples of Town-maintained major roadways are North/South Main Street, Farmington Avenue, Boulevard, Park Road, King Philip Drive, Asylum Avenue, Fern Street, etc. Work on King Philip Drive from Tumblebrook Lane to Parsons Drive is planned for 2017.

On an annual basis, the Engineering Division performs pavement condition evaluations, which rates the entire Town-maintained roadway network into 5 categories; Excellent, Good, Fair, Poor, and Extremely Poor. Based on this year's evaluation, 39 percent or 23 miles of major roadways are rated poor or extremely poor. Arterial Street Reconstruction involves the following: coordination with utility companies to ensure underground facilities are not in need of repair or replacement; replacement of curbing; replacement of failing concrete or brick sidewalk; replacement of concrete or brick driveway aprons; replacement of drainage structures and pipes; re-establishment of the roadway base material; and roadway repaving. In order to sustain the Town's major roadway network, a suitable goal is to annually reconstruct 1 mile of the Town's major roadways. Some of the remaining poor condition major roadway will be repaved under the Street Resurfacing Capital Improvement Program.

Town of West Hartford Capital Improvement Program

Project Title		Neighborhood Street Reconstruction	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,578,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$1,578,000
Project Duration	Recurring	Funding Source(s)	Bonds
 Description & Justification			
<p>This Capital Improvement Program addresses the reconstruction needs of the neighborhood streets or local roadways in the Town's 217 mile roadway network. Approximately 158 miles of roadway are considered local roadways. Based upon the annual pavement condition evaluation, 34 percent or 53 miles of local roadways are rated poor or extremely poor.</p> <p>These neighborhood streets provide access to thousands of residential properties and in addition to their function, they enhance the overall neighborhood appeal and value. Neighborhood Street Reconstruction may include the replacement of existing curbing with granite curbing; the replacement of existing driveway aprons with concrete aprons; sidewalk and drainage structure replacement as necessary; re-establishment of the roadway base material; replacement of the road surface; and in some warranted cases, incorporation of traffic calming elements. The Neighborhood Street Reconstruction program provides a lasting refreshment of the neighborhood's appearance that is often petitioned by entire neighborhoods.</p> <p>The goal is to annually reconstruct 1 mile of the Town's neighborhood streets.</p>			

Town of West Hartford Capital Improvement Program

Project Title		North Main Street Bridge Rehabilitation	
Department	Community Services	Funding Schedule	
		Program Year:	\$200,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$200,000
Project Duration	Year 1 of 2	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>The North Main Street Bridge, which is located between Brookside Boulevard and Wyndwood Road, will be fully rehabilitated by this program. The bridge was originally constructed in 1901 and remains, for the most part, as it was originally constructed as a three-barrel concrete arch structure.</p> <p>The rehabilitation work will include: uncovering the arch structures from the top and performing concrete repairs; performing concrete repairs on the underside of the arches; removing and replacing the parapets (vertical sides) including an open railing design; installing channel revetment to address underwater erosion at the bridge piers; and adding guiderail to the approach sides to the bridge.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Pedestrian and Bicycle Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$470,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$470,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This capital program addresses the needs of the pedestrians and bicyclists throughout the Town. The Town of West Hartford maintains an extensive system of 300 miles of sidewalks. These sidewalks provide a safety benefit to pedestrians in lieu of walking in the street. A recent sidewalk condition survey identified over 1,300 sidewalk sections in need of repair. The sidewalk system also provides a neighborhood enhancement and benefits school children, patrons of businesses throughout town, and recreational users.

In addition to the sidewalk system, the Town will continue to design and construct on and off street bicycling options across the Town. For on-street bicycling options, the Town intends to evaluate and appropriately sign and mark suitable roadways.

Town of West Hartford Capital Improvement Program

Project Title		Storm Water Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$517,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$517,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$454,000
		Grants	\$ 63,000

Description & Justification

This capital program maintains the complex Town-wide drainage system which includes 13 bridges, 73 culverts, 7,600 drainage structures, and 180 miles of pipe. In the next few years, the Town plans to complete a comprehensive mapping of the entire drainage system.

Most of the Town's bridges and some of the Town's culverts are inspected every two years by the State Department of Transportation. The Engineering Division performs periodic inspections of the remaining bridges and culverts. All Town bridges and culverts are in safe, working order.

The Mountain Road culvert just north of Briarwood Road should be replaced to reduce clogging issues that create flooding events to properties on Fairwood Farms, Garwood Lane, and Wood Pond Road. In addition, the Sedgwick Road culvert needs rehabilitation based upon a recent condition inspection. The estimated cost for both of these projects is \$260,000.

The State of Connecticut Department of Transportation granted funds to the Town for the rehabilitation of the Braeburn Road culvert. The estimated project cost is \$133,000 with the State portion of \$62,500 and the Town portion of \$70,500.

Inspections of the Town's storm pipes occur annually and on an as needed basis to investigate flooding or pavement failures especially prior to a road repaving project. These annual video assessments cost approximately \$30,000. Inevitably, the pipe investigations lead to necessary pipe repairs, which will be funded within this program.

The Public Works Department replaces all necessary catch basins in conjunction with street resurfacing program. On the average, 150 catch basins are replaced every year at a cost of approximately \$100,000.

Town of West Hartford Capital Improvement Program

Project Title		Street Resurfacing	
Department	Community Services	Funding Schedule	
		Program Year:	\$943,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$943,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

The Town strives to repave 10 or more miles of roadway each year, via this program. Due to the escalating cost of asphalt over the past five years, the Town has only been able to resurface an average of 7.4 miles during this period of time. In order to increase this distance and get closer to 10 miles, annual funding for this program is increased by \$100,000.

The street selections for resurfacing are based on the annual pavement condition evaluation. Of the Town's 217 miles of roadway, 35 percent or 76 miles is in poor or extremely poor condition. Selections are also based on geographical considerations to balance the repaving throughout Town. The Street Resurfacing Program includes: milling to partially remove the existing pavement; sweeping the roadway clean; and paving the roadway. In some cases, bituminous curbing and driveway aprons are also replaced. The Town also coordinates all work with the utility companies.

Town of West Hartford Capital Improvement Program

Project Title		Traffic System Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$284,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$284,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$200,000
		Capital Non-Recurring Expenditure Fund	\$84,000

Description & Justification

This Capital Improvement Program addresses the replacement of the Town's 61 traffic signals, 1,200 traffic control signs, 30 miles of pavement markings, two miles of guiderail, and the Town's street lighting system. Proper operating maintenance of these traffic control devices greatly improves safety to the mobile public.

In the past seven years, 46 of the Town's traffic signals were replaced. Of the remaining 16 traffic signals, 3 are at the end of their useful life, which is 30 years. The goal of this program is to replace 1 traffic signal every other year, make necessary traffic signal improvements such as pedestrian signal upgrades, and to replace all necessary pavement markings affected by the repaving program and replenish others throughout Town. Guiderail and signage are also replaced as necessary.

This year's funding will replace the traffic signal at the intersection of Trout Brook Drive and Quaker Lane South. The replacement traffic signal will include accessible pedestrian signal equipment, countdown pedestrian signal heads, and video detection.

Town of West Hartford Capital Improvement Program

Project Title		Asbestos Removal	
Department	Public Schools	Funding Schedule	
		Program Year:	\$225,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$225,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$155,000
		State Grant	\$70,000

Description & Justification

Asbestos Containing Material (ACM) has been found throughout the district in locations documented in the Board of Education's Asbestos Management Plan. The annual appropriation is used to support many other recurring projects, such as boiler replacement. Ideally, the removal precedes the designated recurring construction activity. These funds pay for asbestos removal project specifications, diagrams, hygienists, actual removals, testing results and final reports.

Funding is allocated toward the removal of asbestos identified during renovations, flooring replacements and heating improvements.

Inert asbestos containing material can be encapsulated rather than removed. Construction and/or renovation activities, however, often make inert materials friable and removal provides for safer, more predictable working conditions. Additionally, when asbestos containing materials are encountered on a work site, all activities must cease until the removal of the asbestos has been completed. Therefore, we are better able to project construction/renovation schedules and cost with the asbestos removed in advance.

Town of West Hartford Capital Improvement Program

Project Title		Computer Infrastructure	
Department	Public Schools	Funding Schedule	
		Program Year:	\$300,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$300,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	

Description & Justification

All West Hartford Public Schools are connected to a fiber-optic metropolitan area network (MAN). The internal connections at each school consists of layer 2 switches and layer 3 routers to bring the network and internet resources to all offices and classrooms. Servers, switches, telecommunications equipment and other appliances will require proactive replacement to improve mean time between failures and reduce mean time to recovery. Additionally, these funds are used to annually replace the oldest computers in the district for newer models capable of meeting the demands of current administrative and educational software. These funds, combined with funding in the operating budget, constitute our technology investment in the schools.

The ongoing investment in educational and administrative computing is a critical element in providing what has become basic functionality in today's technology reliant education environment.

Town of West Hartford Capital Improvement Program

Project Title		Exterior School Building Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$1,450,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$1,450,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$890,000
		State Grant	\$560,000
 Description & Justification			
<p>With 16 buildings of varying age exterior school improvements are an annual requirement. Exterior school improvements may include roofing, masonry, window upgrades and exterior door replacement, as well as other structural improvements. Re-roofing includes removal of existing materials and in many cases, insulating with thicker, denser materials to provide for increased energy conservation. It also includes the installation of necessary flashings, counter flashings, drainage improvements and related masonry repairs. A systematic re-roofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset. Masonry includes restoration and re-pointing of building facades. Window upgrades replace single pane windows with energy efficient window systems.</p> <p>The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces and exterior building envelopes, left unchanged, exposes buildings to water damage and long-term structural damage.</p> <p>This year's appropriation will be dedicated to the partial replacement of roofing at King Philip and Hall.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Furniture and Equipment Replacement	
Department	Public Schools	Funding Schedule	
		Program Year:	\$175,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$175,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	

Description & Justification

The Furniture and Equipment Replacement program provides for the periodic replacement of furniture and equipment district-wide as the inventory becomes worn out, unable to be repaired, or unsafe. There are four categories of items included in this replacement program.

Classrooms and Laboratories– There are approximately 617 classrooms in the 16 schools that comprise the district. Classroom and laboratory furniture have a life span of approximately 20 years. This category of furniture includes student desks and chairs, teacher desks and chairs, laboratory tables and chairs. These items have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools as needed. Adjustable desks are specified for the elementary schools so that furniture can be transferred to different grade levels within an elementary school.

Administrative – Each of the 16 schools have main offices along with support staff operations that have furniture requirements including desks, chairs, tables, filing cabinets, and permanent dividing walls. Office furniture has a typical life span of 20 years.

Cafeteria – Each of the 16 schools has a cafeteria that requires tables and chairs for students. In many instances, these spaces are also used for additional classroom space, assemblies and meetings. These items have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools. Cafeteria furniture has a typical life span of 15 years.

Equipment – Items in this category include appliances and folding dividing walls. Appliances have a life span of between 10 and 15 years and dividing walls have a typical life span of approximately 30 years.

Lockers – Element of the school building design which is subject to excessive wear and tear as generations of students make use of these temporary storage receptacles. Because certain lockers cannot be repaired further, there is a need for lockers district-wide for the next several years. New lockers are specified to be wider and deeper than existing ones and they are usually specified to have a more limited number of moving components, thereby limiting our future repairs and maintenance.

Furniture has a limited useful life. Much of the Town’s inventory has been pushed well beyond that life span. Furthermore, as classrooms are added to a school (modulars, reconfiguring existing spaces, etc.) additional furniture is needed. As many older pieces become obsolete, the Town can no longer obtain repair parts. Finally, as educational methods change, furniture needs change.

This funding will go toward the replacement of furniture and equipment throughout the system.

Town of West Hartford Capital Improvement Program

Project Title		Hall Science Labs	
Department	Public Schools	Funding Schedule	
		Program Year:	\$6,400,000
Category	Education	Prior Year(s):	\$6,400,000
Fiscal Year	2017-2018	Total Cost:	\$12,800,000
Project Duration	Year 2 of 2	Funding Source(s)	
		Bonds	\$3,840,000
		State Grant	\$2,560,000

Description & Justification

This project provides for the replacement and renovation of the Hall High School Science Labs. The existing program space is original (1970) to the building and does not meet the needs of the current and projected science program. The plan includes 8 new CLABS (Classroom/Lab combination spaces) for Biology and Chemistry and renovation of the existing space to both “dry” lab space (Earth Science and Physics) and flexible classroom space.

In the recent New England Association of Schools and Colleges’ certification review and assessment, Hall’s science labs were cited as being outdated and unable to meet the learning needs of students and curriculum. Both the Next Generation Science Standards and The College Board require different space and lab configurations than when the current labs were built 45 years ago. The current science labs are undersized and lack the infrastructure to support today’s technology. The NSTA recommends 1,440 square feet for each lab, while the current science labs at Hall average 1,100 square feet each. Additionally, the current labs lack both the preparation and storage space for the safe implementation of the science curriculum for the number of students and classes at Hall.

Town of West Hartford Capital Improvement Program

Project Title		Heating and Ventilation Systems	
Department	Public Schools	Funding Schedule	
		Program Year:	\$800,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$800,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>This program provides for the replacement of existing boilers and upgrades to existing HVAC systems some of which have performed well beyond their useful life. Replacement boilers are typically more energy efficient and include a greater amount of programmable auxiliary controls. Reconfigured piping is often necessary. New temperature controlled gas burners are included, as are requisite improvements to the gas piping. Associated breeching, dampers and needed chimney repairs are included.</p> <p>Good preventive maintenance practice dictates that major building components be repaired or replaced, if necessary, before problems arise. Few components of a building are as essential as a dependable boiler. Boiler failures can cause major problems to the educational process as well as unanticipated major expense during the middle of a fiscal year.</p> <p>This funding will go toward the replacement of the King Philip heating system.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Interior School Building Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$1,050,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$1,050,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$840,000
		State Grant	\$210,000
 Description & Justification			
<p>School building improvements consist of facility needs that are not specifically outlined as a separate capital project. These expenditures include replacement of fire alarm systems, handicap accessibility improvements, lighting system upgrades, HVAC control system replacements, and building and fire code related improvements.</p> <p>The school system has 11 elementary schools, 3 middle schools, and 2 high schools, that together comprise more than 1.75 million square feet of educational facilities. These facilities require regular investment to maintain their existing infrastructures and upgrade their system. This appropriation continues the Town's reinvestment in its schools and a commitment to maintain them in good condition.</p> <p>Improvements this year will include replacement of flooring in classrooms at King Philip and Braeburn, replacement of exterior doors at Webster Hill, painting at Sedgwick and Wolcott, and reconfiguration of the offices at Bugbee and Sedgwick.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Site and Athletic Field Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$250,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$250,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>The school fields and site infrastructure have experienced significant wear and tear. Most of these facilities were originally constructed more than fifty years ago. Funding is used to upgrade facilities to ensure their continued usefulness.</p> <p>West Hartford's athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. Much of the site infrastructure is also in need of replacement. The purpose of these improvements is to provide safe playing and pedestrian conditions. A long-term athletic field and site infrastructure improvements program is needed to prevent further deterioration and to preserve these important community resources.</p> <p>This year's funding will be directed toward refurbishment of the Hall track and Duffy parking lot.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Stage & Auditorium Renovations	
Department	Public Schools	Funding Schedule	
		Program Year:	\$200,000
Category	Education	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$200,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>Every school facility in West Hartford has an auditorium and all but Smith School have a type of traditional stage. Many of the stage components and systems have outlived their useful life and are either non-functional or have been made inoperable due to safety concerns. Furthermore, many stages have lighting panels which require updating by code.</p> <p>The West Hartford Public Schools curriculum has been distinguished by its emphasis on excellence in academics, athletics and the arts. Theater, acting and stagecraft are all part of the curriculum. Our auditoria are the scene of many Town-wide events, such as the Pops and Jazz Concerts and the Winter Concerts. Furthermore, the safety of the stages as well as their versatility is important to those renting our facilities. The middle schools offer a full program of artistic events to their communities year round. The fact that many of our stages require significant repairs limits the kinds of productions we can offer the community and the teaching experiences we can offer our students.</p> <p>Funding will be allocated this year for an upgrade of seating at Wolcott and sound/lighting upgrades at Conard/Hall.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Outdoor Pool Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$80,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$80,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	
 Description & Justification			
<p>The money for this project will be used to repair filtration systems, underground pipes and concrete decks where necessary. This is an ongoing program to address facility issues within our neighborhood pools.</p> <p>This project will allow for improvements at the Town's five outdoor pools and four spray decks. Funding under this program will assist the department in maintaining visitor safety as well as upgrading the appearance of the outdoor pools by completing minor projects not addressed through the operating budget.</p> <p>The outdoor pool season is a summer program of limited duration. This program will allow the Town to minimize down-time at the outdoor pools, thus assuring the community has use of their pools during the summer months.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Park & Playfield Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$125,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$125,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This is a cooperative program between the Town and the Board of Education to expand, upgrade and improve West Hartford's athletic fields. It is the intent of both the Town and schools to prioritize the major needs and attempt to address concerns as funding becomes available. Recommendations include a reorganization of certain fields, total reconstruction of poor fields, irrigation, regrading and re-seeding of designated fields.

West Hartford's parks and athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. The purpose of these improvements is to provide safe playing conditions so that interscholastic and youth league injuries can be minimized. In addition, the number of youths participating in community youth leagues has increased over the years. A long-term athletic field improvements program is needed to prevent further deterioration and to preserve these important community resources within Town parks.

Town of West Hartford Capital Improvement Program

Project Title		Park & Playscape Management	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$232,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$232,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	\$182,000
		Other	\$50,000

Description & Justification

Funds for this project will be used to repair and/or replace existing playscapes and playground equipment at Town parks. This is an ongoing program to address facility improvements. A priority list of playscape improvements will be updated yearly.

The existing structures and equipment are ten to fifteen years old and are in need of significant maintenance and repair. The replacement of the existing equipment will provide for an accessible playground, improve safety and better serve the needs of the neighborhoods. The new equipment will conform to current standards for playground equipment.

Also included in this year's appropriation is \$100,000 to restore McGovern Pond, located in Spicebush Swamp Park. It is anticipated that \$50,000 will be funded via Capital Non-Recurring Expenditure Fund and \$50,000 will be sought in matching funds. McGovern Pond has slowly been filled with sediments, consisting primarily of road sand, eroded soils from constructions sites and organic plant materials. The removal of these sediment deposits by dredging is the most efficient method to restore the pond to a condition that supports a diverse aquatic community. McGovern Pond plays an important role as a location for Ecoventure, the Town's ecology education program, and is the site of the Annual Fishing Derby.

Town of West Hartford Capital Improvement Program

Project Title		Rockledge Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$50,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$50,000
Project Duration	Single	Funding Source(s)	Other
<p>Description & Justification</p> <p>This project will address the renovation of greens or other golf course upgrades at Rockledge Golf Club based upon condition and need. It will be funded via the capital projects user fee included in the rates at Rockledge.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Sitework – Recreational Facilities	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$50,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$50,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>This project will repair and repave parking lots at recreational facilities that are deemed in poor condition. The goal of the project is to improve safety and accessibility for the elderly and residents who are handicapped.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Energy Conservation	
Department	Facilities Services	Funding Schedule	
		Program Year:	\$100,000
Category	Building Improvements	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$100,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This project will fund energy conservation improvements to Town and school buildings as part of the Town's overall energy management strategy. Each year, capital improvements will be identified based upon recommendations of the Town's energy specialist that will reduce the consumption and cost of energy. Based upon a priority ranking and payback schedule, those improvements that will have the best return will be implemented. Improvements may include more efficient equipment, energy management control systems, financial incentive programs for improvements from the utility companies, implementing separate heating and cooling systems within buildings and taking advantage of new technologies.

Natural gas and electricity costs had stabilized over the past few years but will be increasing over time. Investments need to be made that reduce the consumption of energy to manage energy costs. This dedicated project for energy conservation improvements establishes these investments as a priority rather than competing with other building improvement projects and priorities.

Town of West Hartford Capital Improvement Program

Project Title		Town Building Improvements	
Department	Facilities Services	Funding Schedule	
		Program Year:	\$1,514,000
Category	Building Improvements	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$1,514,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

Town building improvements are facility needs not addressed under other capital projects and include the categories of heating, ventilation and cooling (HVAC) systems, roofing and masonry, interior finishes, fixtures and furnishings, and code compliance. This program allows for improvements to the Town's municipal buildings, such as completing minor projects and replacing equipment and building amenities, to maintain and upgrade the systems and appearance of the buildings.

Heating, Ventilation and Cooling (HVAC) Systems - HVAC systems provide heating, cooling and air circulation to users of buildings. Air temperature and indoor air quality are important issues to building occupants in regard to their personal comfort and health. The periodic replacement of boilers, furnaces, chillers, cooling towers, air handlers, and ventilation systems is required as these systems wear out and/or become obsolete. New HVAC systems also provide the Town an opportunity to install more energy efficient equipment and to install modern direct digital controls which provide greater control and will lower operating costs.

Roofing and Masonry - Proper maintenance of the exterior building shell is required to prevent water and air penetration into the building. Water damage can cause significant damage to a building and potential health hazards to building occupants. Air penetration causes heating and cooling losses and interferes with the proper operation of HVAC equipment and can lead to excessive wear and tear of the equipment and higher operating costs. Building roofs have a life span of approximately 20 to 25 years.

Interior Finishes, Fixtures and Furnishings - Interior finishes include wall, floor and ceiling surfaces; fixtures include restroom toilets, sinks, partitions, and kitchen sinks; and furnishings include appliances such as stoves, ovens, refrigerators, and water fountains, benches and other miscellaneous items that are permanently installed in buildings.

Code Compliance - Code compliance includes fire and life safety, handicap accessibility, elevator and public health codes in Town buildings. Codes periodically change or it is discovered that we are not in compliance with the code and we must make repairs, enhance systems or modify buildings to meet the requirements of the code.

Town of West Hartford Capital Improvement Program

Project Title		Communications Infrastructure	
Department	Information Technology Services	Funding Schedule	
		Program Year:	\$732,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$732,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$500,000
		Capital Non-Recurring Expenditure Fund	\$232,000

Description & Justification

This project represents the continued investment in the organization's communications infrastructure supporting voice and data communication for town departments and the public schools. The maintenance of the infrastructure requires annual investments to replace obsolete hardware and software and enhancements are required to maintain the performance of the infrastructure to support the continued and expanded utilization of voice and data communications. This project also finances investments in hardware and software for all Town departments.

The communications infrastructure supports applications that utilize voice and data communication to improve organizational performance. Improved performance is the result of extending access to information throughout the organization making employees information independent in accessing resources to solve problems and provide customer service. The communications infrastructure supports applications that provide customers direct access to electronic services eliminating their dependencies on employees to receive customer service. Continued investment is required to maintain the infrastructure to support new applications and increased utilization while maintaining the security integrity of the infrastructure.

Town of West Hartford Capital Improvement Program

Project Title		Financial Management System	
Department	Financial Services	Funding Schedule	
		Program Year:	\$250,000
Category	Miscellaneous	Prior Year(s):	\$1,500,000
Fiscal Year	2017-2018	Total Cost:	\$1,750,000
Project Duration	Single	Funding Source(s)	
		Bonds	\$250,000

Description & Justification

This project replaces the Town's automated general ledger accounting, purchasing and payroll/human resource management systems. This also includes budgeting, fixed asset management and vendor registration systems. The project includes the purchase of new software and hardware, implementation and data conversion services, and training. The current software applications for general ledger accounting and purchasing are reaching end of useful life. The vendor has not made any significant re-investment in the applications and vendor support has diminished. This has resulted in stagnated functionality and incompatibility issues with newer operating system software versions. The general ledger accounting and payroll system are used by both the Town and Board of Education. The financial operations of the Town are highly dependent upon these systems to perform day to day operations. The installation of the new system will require configuring and testing the system to the Town's requirements for accounting, payroll processing and procurement processing. A significant investment is required to convert the financial data currently contained in the existing financial management system.

The Town's financial management operation is highly dependent on technology for the efficient processing of financial transactions and distribution of financial information throughout the organization. The Town's current financial management system has been in use since 1999. Over the last several years, ownership of the software has transferred to several different companies. The current owner has not released any significant updates to the software for three years. Software updates are required to implement new functionality, fix glitches in the software and keep current with new server and end user computer operating systems. There are enhancements and changes to the purchasing system that are important to the Town's use of the system that have not been forthcoming. The selection and implementation of a new financial management system is a considerable effort that will take several years to implement. It will also require re-integration with other systems or potential replacement of other systems if a new financial management system has the functionality provided by other systems.

Town of West Hartford Capital Improvement Program

Project Title		Fire Apparatus	
Department	Fire Services	Funding Schedule	
		Program Year:	\$1,170,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$1,170,000
Project Duration	Single	Funding Source(s)	Bonds
<p>Description & Justification The Town has an inventory of seven (7) fire vehicles, including 3 quints and 4 pumper trucks. The CIP assumes periodic replacement of fire apparatus based upon a planned replacement cycle.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Public Works Rolling Stock	
Department	Public Works	Funding Schedule	
		Program Year:	\$620,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2017-2018	Total Cost:	\$620,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>The Department of Public Works utilizes a variety of rolling stock to perform a diverse array of community maintenance services. Equipment in good repair is critical to the productive use of the department's resources. The Town has developed a multi-year plan to replace rolling stock based upon the condition of existing inventory and expected useful life. Timely replacement of rolling stock contributes to the efficiency and effectiveness of community maintenance services provided by the staff of the Department of Public Works. Included in this funding is \$620,000 for the replacement of existing rolling stock.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Radio System Replacement	
Department	Police Services	Funding Schedule	
		Program Year:	\$400,000
Category	Miscellaneous	Prior Year(s):	\$4,900,000
Fiscal Year	2017-2018	Total Cost:	\$5,300,000
Project Duration	Year 2 of 2	Funding Source(s)	Bonds

Description & Justification

The Town's current 3-site, 800 megahertz analog radio system backbone was purchased and installed in 1999. Between 2008 and 2010, the Town replaced many of its portable and mobile radios as part of a national re-banding program at no cost to the Town. Some components of that backbone infrastructure (controllers and GPS units) were upgraded with Capital Improvement Funding in 2009 and 2010 to keep the system operational until 2015, when Motorola support for the existing system would expire. During that same period, the Town also replaced the remaining portable and mobile radios that were outdated and could no longer be supported by the equipment maintenance contract. Through a Federal fire grant the Town also invested in a microwave communications system that replaced the original T-1 telephone communications system. This system coordinates the remote radio sites and the master site located at Raymond Road. Since its installation, the system has operated flawlessly through snowstorms, recent hurricanes and Winter Storm Alfred. The Town has also re-located its main radio tower site to the WCCC tower site on Albany Avenue in West Hartford.

After 2015, Motorola, the manufacturer and maintainer of the Town's system equipment, will no longer guarantee replacement parts for the current backbone components of the Town's radio system. The Town can continue operating in this mode, but jeopardizes system operation in the event of a failure in the equipment or equipment components located at the main equipment site on Raymond Road or at any of the three remote sites (Albany Avenue, Hamilton Heights & Avery Heights in Hartford). This is especially critical for the Public Safety radio system users (approximately 250 mobiles and portables) who rely on the radio system for emergency communications and support.

Anticipating the need to replace the current radio system, representatives from Motorola were asked to provide the Town with an estimated cost for migrating to a digital radio system, utilizing existing backbone equipment and field units wherever possible.

As part of the process, the Town hired a radio system consultant, utilizing existing Radio System CIP funds, to review the components of the Motorola proposal and make recommendations for opportunities in migrating to a digital format, including broadband data capability and interoperability with Towns that border West Hartford. The consultant may also assist the Town in preparing an RFP for a new digital radio system, reviewing the proposal submitted and working with the Town to oversee the installation.

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TOWN COUNCIL ADOPTED
SUMMARY OF CAPITAL IMPROVEMENTS
PROGRAM YEAR 2018-2019
(IN THOUSANDS)

	BONDS	CNRE	GRANTS	OTHER	TOTAL
<u>TRANSPORTATION & CIRCULATION</u>					
Arterial Street Reconstruction	\$1,486	\$	\$	\$	\$1,486
Neighborhood Street Reconstruction	1,625				1,625
North Main Street Bridge Rehabilitation	648		848		1,496
Pedestrian & Bicycle Management	480				480
Storm Water Management	556				556
Street Resurfacing	962				962
Traffic System Management	<u> </u>	<u>86</u>	<u> </u>	<u> </u>	<u>86</u>
Sub-Total	5,757	86	848	0	6,691
<u>EDUCATION</u>					
Asbestos Removal	175		75		250
Computer Infrastructure		350			350
Exterior School Building Improvements	930		620		1,550
Furniture & Equipment Replacement		175			175
Heating & Ventilation Systems	800				800
Interior School Building Improvements	810		190		1,000
Site and Athletic Field Improvements	250				250
Stage & Auditorium Renovations	<u>200</u>	<u> </u>	<u> </u>	<u> </u>	<u>200</u>
Sub-Total	3,165	525	885	0	4,575
<u>PARKS & RECREATION</u>					
Outdoor Pool Improvements		82			82
Park & Playfield Improvements	125				125
Park & Playscape Management		136			136
Parks – Wolcott	300				300
Sitework – Recreational Facilities	<u>50</u>	<u> </u>	<u> </u>	<u> </u>	<u>50</u>
Sub-Total	475	218	0	0	693
<u>TOWN BUILDING IMPROVEMENTS</u>					
Energy Conservation	100				100
Town Building Improvements	<u>1,559</u>	<u> </u>	<u> </u>	<u> </u>	<u>1,559</u>
Sub-Total	1,659	0	0	0	1,659
<u>MISCELLANEOUS IMPROVEMENTS</u>					
Communications Infrastructure	500	257			757
Public Works Rolling Stock	610				610
Recycling Center	<u>2,500</u>	<u> </u>	<u> </u>	<u> </u>	<u>2,500</u>
Sub-Total	3,610	257	0	0	3,867
TOTAL	<u>\$14,666</u>	<u>\$1,086</u>	<u>\$1,733</u>	<u>\$0</u>	<u>\$17,485</u>

Town of West Hartford Capital Improvement Program

Project Title		Arterial Street Reconstruction	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,486,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$1,486,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This Capital Improvement Program provides the funding necessary to address the reconstruction needs of an arterial/collector roadway. The Town of West Hartford roadway network is primarily classified as arterial, collector, or local roadways. Approximately 59 of 217 miles of roadway are classified as arterial/collector roadways or major roadways. These major roadways service greater numbers of vehicles, pedestrians and other transportation modes compared to local roadways or neighborhood streets. Therefore, these reconstruction projects typically require additional treatments and infrastructure beyond a neighborhood street reconstruction project. These typically include greater pavement widths for turning lanes and on-street parking, drainage systems, and more sustainable curbing material.

Some examples of Town-maintained major roadways are North/South Main Street, Farmington Avenue, Boulevard, Park Road, King Philip Drive, Asylum Avenue, Fern Street, etc.

On an annual basis, the Engineering Division performs pavement condition evaluations, which rates the entire Town-maintained roadway network into 5 categories; Excellent, Good, Fair, Poor, and Extremely Poor. Based on this year's evaluation, 39 percent or 23 miles of major roadways are rated poor or extremely poor. Arterial Street Reconstruction involves the following: coordination with utility companies to ensure underground facilities are not in need of repair or replacement; replacement of curbing; replacement of failing concrete or brick sidewalk; replacement of concrete or brick driveway aprons; replacement of drainage structures and pipes; re-establishment of the roadway base material; and roadway repaving. In order to sustain the Town's major roadway network, a suitable goal is to annually reconstruct 1 mile of the Town's major roadways. Some of the remaining poor condition major roadway will be repaved under the Street Resurfacing Capital Improvement Program.

Town of West Hartford Capital Improvement Program

Project Title		Neighborhood Street Reconstruction	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,625,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$1,625,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This Capital Improvement Program addresses the reconstruction needs of the neighborhood streets or local roadways in the Town's 217 mile roadway network. Approximately 158 miles of roadway are considered local roadways. Based upon the annual pavement condition evaluation, 34 percent or 53 miles of local roadways are rated poor or extremely poor.

These neighborhood streets provide access to thousands of residential properties and in addition to their function, they enhance the overall neighborhood appeal and value. Neighborhood Street Reconstruction may include the replacement of existing curbing with granite curbing; the replacement of existing driveway aprons with concrete aprons; sidewalk and drainage structure replacement as necessary; re-establishment of the roadway base material; replacement of the road surface; and in some warranted cases, incorporation of traffic calming elements. The Neighborhood Street Reconstruction program provides a lasting refreshment of the neighborhood's appearance that is often petitioned by entire neighborhoods.

The goal is to annually reconstruct 1 mile of the Town's neighborhood streets.

Town of West Hartford Capital Improvement Program

Project Title		North Main Street Bridge Rehabilitation	
Department	Community Services	Funding Schedule	
		Program Year:	\$1,496,000
Category	Transportation & Circulation	Prior Year(s):	\$200,000
Fiscal Year	2018-2019	Total Cost:	\$1,696,000
Project Duration	Year 2 of 2	Funding Source(s)	
		Bonds	\$648,000
		Grants	\$848,000

Description & Justification

The North Main Street Bridge, which is located between Brookside Boulevard and Wyndwood Road, will be fully rehabilitated by this program. The bridge was originally constructed in 1901 and remains, for the most part, as it was originally constructed as a three-barrel concrete arch structure.

The rehabilitation work will include: uncovering the arch structures from the top and performing concrete repairs; performing concrete repairs on the underside of the arches; removing and replacing the parapets (vertical sides) including an open railing design; installing channel revetment to address underwater erosion at the bridge piers; and adding guiderail to the approach sides to the bridge.

Town of West Hartford Capital Improvement Program

Project Title		Pedestrian and Bicycle Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$480,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$480,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>This capital program addresses the needs of the pedestrians and bicyclists throughout the Town. The Town of West Hartford maintains an extensive system of 300 miles of sidewalks. These sidewalks provide a safety benefit to pedestrians in lieu of walking in the street. A recent sidewalk condition survey identified over 1,300 sidewalk sections in need of repair. The sidewalk system also provides a neighborhood enhancement and benefits school children, patrons of businesses throughout town, and recreational users.</p> <p>In addition to the sidewalk system, the Town will continue to design and construct on and off street bicycling options across the Town. For on-street bicycling options, the Town intends to evaluate and appropriately sign and mark suitable roadways.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Storm Water Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$556,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$556,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This capital program maintains the complex Town-wide drainage system which includes 13 bridges, 73 culverts, 7,600 drainage structures, and 180 miles of pipe. In the next few years, the Town plans to complete a comprehensive mapping of the entire drainage system.

Most of the Town's bridges and some of the Town's culverts are inspected every two years by the State Department of Transportation. The Engineering Division performs periodic inspections of the remaining bridges and culverts. All Town bridges and culverts are in safe, working order.

The Fern Street Bridge needs rehabilitation due to flooding conditions and deterioration. The cost associated with this rehabilitation is estimated at \$160,000 within this program year.

Inspections of the Town's storm pipes occur annually and on an as needed basis to investigate flooding or pavement failures especially prior to a road repaving project. These annual video assessments cost approximately \$30,000. Inevitably, the pipe investigations lead to necessary pipe repairs, which average \$210,000 per year.

The Public Works Department replaces all necessary catch basins in conjunction with street resurfacing program. On the average, 150 catch basins are replaced every year at a cost of approximately \$100,000.

Town of West Hartford Capital Improvement Program

Project Title		Street Resurfacing	
Department	Community Services	Funding Schedule	
		Program Year:	\$962,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$962,000
Project Duration	Recurring	Funding Source(s)	Bonds
Description & Justification			
<p>The Town strives to repave 10 or more miles of roadway each year, via this program. Due to the escalating cost of asphalt over the past five years, the Town has only been able to resurface an average of 7.4 miles during this period of time. In order to increase this distance and get closer to 10 miles, annual funding for this program is increased by \$100,000.</p> <p>The street selections for resurfacing are based on the annual pavement condition evaluation. Of the Town's 217 miles of roadway, 35 percent or 53 miles is in poor or extremely poor condition. Selections are also based on geographical considerations to balance the repaving throughout Town. The Street Resurfacing Program includes: milling to partially remove the existing pavement; sweeping the roadway clean; and paving the roadway. In some cases, bituminous curbing and driveway aprons are also replaced. The Town also coordinates all work with the utility companies.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Traffic System Management	
Department	Community Services	Funding Schedule	
		Program Year:	\$86,000
Category	Transportation & Circulation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$86,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	\$86,000

Description & Justification

This Capital Improvement Program addresses the replacement of the Town's 61 traffic signals, 1,200 traffic control signs, 30 miles of pavement markings, two miles of guiderail, and the Town's street lighting system. Proper operating maintenance of these traffic control devices greatly improves safety to the mobile public.

In the past seven years, 46 of the Town's traffic signals were replaced. Of the remaining 16 traffic signals, 3 are at the end of their useful life, which is 30 years. The goal of this program is to replace 1 traffic signal every other year, make necessary traffic signal improvements such as pedestrian signal upgrades, and to replace all necessary pavement markings affected by the repaving program and replenish others throughout Town. Guiderail and signage are also replaced as necessary.

Town of West Hartford Capital Improvement Program

Project Title		Asbestos Removal	
Department	Public Schools	Funding Schedule	
		Program Year:	\$250,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$250,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$175,000
		State Grant	\$75,000

Description & Justification

Asbestos Containing Material (ACM) has been found throughout the district in locations documented in the Board of Education's Asbestos Management Plan. The annual appropriation is used to support many other recurring projects, such as boiler replacement. Ideally, the removal precedes the designated recurring construction activity. These funds pay for asbestos removal project specifications, diagrams, hygienists, actual removals, testing results and final reports.

Funding is allocated toward the removal of asbestos identified during renovations, flooring replacements and heating improvements.

Inert asbestos containing material can be encapsulated rather than removed. Construction and/or renovation activities, however, often make inert materials friable and removal provides for safer, more predictable working conditions. Additionally, when asbestos containing materials are encountered on a work site, all activities must cease until the removal of the asbestos has been completed. Therefore, we are better able to project construction/renovation schedules and cost with the asbestos removed in advance.

Town of West Hartford Capital Improvement Program

Project Title		Computer Infrastructure	
Department	Public Schools	Funding Schedule	
		Program Year:	\$350,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$350,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	

Description & Justification

All West Hartford Public Schools are connected to a fiber-optic metropolitan area network (MAN). The internal connections at each school consists of layer 2 switches and layer 3 routers to bring the network and internet resources to all offices and classrooms. Servers, switches, telecommunications equipment and other appliances will require proactive replacement to improve mean time between failures and reduce mean time to recovery. Additionally, these funds are used to annually replace the oldest computers in the district for newer models capable of meeting the demands of current administrative and educational software. These funds, combined with funding in the operating budget, constitute our technology investment in the schools.

The ongoing investment in educational and administrative computing is a critical element in providing what has become basic functionality in today's technology reliant education environment.

Town of West Hartford Capital Improvement Program

Project Title		Exterior School Building Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$1,550,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$1,550,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$930,000
		State Grant	\$620,000
 Description & Justification			
<p>With 16 buildings of varying age exterior school improvements are an annual requirement. Exterior school improvements may include roofing, masonry, window upgrades and exterior door replacement, as well as other structural improvements. Re-roofing includes removal of existing materials and in many cases, insulating with thicker, denser materials to provide for increased energy conservation. It also includes the installation of necessary flashings, counter flashings, drainage improvements and related masonry repairs. A systematic re-roofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset. Masonry includes restoration and re-pointing of building facades. Window upgrades replace single pane windows with energy efficient window systems.</p> <p>The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces and exterior building envelopes, left unchanged, exposes buildings to water damage and long-term structural damage.</p> <p>This year's appropriation will be dedicated to the completion of the roof replacement at King Philip and masonry repairs at Sedgwick and Hall.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Furniture and Equipment Replacement	
Department	Public Schools	Funding Schedule	
		Program Year:	\$175,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$175,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	

Description & Justification

The Furniture and Equipment Replacement program provides for the periodic replacement of furniture and equipment district-wide as the inventory becomes worn out, unable to be repaired, or unsafe. There are four categories of items included in this replacement program.

Classrooms and Laboratories– There are approximately 617 classrooms in the 16 schools that comprise the district. Classroom and laboratory furniture have a life span of approximately 20 years. This category of furniture includes student desks and chairs, teacher desks and chairs, laboratory tables and chairs. These items have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools as needed. Adjustable desks are specified for the elementary schools so that furniture can be transferred to different grade levels within an elementary school.

Administrative – Each of the 16 schools have main offices along with support staff operations that have furniture requirements including desks, chairs, tables, filing cabinets, and permanent dividing walls. Office furniture has a typical life span of 20 years.

Cafeteria – Each of the 16 schools has a cafeteria that requires tables and chairs for students. In many instances, these spaces are also used for additional classroom space, assemblies and meetings. These items have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools. Cafeteria furniture has a typical life span of 15 years.

Equipment – Items in this category include appliances and folding dividing walls. Appliances have a life span of between 10 and 15 years and dividing walls have a typical life span of approximately 30 years.

Lockers – Element of the school building design which is subject to excessive wear and tear as generations of students make use of these temporary storage receptacles. Because certain lockers cannot be repaired further, there is a need for lockers district-wide for the next several years. New lockers are specified to be wider and deeper than existing ones and they are usually specified to have a more limited number of moving components, thereby limiting our future repairs and maintenance.

Furniture has a limited useful life. Much of the Town’s inventory has been pushed well beyond that life span. Furthermore, as classrooms are added to a school (modulars, reconfiguring existing spaces, etc.) additional furniture is needed. As many older pieces become obsolete, the Town can no longer obtain repair parts. Finally, as educational methods change, furniture needs change.

This funding will go toward the replacement of furniture and equipment throughout the system.

Town of West Hartford Capital Improvement Program

Project Title		Heating and Ventilation Systems	
Department	Public Schools	Funding Schedule	
		Program Year:	\$800,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$800,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>This program provides for the replacement of existing boilers and upgrades to existing HVAC systems some of which have performed well beyond their useful life. Replacement boilers are typically more energy efficient and include a greater amount of programmable auxiliary controls. Reconfigured piping is often necessary. New temperature controlled gas burners are included, as are requisite improvements to the gas piping. Associated breeching, dampers and needed chimney repairs are included.</p> <p>Good preventive maintenance practice dictates that major building components be repaired or replaced, if necessary, before problems arise. Few components of a building are as essential as a dependable boiler. Boiler failures can cause major problems to the educational process as well as unanticipated major expense during the middle of a fiscal year.</p> <p>This funding will go toward the replacement of the boiler at Braeburn.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Interior School Building Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$1,000,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$1,000,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$810,000
		State Grant	\$190,000
 Description & Justification			
<p>School building improvements consist of facility needs that are not specifically outlined as a separate capital project. These expenditures include replacement of fire alarm systems, handicap accessibility improvements, lighting system upgrades, HVAC control system replacements, and building and fire code related improvements.</p> <p>The school system has 11 elementary schools, 3 middle schools, and 2 high schools, that together comprise more than 1.75 million square feet of educational facilities. These facilities require regular investment to maintain their existing infrastructures and upgrade their system. This appropriation continues the Town's reinvestment in its schools and a commitment to maintain them in good condition.</p> <p>Improvements this year will include replacement of flooring in classrooms throughout the system, replacement of exterior doors at schools and painting at schools as needed.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Site and Athletic Field Improvements	
Department	Public Schools	Funding Schedule	
		Program Year:	\$250,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$250,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

The school fields and site infrastructure have experienced significant wear and tear. Most of these facilities were originally constructed more than fifty years ago. Funding is used to upgrade facilities to ensure their continued usefulness.

West Hartford's athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. Much of the site infrastructure is also in need of replacement. The purpose of these improvements is to provide safe playing and pedestrian conditions. A long-term athletic field and site infrastructure improvements program is needed to prevent further deterioration and to preserve these important community resources.

This year's funding will be directed toward resurfacing of the parking lot at Norfeldt.

Town of West Hartford Capital Improvement Program

Project Title		Stage & Auditorium Renovations	
Department	Public Schools	Funding Schedule	
		Program Year:	\$200,000
Category	Education	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$200,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification</p> <p>Every school facility in West Hartford has an auditorium and all but Smith School have a type of traditional stage. Many of the stage components and systems have outlived their useful life and are either non-functional or have been made inoperable due to safety concerns. Furthermore, many stages have lighting panels which require updating by code.</p> <p>The West Hartford Public Schools curriculum has been distinguished by its emphasis on excellence in academics, athletics and the arts. Theater, acting and stagecraft are all part of the curriculum. Our auditoria are the scene of many Town-wide events, such as the Pops and Jazz Concerts and the Winter Concerts. Furthermore, the safety of the stages as well as their versatility is important to those renting our facilities. The middle schools offer a full program of artistic events to their communities year round. The fact that many of our stages require significant repairs limits the kinds of productions we can offer the community and the teaching experiences we can offer our students.</p> <p>Funding will be allocated this year for an upgrade of seating at Sedgwick and sound/lighting upgrades at Conard/Hall.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Outdoor Pool Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$82,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$82,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	
 Description & Justification			
<p>The money for this project will be used to repair filtration systems, underground pipes and concrete decks where necessary. This is an ongoing program to address facility issues within our neighborhood pools.</p> <p>This project will allow for improvements at the Town's five outdoor pools and four spray decks. Funding under this program will assist the department in maintaining visitor safety as well as upgrading the appearance of the outdoor pools by completing minor projects not addressed through the operating budget.</p> <p>The outdoor pool season is a summer program of limited duration. This program will allow the Town to minimize down-time at the outdoor pools, thus assuring the community has use of their pools during the summer months.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Park & Playfield Improvements	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$125,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$125,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This is a cooperative program between the Town and the Board of Education to expand, upgrade and improve West Hartford's athletic fields. It is the intent of both the Town and schools to prioritize the major needs and attempt to address concerns as funding becomes available. Recommendations include a reorganization of certain fields, total reconstruction of poor fields, irrigation, regrading and re-seeding of designated fields.

West Hartford's parks and athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. The purpose of these improvements is to provide safe playing conditions so that interscholastic and youth league injuries can be minimized. In addition, the number of youths participating in community youth leagues has increased over the years. A long-term athletic field improvements program is needed to prevent further deterioration and to preserve these important community resources within Town parks.

Town of West Hartford Capital Improvement Program

Project Title		Park & Playscape Management	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$136,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$136,000
Project Duration	Recurring	Funding Source(s)	
		Capital Non-Recurring Expenditure Fund	
Description & Justification			
<p>Funds for this project will be used to repair and/or replace existing playscapes and playground equipment at Town parks. This is an ongoing program to address facility improvements. A priority list of playscape improvements will be updated yearly.</p> <p>The existing structures and equipment are ten to fifteen years old and are in need of significant maintenance and repair. The replacement of the existing equipment will provide for an accessible playground, improve safety and better serve the needs of the neighborhoods. The new equipment will conform to current standards for playground equipment.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Parks - Wolcott	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$300,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$300,000
Project Duration	Year 1 of 2	Funding Source(s)	Bonds
<p>Description & Justification Infrastructure improvements at Wolcott Park including an upgrade of the electrical system, which services a baseball field, two basketball courts, tennis courts, restroom facility, walkways and two parking lots. Renovations of the six tennis courts will address safety hazards.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Sitework – Recreational Facilities	
Department	Human & Leisure Services	Funding Schedule	
		Program Year:	\$50,000
Category	Parks & Recreation	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$50,000
Project Duration	Recurring	Funding Source(s)	Bonds
<p>Description & Justification This project will repair and repave parking lots at recreational facilities that are deemed in poor condition. The goal of the project is to improve safety and accessibility for the elderly and residents who are handicapped.</p>			

Town of West Hartford Capital Improvement Program

Project Title		Energy Conservation	
Department	Facilities Services	Funding Schedule	
		Program Year:	\$100,000
Category	Building Improvements	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$100,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

This project will fund energy conservation improvements to Town and school buildings as part of the Town's overall energy management strategy. Each year, capital improvements will be identified based upon recommendations of the Town's energy specialist that will reduce the consumption and cost of energy. Based upon a priority ranking and payback schedule, those improvements that will have the best return will be implemented. Improvements may include more efficient equipment, energy management control systems, financial incentive programs for improvements from the utility companies, implementing separate heating and cooling systems within buildings and taking advantage of new technologies.

Natural gas and electricity costs had stabilized over the past few years but will be increasing over time. Investments need to be made that reduce the consumption of energy to manage energy costs. This dedicated project for energy conservation improvements establishes these investments as a priority rather than competing with other building improvement projects and priorities.

Town of West Hartford Capital Improvement Program

Project Title		Town Building Improvements	
Department	Facilities Services	Funding Schedule	
		Program Year:	\$1,559,000
Category	Building Improvements	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$1,559,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

Town building improvements are facility needs not addressed under other capital projects and include the categories of heating, ventilation and cooling (HVAC) systems, roofing and masonry, interior finishes, fixtures and furnishings, and code compliance. This program allows for improvements to the Town's municipal buildings, such as completing minor projects and replacing equipment and building amenities, to maintain and upgrade the systems and appearance of the buildings.

Heating, Ventilation and Cooling (HVAC) Systems - HVAC systems provide heating, cooling and air circulation to users of buildings. Air temperature and indoor air quality are important issues to building occupants in regard to their personal comfort and health. The periodic replacement of boilers, furnaces, chillers, cooling towers, air handlers, and ventilation systems is required as these systems wear out and/or become obsolete. New HVAC systems also provide the Town an opportunity to install more energy efficient equipment and to install modern direct digital controls which provide greater control and will lower operating costs.

Roofing and Masonry - Proper maintenance of the exterior building shell is required to prevent water and air penetration into the building. Water damage can cause significant damage to a building and potential health hazards to building occupants. Air penetration causes heating and cooling losses and interferes with the proper operation of HVAC equipment and can lead to excessive wear and tear of the equipment and higher operating costs. Building roofs have a life span of approximately 20 to 25 years.

Interior Finishes, Fixtures and Furnishings - Interior finishes include wall, floor and ceiling surfaces; fixtures include restroom toilets, sinks, partitions, and kitchen sinks; and furnishings include appliances such as stoves, ovens, refrigerators, and water fountains, benches and other miscellaneous items that are permanently installed in buildings.

Code Compliance - Code compliance includes fire and life safety, handicap accessibility, elevator and public health codes in Town buildings. Codes periodically change or it is discovered that we are not in compliance with the code and we must make repairs, enhance systems or modify buildings to meet the requirements of the code.

Town of West Hartford Capital Improvement Program

Project Title		Communications Infrastructure	
Department	Information Technology Services	Funding Schedule	
		Program Year:	\$757,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$757,000
Project Duration	Recurring	Funding Source(s)	
		Bonds	\$500,000
		Capital Non-Recurring Expenditure Fund	\$257,000

Description & Justification

This project represents the continued investment in the organization's communications infrastructure supporting voice and data communication for town departments and the public schools. The maintenance of the infrastructure requires annual investments to replace obsolete hardware and software and enhancements are required to maintain the performance of the infrastructure to support the continued and expanded utilization of voice and data communications. This project also finances investments in hardware and software for all Town departments.

The communications infrastructure supports applications that utilize voice and data communication to improve organizational performance. Improved performance is the result of extending access to information throughout the organization making employees information independent in accessing resources to solve problems and provide customer service. The communications infrastructure supports applications that provide customers direct access to electronic services eliminating their dependencies on employees to receive customer service. Continued investment is required to maintain the infrastructure to support new applications and increased utilization while maintaining the security integrity of the infrastructure.

Town of West Hartford Capital Improvement Program

Project Title		Public Works Rolling Stock	
Department	Public Works	Funding Schedule	
		Program Year:	\$610,000
Category	Miscellaneous	Prior Year(s):	-
Fiscal Year	2018-2019	Total Cost:	\$610,000
Project Duration	Recurring	Funding Source(s)	Bonds

Description & Justification

The Department of Public Works utilizes a variety of rolling stock to perform a diverse array of community maintenance services. Equipment in good repair is critical to the productive use of the department's resources. The Town has developed a multi-year plan to replace rolling stock based upon the condition of existing inventory and expected useful life. Timely replacement of rolling stock contributes to the efficiency and effectiveness of community maintenance services provided by the staff of the Department of Public Works. Included in this funding is \$610,000 for the replacement of existing rolling stock.

Town of West Hartford Capital Improvement Program

Project Title		Recycling Center	
Department	Public Works	Funding Schedule	
		Program Year:	\$2,500,000
Category	Miscellaneous	Prior Year(s):	\$200,000
Fiscal Year	2018-2019	Total Cost:	\$2,700,000
Project Duration	Year 2 of 2	Funding Source(s)	Bonds

Description & Justification

The Recycling Center Modernization Project is envisioned to be a long-term solution to help the Town meet disposal and recycling needs for West Hartford well into the future. The project envisions wide-ranging improvements to the facilities located at 25 Brixton Street that will expand the green recycling program and recycling capabilities, and enhance the Center's capabilities by improving our on-site recycling facility with modern-day technology. A request for information (RFI) to parties interested in formulating a public/private partnership will be issued. The site is the former site of the Town's waste incinerator and associated ash landfill. The incinerator facility has been dormant since 1974. The compactor and transfer station operation have not been operational since 1990. The scale house and ash landfill have been used as a quasi-public organic volume reduction and composting operation since 1990. The organic management operation receives both commercial and municipal generated green waste such as woody vegetation, leaves, and other organic landscaping waste. The incinerator building is not operational and currently offers no or limited opportunity for re-use. The building poses a potential environmental and health risk to the town in its current condition.

**CAPITAL IMPROVEMENT
PROGRAM**

PROGRAM YEARS 4 – 6

The costs of the projects planned for program years 4–6 of the Capital Improvement Program (CIP) are aggregated rather than specified by project. The capital financing model computes funding amounts for each of the three years and the total of the three-year period is matched with projects. Individual projects are not presented for each of the three years as the determination of priorities and ability to plan are less certain in the 4–6 year period than in the first three years of the CIP. The presentation of projects for the entire three-year period allows flexibility and review of project priorities in determining which projects emerge from the 4–6 year period to create the new year 3 of the CIP.

PROGRAM YEARS 4 - 6

CAPITAL FINANCING MODEL FUNDING SUMMARY

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>Total</u>
Long-Term Debt Funding	\$11,790,000	\$11,788,000	\$12,095,000	\$35,673,000
CNRE Contribution	1,120,000	1,155,000	1,190,000	3,465,000
Grants/Other	<u>1,125,000</u>	<u>953,000</u>	<u>982,000</u>	<u>3,060,000</u>
TOTAL	\$14,035,000	\$13,896,000	\$14,267,000	\$42,198,000

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>Total</u>
Transportation & Circulation	\$5,572,000	\$5,763,000	\$5,857,000	\$17,192,000
Education	4,700,000	4,840,000	4,984,000	14,524,000
Parks & Recreation	774,000	380,000	436,000	1,590,000
Town Building Improvements	1,706,000	1,754,000	1,804,000	5,264,000
Miscellaneous Improvements	<u>1,283,000</u>	<u>1,159,000</u>	<u>1,186,000</u>	<u>3,628,000</u>
TOTAL	\$14,035,000	\$13,896,000	\$14,267,000	\$42,198,000

**CAPITAL IMPROVEMENT
PROGRAM**

CAPITAL FINANCING MODEL FUNDING SUMMARY
PROGRAM YEARS 2020 - 2022
(IN THOUSANDS)

	BONDS	CNRE	GRANTS/ OTHER	TOTAL
<u>TRANSPORTATION & CIRCULATION</u>				
Arterial Street Reconstruction	\$ 4,729	\$	\$	\$ 4,729
Neighborhood Street Reconstruction	5,174			5,174
Pedestrian & Bicycle Management	1,500			1,500
Storm Water Management	2,110			2,110
Street Resurfacing	3,007			3,007
Traffic System Management	<u>400</u>	<u>272</u>	—	<u>672</u>
Sub-Total	16,920	272	0	17,192
<u>EDUCATION</u>				
Asbestos Removal	525		225	750
Computer Infrastructure		1,050		1,050
Furniture & Equipment Replacement		525		525
Heating & Ventilation Systems	2,400			2,400
Exterior School Building Improvements	2,835		1,890	4,725
Interior School Building Improvements	2,979		745	3,724
Site & Athletic Field Improvements	750			750
Stage & Auditorium Renovations	<u>600</u>			<u>600</u>
Sub-Total	10,089	<u>1,575</u>	<u>2,860</u>	14,524
<u>PARKS & RECREATION</u>				
Outdoor Pool Improvements		258		258
Park & Playfield Improvements	500			500
Park & Playscape Management		432		432
Parks – Wolcott	200			200
Rockledge Improvements			50	50
Westmoor Park Improvements	<u>700</u>		<u>150</u>	<u>150</u>
Sub-Total	700	690	200	1,590
<u>TOWN BUILDING IMPROVEMENTS</u>				
Energy Conservation	300			300
Town Building Improvements	<u>4,964</u>	—	—	<u>4,964</u>
Sub-Total	5,264	0	0	5,264
<u>MISCELLANEOUS IMPROVEMENTS</u>				
Communications Infrastructure	1,500	928		2,428
Public Works Rolling Stock	<u>1,200</u>		—	<u>1,200</u>
Sub-Total	2,700	928	0	3,628
TOTAL CIP-PROGRAM YEARS 4 - 6	<u>\$35,673</u>	<u>\$3,465</u>	<u>\$3,060</u>	<u>\$42,198</u>

**CAPITAL IMPROVEMENT
PROGRAM**

TRANSPORTATION & CIRCULATION
PROGRAM YEARS 4 – 6
SUMMARY OF ALL PROJECTS
(IN THOUSANDS)

Transportation & Circulation	Bonds	CNRE	Total
Arterial Street Reconstruction	\$ 4,729	\$	\$ 4,729
Neighborhood Street Reconstruction	5,174		5,174
Pedestrian & Bicycle Management	1,500		1,500
Storm Water Management	2,110		2,110
Street Resurfacing	3,007		3,007
Traffic System Management	<u>400</u>	<u>272</u>	<u>672</u>
Total	\$16,920	\$ 272	\$17,192

**CAPITAL IMPROVEMENT
PROGRAM**

Transportation & Circulation
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Arterial Street Reconstruction

\$4,729

This Capital Improvement Program provides the funding necessary to address the construction needs of arterial/collector roadways. This program involves the following: coordination with utility companies to ensure underground facilities are not in need of repair or replacement; replacement of curbing; replacement of failing concrete or brick sidewalk; replacement of concrete or brick driveway aprons; replacement of drainage structures and pipes; re-establishment of the roadway base material; and roadway repaving.

Neighborhood Street Reconstruction

\$5,174

This Capital Improvement Program addresses the construction needs of the neighborhood streets or local roadways in the Town's 218 mile roadway network. Neighborhood street construction includes the replacement of existing curbing with granite curbing; the replacement of existing driveway aprons with concrete aprons; sidewalk and drainage structure replacement as necessary; re-establishment of the roadway base material; replacement of the road surface; and in some warranted cases, incorporation of traffic calming elements.

Pedestrian & Bicycle Management

\$1,500

This capital program addresses the needs of the pedestrians and bicyclists throughout the Town. The Town of West Hartford maintains an extensive system of 300 miles of sidewalks. These sidewalks provide a safety benefit to pedestrians in lieu of walking in the street.

In addition to the sidewalk system, the Town will continue to design and construct on and off street bicycling options across the Town.

**CAPITAL IMPROVEMENT
PROGRAM**

Transportation & Circulation
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Storm Water Management

\$2,110

This capital program maintains the complex Town-wide drainage system which includes 13 bridges, 73 culverts, 7,600 drainage structures, and 180 miles of pipe. The Town will utilize its comprehensive drainage system mapping to plan and budget necessary drainage improvements and ongoing maintenance. The Still Road Bridge needs rehabilitation and replacement due to flooding conditions and deterioration. The cost associated with the Still Road Bridge replacement is estimated at \$250,000.

This program also includes \$600,000 for a three year project to line the storm drainage under Farmington Avenue and LaSalle Road that is over 50 years old and over 20 feet deep to avoid disruptive open cut excavation repairs or replacements.

Street Resurfacing

\$3,007

Through the Capital Improvement Program, the Town strives to repave 10 or more miles of roadway each year. Due to the escalating cost of asphalt over the past five years, the Town has only been able to resurface an average of 7.4 miles during this period of time.

The Street Resurfacing Program includes: milling to partially remove the existing pavement; sweeping the roadway clean; and paving the roadway. In some cases, bituminous curbing and driveway aprons are also replaced. The Town also coordinates all work with the utility companies.

Traffic System Management

\$672

This Capital Improvement Program addresses the maintenance of the Town's 62 traffic signals, 1,200 traffic control signs, 30 miles of pavement markings, 2 miles of guiderail, and the Town's street lighting system. Proper maintenance of these traffic control devices greatly improves safety to the mobile public.

The goal of this program is to replace one traffic signal every other year and to replace all necessary pavement markings affected by the repaving program and replenish others throughout Town.

**CAPITAL IMPROVEMENT
PROGRAM**

EDUCATION
PROGRAM YEARS 4 – 6
SUMMARY OF ALL PROJECTS
(IN THOUSANDS)

Education	Bonds	CNRE	Grants	Total
Asbestos Removal	\$ 525	\$	\$ 225	\$ 750
Computer Infrastructure		1,050		1,050
Furniture & Equipment Replacement		525		525
Heating & Ventilation Systems	2,400			2,400
Exterior School Building Improvements	2,835		1,890	4,725
Interior School Building Improvements	2,979		745	3,724
Site & Athletic Field Improvements	750			750
Stage & Auditorium Renovations	<u>600</u>	<u> </u>	<u> </u>	<u>600</u>
Total	\$10,089	\$1,575	\$2,860	\$14,524

**CAPITAL IMPROVEMENT
PROGRAM**

Education
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Asbestos Removal

\$750

Asbestos Containing Material (ACM) has been found throughout the district in locations documented in the Board of Education's Asbestos Management Plan. The annual appropriation is used in concert with many other recurring projects, such as boiler replacement. Ideally, the removal precedes the designated recurring construction activity. These funds pay for asbestos removal project specifications, diagrams, actual removals, testing results and final reports. Inert asbestos containing material can be encapsulated rather than removed. Construction and/or renovation activities, however, often make inert materials friable and removal provides for safer, more predictable working conditions. Additionally, when asbestos containing materials are encountered on a work site, all activities must cease until the removal of the asbestos has been completed. Therefore, we are better able to project construction/renovation schedules and cost with the asbestos removed in advance.

Computer Infrastructure

\$1,050

All West Hartford Public Schools are connected to a fiber-optic metropolitan area network (MAN). The internal connections at each school consist of layer 2 switches and layer 3 routers to bring the network and internet resources to all offices and classrooms. West Hartford Public Schools have completed a district wide wireless project which will require ongoing maintenance and support over time. Servers, switches, telecommunications equipment and other appliances will require proactive replacement to improve mean time between failures and reduce mean time to recovery. Additionally, these funds are used to annually replace the oldest computers in the district for newer models capable of meeting the demands of current administrative and educational software.

The investment in educational and administrative computing is a critical element in allowing West Hartford Public Schools to remain competitive with our neighboring communities. In order to provide students with the skills necessary after graduation, technology education begins early in the elementary schools and continues throughout the educational process, ending with specific technology-based graduation requirements for high school students. This funding creates and maintains the overall infrastructure which makes that possible.

**CAPITAL IMPROVEMENT
PROGRAM**

Education
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Furniture and Equipment Replacement

\$525

The Furniture and Equipment Replacement program provides for the periodic replacement of furniture and equipment district-wide as inventory becomes worn out, unable to be repaired, or unsafe. There are five categories included in this replacement program: Classrooms and Laboratories, Administrative, Cafeteria, Equipment and Lockers. Furniture and equipment have been standardized throughout the district to streamline maintenance and repairs and so that items may be transferred between schools as needed. The majority of furniture and equipment inventory has been pushed well beyond its life span and have only sporadically replaced furniture and equipment in the past few years. Much of the older furniture is not ergonomically correct for students, teachers and staff who spend much of their time in sedentary positions often working on computers. There is a need to fund this program continuously in order to keep our furniture and equipment inventory current.

Heating and Ventilation Systems

\$2,400

This program provides for the replacement of existing boilers and ventilation systems, some of which have performed well beyond their useful life. Replacement boilers are typically more energy efficient and include a greater amount of programmable auxiliary controls. New ventilation systems bring additional fresh air into the classrooms. Good preventive maintenance practice dictates that major building components be repaired or replaced, if necessary, before problems arise. Few component of a building are as essential as a dependable boiler. Boiler failures can cause major problems to the educational process as well as unanticipated major expense during the middle of a fiscal year.

**CAPITAL IMPROVEMENT
PROGRAM**

Education
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Exterior School Building Improvements

\$4,725

With 16 buildings of varying age exterior school improvements are an annual requirement. Exterior school improvements may include roofing, masonry, window upgrades and exterior door replacement, as well as other structural improvements. Re-roofing includes removal of existing materials and in many cases, insulating with thicker, denser materials to provide for increased energy conservation. It also includes the installation of necessary flashings, counter flashings, drainage improvements and related masonry repairs. A systematic re-roofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset. Masonry includes restoration and re-pointing of building facades. Window upgrades replace single pane windows with energy efficient window systems.

Interior School Building Improvements

\$3,724

School building improvements are facility needs that are not specifically outlined as a separate capital project. These expenditures include replacement of fire alarm systems, handicap accessibility improvements, lighting system upgrades, HVAC control system replacements, and building and fire code related improvements. The school system has 11 elementary schools, 3 middle schools, and 2 high schools that together comprise more than 1.75 million square feet of facilities. These facilities require regular investment to maintain their existing infrastructures and upgrade their systems.

Site and Athletic Field Improvements

\$750

The school fields and site infrastructure have experienced significant wear and tear. Most of these facilities were originally constructed more than fifty years ago. Funding is used to upgrade facilities to ensure their continued usefulness.

West Hartford's athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. Much of the site infrastructure is also in need of replacement. The purpose of these improvements is to provide safe playing and pedestrian conditions. A long-term athletic field and site infrastructure improvements program is needed to prevent further deterioration and to preserve these important community resources.

**CAPITAL IMPROVEMENT
PROGRAM**

Education
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Stage and Auditorium Renovations

\$600

Every school facility in West Hartford has an auditorium and all but Smith School have a type of traditional stage. Many of the stage components and systems have outlived their useful life and are either non-functional or have been made inoperable due to safety concerns. Furthermore, many stages have lighting panels which require updating by code.

The West Hartford Public Schools curriculum has been distinguished by its emphasis on excellence in academics, athletics and the arts. Theater, acting and stagecraft are all part of the curriculum. Our auditoria are the scene of many Town-wide events, such as the Pops and Jazz Concerts and the Winter Concerts. Furthermore, the safety of the stages as well as their versatility is important to those renting our facilities. The middle schools offer a full program of artistic events to their communities year round. The fact that many of our stages require significant repairs limits the kinds of productions we can offer the community and the teaching experiences we can offer our students.

**CAPITAL IMPROVEMENT
PROGRAM**

PARKS & RECREATION
PROGRAM YEARS 4 – 6
SUMMARY OF ALL PROJECTS
(IN THOUSANDS)

Parks & Recreation	Bonds	CNRE	Other	Total
Outdoor Pool Improvements	\$	\$ 258	\$	\$258
Park & Playfield Improvements	500			500
Park & Playscape Management		432		432
Parks – Wolcott	200			200
Rockledge Improvements			50	50
Westmoor Park Improvements	—	—	<u>150</u>	<u>150</u>
Total	\$ 700	\$ 690	\$ 200	\$1,590

**CAPITAL IMPROVEMENT
PROGRAM**

Parks & Recreation
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Outdoor Pool Improvements

\$258

These funds will be used to repair filtration systems, underground pipes and concrete decks where necessary. This is an ongoing program to address facility issues within our neighborhood pools. This project will allow for improvements at the Town's five outdoor pools and four spray decks. Funding under this program will assist the department in maintaining visitor safety as well as upgrading the appearance of the outdoor pools by completing minor projects not addressed through the operating budget. The outdoor pool season is a twelve-week summer program. This program will allow us to minimize down-time at the outdoor pools, thus assuring the community has use of their pools during the summer months.

Park & Playfield Improvements

\$500

This is a cooperative program between the Town and the Board of Education to expand, upgrade and improve West Hartford's athletic fields. It is the intent of both the Town and schools to prioritize the major needs and attempt to address concerns as funding becomes available. Recommendations include a reorganization of certain fields, total reconstruction of poor fields, irrigation, regrading and re-seeding of designated fields.

West Hartford's parks and athletic fields have been intensively used to a point where facilities have become inadequate or are beginning to show signs of deterioration. The purpose of these improvements is to provide safe playing conditions so that interscholastic and youth league injuries can be minimized. In addition, the number of youths participating in community youth leagues has increased over the years. A long-term athletic field improvements program is needed to prevent further deterioration and to preserve these important community resources within Town parks.

**CAPITAL IMPROVEMENT
PROGRAM**

Parks & Recreation
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Park & Playscape Management

\$432

Funds for this project will be used to repair and/or replace existing playscapes and playground equipment at Town parks. As various structures and equipment age, they are in need of significant maintenance and repair. The replacement of the existing equipment will provide for an accessible playground, improve safety and better serve the needs of the neighborhoods. The new equipment will conform to current standards for playground equipment. The money funded for this project will also be used to replace various signs, maintain and repave sidewalks, paint bituminous tennis courts and hard surface areas, and replace fencing where necessary. This program will assist the department in maintaining visitor safety as well as upgrading the appearance of the parks by completing minor projects not addressed through operating budgets.

Parks - Wolcott

\$200

Infrastructure improvements to address deteriorating conditions in the pavilion building, which houses restrooms and a concession area. The building originally dates from the mid-1970s and underwent a renovation approximately thirteen years ago.

Rockledge Improvements

\$50

This project will address the renovation of greens or other golf course upgrades at Rockledge Golf Club based upon condition and need. It will be funded via the capital projects user fee included in the rates at Rockledge.

Westmoor Park Improvements

\$150

This project will fund design and construction of an outdoor classroom pavilion. An outdoor pavilion would host school groups, community youth organizations, and ecology education classes to enhance the programming offered at Westmoor Park.

**CAPITAL IMPROVEMENT
PROGRAM**

TOWN BUILDING IMPROVEMENTS
PROGRAM YEARS 4 – 6
SUMMARY OF ALL PROJECTS
(IN THOUSANDS)

Town Building Improvements	Bonds	Total
Energy Conservation	\$ 300	\$ 300
Town Building Improvements	<u>4,964</u>	<u>4,964</u>
Total	\$5,264	\$5,264

**CAPITAL IMPROVEMENT
PROGRAM**

Town Building Improvements
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Energy Conservation

\$300

This project will fund energy conservation improvements to Town and School buildings as part of the Town's overall energy management strategy. Each year, capital improvements will be identified based upon recommendations of the Town's Energy Specialist that will reduce the consumption and cost of energy. Based upon a priority ranking and payback schedule, those improvements that will have the best return will be implemented. Improvements may include more efficient equipment, energy management control systems, financial incentive programs for improvements from the utility companies, implementing separate heating and cooling systems within buildings and taking advantage of new technologies.

Natural gas and electricity costs had stabilized over the past few years but are now increasing. Investments need to be made that reduce the consumption of energy to manage energy costs. This dedicated project for energy conservation improvements establishes these investments as a priority rather than competing with other building improvement projects and priorities.

Town Building Improvements

\$4,964

This program provides for the general capital maintenance of Town facilities. Improvements to be undertaken include replacement of interior finishes, completion of minor carpentry work, replacement of building equipment, repair of building fixtures, replacement of building roofs and other exterior surfaces, and other minor projects of an on-going nature. This program allows for minor improvements to municipal buildings. Funding assists in maintaining and upgrading the appearance of buildings by completing minor projects and scheduled replacement of equipment and building structures and for smaller repairs and improvements. Also included are improvements to facilities that are recommended by EPA and DEEP guidelines.

**CAPITAL IMPROVEMENT
PROGRAM**

MISCELLANEOUS IMPROVEMENTS
PROGRAM YEARS 4 – 6
SUMMARY OF ALL PROJECTS
(IN THOUSANDS)

Miscellaneous Improvements	Bonds	CNRE	Total
Communications Infrastructure	\$1,500	\$ 928	\$2,428
Public Works Rolling Stock	<u>1,200</u>	<u> </u>	<u>1,200</u>
Total	\$2,700	\$ 928	\$3,628

**CAPITAL IMPROVEMENT
PROGRAM**

Miscellaneous Improvements
Years 4-6 CIP Summary
Fiscal Years 2020-2022
(In Thousands)

Communications Infrastructure

\$2,428

This project represents the continued investment in the organization's communication infrastructure supporting voice and data communications for the town departments and the public schools. Annual funding provides the necessary investment in hardware and software to maintain and enhance this critical infrastructure. The Town's new fiber optic metropolitan area network (MAN) will require an annual maintenance contract in order to provide proactive maintenance and repair should damage occur. Continued enhancements to our infrastructure are included in this project.

Public Works Rolling Stock

\$1,200

The Department of Public Works utilizes a variety of rolling stock to perform a diverse array of community maintenance services. Equipment in good repair is critical to the productive use of the department's resources. The Town has developed a multi-year plan to replace rolling stock based upon the condition of existing inventory and expected useful life. Timely replacement of rolling stock contributes to the efficiency and effectiveness of community maintenance services provided by the staff of the Department of Public Works.

**CAPITAL IMPROVEMENT
PROGRAM**

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**CAPITAL IMPROVEMENT
PROGRAM**

PROGRAM YEARS 7 – 12

The 7–12 year period of the Capital Improvement Program allocates funding for each year by project category rather than individual project. The capital financing model produces the funding amounts available each year and these amounts are then allocated by category. Project descriptions are more generalized and include identification of all potential projects that could emerge. The projects do not tie to the annual funding amounts allocated for each project category. This recognizes that it is difficult to plan and establish priorities for a period of 7–12 years from today.

YEARS 7-12 CIP SUMMARY BY FINANCING

	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Total</u>
Long-Term Debt Funding	\$13,568,000	\$12,515,000	\$14,036,000	\$13,308,000	\$13,547,000	\$15,036,000	\$82,010,000
CNRE Contribution	1,227,000	1,342,000	1,382,000	1,424,000	1,451,000	1,530,000	8,356,000
School Grants	<u>1,051,000</u>	<u>1,080,000</u>	<u>1,120,000</u>	<u>1,140,000</u>	<u>1,190,000</u>	<u>1,230,000</u>	<u>6,811,000</u>
TOTAL	\$15,846,000	\$14,937,000	\$16,538,000	\$15,872,000	\$16,188,000	\$17,796,000	\$97,177,000

YEARS 7-12 CIP SUMMARY BY PLANNING CATEGORY

	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>Total</u>
Transportation & Circulation	\$5,606,000	\$5,960,000	\$5,919,000	\$6,283,000	\$6,252,000	\$6,634,000	\$36,654,000
Education	5,128,000	5,325,000	5,525,000	5,725,000	5,975,000	6,225,000	33,903,000
Parks & Recreation	643,000	501,000	1,859,000	542,000	550,000	584,000	4,679,000
Town Building Improvements	1,855,000	1,908,000	1,962,000	2,018,000	2,076,000	2,135,000	11,954,000
Miscellaneous Improvements	<u>2,614,000</u>	<u>1,243,000</u>	<u>1,273,000</u>	<u>1,304,000</u>	<u>1,335,000</u>	<u>2,218,000</u>	<u>9,987,000</u>
Total Adopted CIP Years 7-12	\$15,846,000	\$14,937,000	\$16,538,000	\$15,872,000	\$16,188,000	\$17,796,000	\$97,177,000

**CAPITAL IMPROVEMENT
PROGRAM**

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**CAPITAL IMPROVEMENT
PROGRAM**

TRANSPORTATION & CIRCULATION

Inventory of Public Infrastructure

217	Miles of Roads
13	Bridges
73	Culverts
300	Miles of Sidewalks
135	Miles of Storm Drainage Pipes
7,600	Storm Drains
8.5	Miles of Water Courses on Town Property
1,406	Stop Signs
490	Crosswalks
61	Traffic Signals

One of the largest project categories in the CIP is comprised of projects that improve and refurbish the public infrastructure of roads, bridges, sidewalks, curbing, drainage, and traffic control. This CIP category consists primarily of recurring projects that fund renovation and improvements to this infrastructure. The Town maintains an extensive public infrastructure.

Maintenance of the Town's public infrastructure is considered a priority that supports the long-range public policy of maintaining and improving the attractiveness of the Town. The attractiveness of the Town is considered essential in retaining and attracting residents and encouraging investment in the private infrastructure of the community.

**CAPITAL IMPROVEMENT
PROGRAM**

STREET IMPROVEMENTS

West Hartford has an extensive roadway network. The Town ranks twelfth highest in the State for the number of miles of roadway that are locally maintained. The street network is classified by the function of the individual streets. Arterial and collector streets carry heavy, often intertown traffic and include all of the Town's major streets. Local streets primarily serve residential neighborhoods. West Hartford has very few highway miles maintained by the State of Connecticut compared to other communities. While statewide 18% of local roads are maintained by the State of Connecticut, in West Hartford only 6.7% of the roads are maintained by the State.

STREET IMPROVEMENTS

Inventory of Streets

<u>Street Category</u>	<u>Miles</u>
Arterial Streets	39
Collector Streets	20
Local Streets	<u>158</u>
TOTAL	217

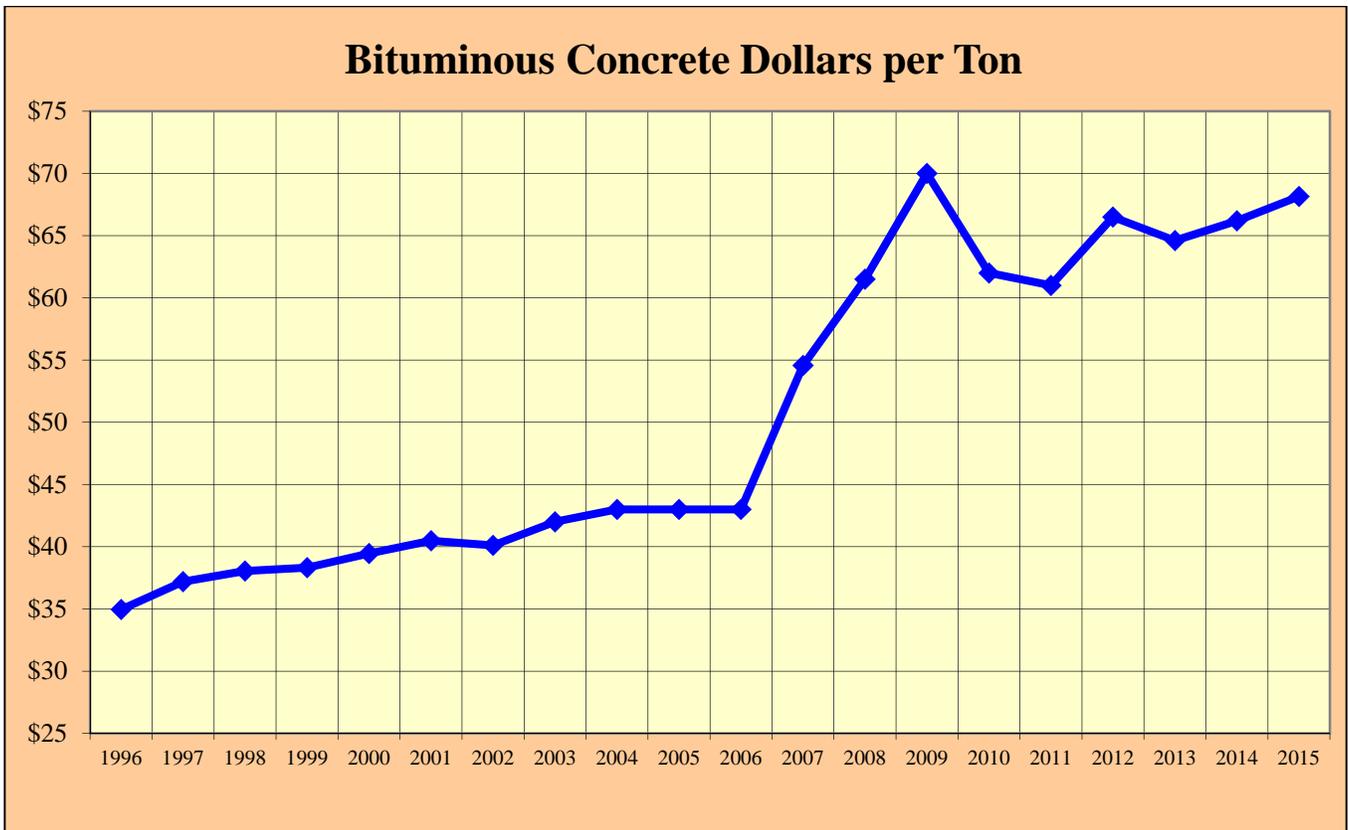
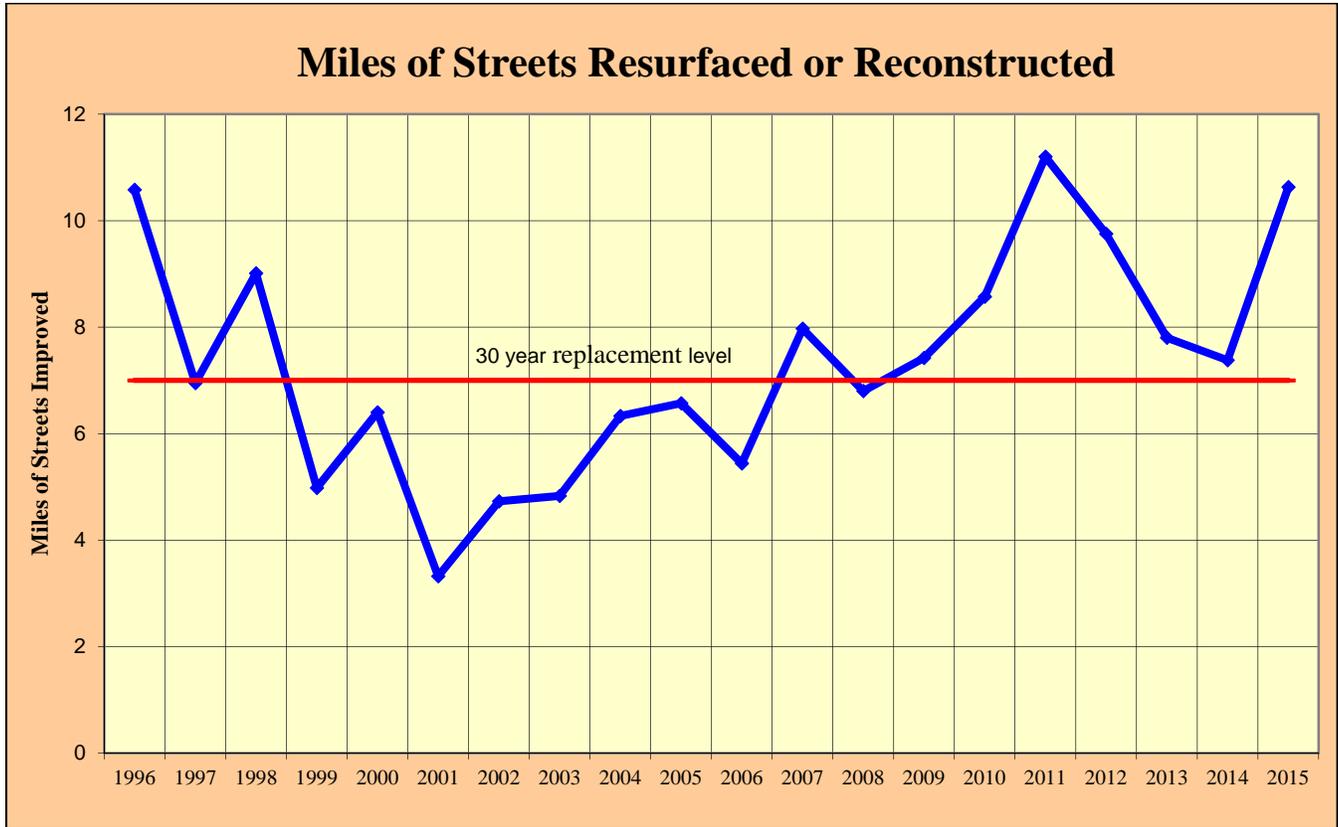
Note: These figures represent linear miles of streets. Some streets have multiple lanes and require a larger investment than the mileage would suggest. In addition, there are 17 miles of State highways and 15 miles of private roads in West Hartford.

Capital Investment Strategy:

Funding is allocated every year in the CIP for the rehabilitation and resurfacing of streets. In order to extend the life of the existing street infrastructure various maintenance strategies are employed. Regular maintenance is provided by the Department of Public Works, which fills potholes and repaves small sections of streets. Street resurfacing is undertaken on streets where the existing pavement structure is in poor condition. The expected life of resurfaced roadway varies widely depending upon the condition of the underlying road, but generally lasts between 15 and 20 years. Streets that are deteriorated, in need of storm drainage or curbing replacement, or cannot sustain an additional resurfacing undergo some degree of rehabilitation. A rehabilitated street can generally last between 20 and 30 years. These life spans vary widely depending upon the amount of traffic the street carries and the number of utility cuts the street experiences over its life span. It is the goal of the street program to treat approximately 12 miles of streets with some form of improvement each year. However, rising oil prices and budget constraints make it difficult to rehabilitate 12 miles of roadway every year.

The CIP provides funding each year for the rehabilitation of arterial and collector streets. Arterial and collector streets are more heavily traveled than residential streets. This program may also include catch basin replacement, storm drainage improvements, curb and driveway apron replacement, fixing of the roadway base, paving, and pavement markings.

**CAPITAL IMPROVEMENT
PROGRAM**



**CAPITAL IMPROVEMENT
PROGRAM**

Periodically the Town will receive funding from the State and Federal government for improvements to arterial and collector streets. These projects are financed by the State with the Town appropriating the required matching contribution. The only cost reflected in the Town's CIP would be the required matching contribution. These projects are competitively awarded among Connecticut municipalities and the available funding varies from year to year. Since 1976 the total amount of State and Federally funded improvements is approximately \$41,550,000.

Summary of State & Federally Funded Projects

<u>Project</u>	<u>Cost</u>	<u>Length of Street Improved in Miles</u>
South Main Street	\$1,000,000	1.1
Boulevard Bridge @ Trout Brook Drive	750,000	0.1
Farmington Ave. @ Trout Brook Drive	500,000	0.1
South Street	1,300,000	0.6
Fern Street	1,700,000	1.1
Mountain Road	1,500,000	0.5
Newington Road	2,300,000	0.9
Trout Brook Drive	3,000,000	1.7
Trout Brook Drive	1,800,000	0.9
Talcott Road	1,700,000	0.6
Park Road	5,000,000	0.9
New Park Avenue	500,000	0.5
Farmington Avenue (West of Center)	3,600,000	1.2
Farmington Avenue (Prospect to Whiting Lane)	3,300,000	0.5
New Britain Ave Reconstruction	9,000,000	0.7
Park Road at Interstate 84 Interchange (FY 2017)	<u>4,600,000</u>	<u>0.3</u>
TOTAL	\$41,550,000	11.7

The CIP provides funding each year for improvements to neighborhood streets. This project includes catch basin replacement and storm drainage improvements, if necessary, curb and driveway apron replacement, fixing of the roadway base, paving and pavement markings. Improvements to neighborhood streets are viewed as important in stimulating private investment in properties and maintaining the attractiveness and quality of the Town's neighborhoods.

The CIP provides funding each year to resurface residential streets. This includes the replacement of catch basins and two inch milling and repaving. Often streets are milled, which removes part of the pavement, prior to resurfacing. Resurfacing is done on streets with a poor pavement condition, but have good base material and curbing. Streets are selected for resurfacing through a priority system which identifies the streets with the poorest surface conditions. The annual appropriation historically provides for the resurfacing of eight miles of streets depending upon what other work is necessary to complete the resurfacing. Resurfacing extends the life of a street and delays the need for reconstruction.

**CAPITAL IMPROVEMENT
PROGRAM**

Pavement Markings

The CIP provides funding for the installation and replacement of epoxy paint pavement markings and is supplemented with operating budget funding every year. Pavement markings include the double yellow lines, stop bars, crosswalks, arrows, edge lines, parking stalls, handicap stencils, lane lines, bicycle stencils and slow school markings.

Pavement markings are used primarily on heavily traveled streets and newly paved streets. The center lines on arterial streets painted with epoxy pavement markings have a life expectancy of 10 years. Crosswalks, on the other hand, will last only a few years. The life of most pavement marking is a function of traffic volume and resurfacing.

BRIDGE & CULVERTS

Inventory of Bridges & Culverts

	<u>Number</u>	<u>Estimated Value</u>
Bridges	13	\$6,500,000
Culverts	73	\$23,200,000

Note: There are also 50 State and 17 private bridges and culverts in West Hartford. The 50 State bridges include 3 new bridges: the Flatbush Avenue Bridge over CT Fastrak, the CT Fastrak Bridge over Trout Brook, and a CT Fastrak Bridge over New Britain Avenue.

Capital Investment Strategy:

The CIP includes annual funding for the rehabilitation of bridges and culverts. This provides for the periodic assessment of conditions and some contracted maintenance such as painting and repairs to concrete and culverts. The periodic assessment of the conditions of bridges may result in new CIP projects being identified to repair specific bridges. The project scope of major bridge and culvert projects include the removal of spalls and declamation; cleaning, reinforcing, injection grouting and painting of the concrete; and installation of a V-shaped lining.

There are five structures currently being monitored by the Town and slated for improvement:

1. North Main Street bridge
2. Braeburn Road culvert over Trout Brook
3. Sedgwick Road Bridge over Rockledge Brook
4. Still Road over Tumbledown Brook
5. Fern Street over Trout Brook at Fernridge Park
6. Mountain Road culvert over Wood Pond Brook
7. Sedgwick Road culvert over Rockledge Brook

**CAPITAL IMPROVEMENT
PROGRAM**

TRAFFIC SIGNALS

Inventory of Traffic Signals

Traffic Signals 61

Capital Investment Strategy:

In the past 7 years, 45 of the Town's traffic signals were completely replaced. A new traffic signal costs about \$200,000 per installation. Traffic signal enhancements are funded through the CIP biennially.

CIP funding is used to renovate the signals, which includes new vehicular and pedestrian signal heads, video detectors and other equipment. Periodic maintenance is required to refurbish and replace old parts or upgrade existing electronics. These funds have also been used for electronic speed control signs in school zones.

SIDEWALKS

Inventory of Sidewalks

Sidewalk Miles 300

Capital Investment Strategy:

Sidewalk replacement is funded annually in the CIP. The funds are used to replace or restore individual slabs in need of maintenance. The vast majority of the system is concrete but there are some bituminous and a few slate walks. The Town receives about 300 sidewalk complaints each year. Those slabs that are determined to be the most dangerous tripping hazard are given priority. Annual funding provides for the replacement of approximately 1 mile of sidewalks.

Sidewalks deteriorate creating trip and fall accidents. Each year, sidewalks are prioritized for replacement based on safety and pedestrian traffic volume. Existing slabs are removed, a processed stone base is installed; and a new concrete slab is poured in place.

**CAPITAL IMPROVEMENT
PROGRAM**

STORM DRAINAGE

Inventory of Storm Drainage

Catch Basins	7,600
Miles of Pipe	135

Capital Investment Strategy:

The CIP provides funding each year for improvements to the storm drainage system. The funding is used for small repairs in response to flooding complaints, minor improvements and occasionally a major storm drainage improvement. West Hartford's storm drainage system is effective and meets most design standards. Despite this, periodic flooding occurs with high intensity storms. As with all infrastructure projects, the Town seeks funding from alternate sources whenever possible. Major improvements to the storm drainage system have been accomplished with Federal flood prevention funds and Federal highway funds. Projects would not likely be affordable to the Town without these alternate sources of funds.

The existing appropriation outlined in the CIP meets our short term repair, maintenance and minor upgrade needs of the Town's storm sewer system. Significant change to the storm drainage system is not planned and funding, if needed, would be sought from alternate sources when available.

The funding is also used in anticipation of road reconstruction projects when roads scheduled for improvements have major storm drainage system problems. The improvements to the storm drainage system are prioritized based upon (1) elimination of flooding of property owners; (2) elimination of icing and water build up problems; and, (3) improving system capacity.

The Town will continue a program of video inspection of storm drainage that are suspected to be deficient in order to help identify problems and potential solutions to address them.

**CAPITAL IMPROVEMENT
PROGRAM**

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**CAPITAL IMPROVEMENT
PROGRAM**

EDUCATION

Improvements to school buildings are driven by enrollment trends and the age of school buildings. There has been significant investment in the public schools over the past decade, but buildings of this age require constant reinvestment to improve energy efficiency and maintain infrastructure.

Facility needs are divided into three components: (1) recurring needs, (2) program enhancements, and (3) space needs. Recurring needs encompass building maintenance needs such as reroofing, boiler replacement and code requirements. Program enhancements include enhancements to technology systems, accessibility improvements, furniture and equipment replacements, playscape improvements, building security improvements, athletic field upgrades, and ventilation and air conditioning upgrades. Space needs include school specific renovations and additions.

Recurring needs are driven by aging building systems that require annual investments. Programmatic enhancements are driven by changing educational program needs and the goal to provide the best, most up to date, and safest educational environment possible. Space needs are driven by enrollment trends and changing space allocations at all levels. Recent trends indicate a decline in enrollment over the time period of the CIP, so space needs will no longer be a driver in the CIP.

**CAPITAL IMPROVEMENT
PROGRAM**

SCHOOL CIP PLANNING ASSUMPTIONS

The following assumptions were developed by the school administration and approved by the Board of Education to guide capital investment in their facilities:

1. We will maintain our commitment to neighborhood schools.
2. Changing demographics will result in a greater need for intervention programs, which will increase our needs for space.
3. We will continue to extend both the length of the school day and school year, (full-day kindergarten, homework centers, Summer Academy) based upon the needs of our students, which will place additional demands on our school facilities.
4. Class size is a significant variable in our planning.
5. We are committed to maintaining stability in the location of our Town-wide special education programs.
6. We are committed to supporting our middle school programs with adequate space.
7. There will be a dedicated space for music and art.
8. There will be adequate office and administrative space for each school.
9. There will be adequate space for specialty areas (QUEST, ELL, Early Intervention, Parent Centers, and Resource Rooms for At-Risk Learners.)
10. We will advance the technology infrastructure program in each school.
11. Each school will have an adequate internal communications system.
12. Each school will be at least partially handicapped accessible.
13. Each cafeteria will hold one-third of the student body.
14. Each auditorium will hold one-half the student body.
15. Elementary outdoor play equipment will be adequate, safe and developmentally appropriate.
16. Secondary level athletic fields will be enhanced and maintained.
17. Schools will be upgraded for roofs, lighting, windows, flooring, heat and air conditioning.
18. All schools will have safe roadways, walks and traffic patterns.
19. All schools will pursue energy conservation improvements at every opportunity.

**CAPITAL IMPROVEMENT
PROGRAM**

BUILDING INVENTORY

The eleven elementary schools, three middle schools, and two high schools comprise approximately 1,772,500 square feet of facilities on 320 acres of land.

Inventory of School Buildings

<u>School</u>	<u>Square Feet</u>	<u>Year Built</u>	<u>Recent Rehab</u>
Aiken	58,760	1964	2003
Braeburn	56,984	1956	2003
Bugbee	57,586	1950	
Charter Oak	59,541	1929	1976
Duffy	78,969	1952	
Morley	61,593	1927	1976
Norfeldt	61,486	1957	2000
Smith	58,831	1955	1995
Webster Hill	70,092	1949	1999
Whiting Lane	96,817	1954	1997
Wolcott	73,850	1957	2003
Bristow	103,900	2005	
King Philip	196,257	1955	
Sedgwick	179,850	1931	2004
Conard	278,874	1957	1998
Hall	<u>279,027</u>	1970	1999
TOTAL	1,772,417		

**CAPITAL IMPROVEMENT
PROGRAM**

ENROLLMENT

Enrollment growth resulted in the need to develop additional space at existing schools in prior Capital Improvement Programs. Over the past 20 years we have added instructional space at all elementary schools except Charter Oak and Morley, all middle schools including the construction of a new middle school – Bristow, and at both high schools. These space additions were in response to enrollment that grew from 8,030 K-12 students on 10/1/1992 to a peak of 10,091 K-12 students on 10/1/2010.

The fiscal year 2015 CIP included the construction of a new Charter Oak International Academy with the new school opening in the Fall of 2016. The new building will significantly expand the number of openings for magnet students at Charter Oak and help improve racial balance throughout the district.

Enrollment projections for the next six years are calculated every November. These enrollment projections use the historical enrollment trends that result from analysis of the changes in enrollment from October 1 of each school year to the next. Enrollment projections are made both for the district as a whole as well as for each individual school.

The latest enrollment projections as of November 2015 start on page 137. These projections indicate total K-12 enrollment will decline from 9,483 students on 10/1/15 to under 8,000 by 10/1/25. The declining enrollments mean there are no high priority needs for school space.

**CAPITAL IMPROVEMENT
PROGRAM**

I. SCHOOL RECURRING NEEDS – BUILDING INFRASTRUCTURE

Investments are undertaken to maintain the existing structures and building systems, address code compliance and safety issues, and improve the energy efficiency and performance of facilities.

Recurring Need Categories

Asbestos Removal
Heating and Ventilation Systems
Exterior School Building Improvements
 Roofing and Masonry
 Window Replacement
Interior School Building Improvements
Site and Athletic Field Improvements

Asbestos Removal

The CIP includes an annual appropriation for asbestos removal. All asbestos containing materials have been surveyed and identified to the best of our ability. There is no friable or dangerous asbestos in any of our schools. When the material becomes friable, it must be removed or contained as soon as possible. Generally, this appropriation is used in advance of another construction project to ensure that the work site is free of asbestos. Often an asbestos abatement project is connected with a heating system replacement, but asbestos can be found throughout the school building. The complete removal of asbestos from the schools is a very long term goal. This is a program that will require a continuous long term investment as most flooring systems contain asbestos.

Boiler Replacements and HVAC Improvements

Over the past decade significant improvements have been made in school heating, ventilation and air-conditioning systems (HVAC). As school heating systems were approaching the end of their useful life, the town began a systematic replacement program beginning in the late 1980's including Braeburn, Bugbee, Duffy, Morley, Webster Hill, Whiting Lane and Wolcott Elementary Schools. More recent boiler replacements have occurred at Aiken, Norfeldt, Sedgwick and Hall. Planned boiler replacements include Smith Elementary School and King Philip Middle School. The main chiller plant at Conard was replaced in 2011 and the main chiller plant at Hall was replaced in 2015.

Several schools are either partially or fully air-conditioned. Both high schools are completely air-conditioned as are the three middle schools and Smith School. The main chiller plants at Conard and Hall were replaced in 2011 and 2015, respectively. The new Charter Oak International Academy will be fully air-conditioned. The remaining nine elementary schools have limited air-conditioning in the library/media centers, school offices, nurse's offices and some selected classrooms to meet student medical needs. Currently, this is accomplished primarily through small localized systems or window units. However, as all schools are used to a greater extent for summer programs, there is a growing need for air-conditioning in classrooms.

School renovations generally include a significant investment in ventilation systems. The building code requires that a certain number of square feet of fresh air be brought into the classroom each hour.

CAPITAL IMPROVEMENT PROGRAM

Schools that have been substantially renovated generally have been upgraded to meet the current air quality standards. The ventilation standards are substantially met in the two high schools, Sedgwick and Bristow Middle Schools, Aiken, Braeburn, the new Charter Oak, Smith, Webster Hill, Whiting Lane and Wolcott Elementary Schools.

Funding is allocated every year in the CIP for the replacement of boilers and HVAC systems. The replacement of these systems will ensure that boiler operation continues without failure. At the same time, the goal of utilizing the full useful life of a capital investment balances against the need to secure continuous and effective operation of the heating systems during the winter months. Some of the replacement needs can be deferred in the short term, but cannot be avoided for very long. A careful evaluation of each system as its replacement approaches will give us the ability to craft the best solution for that system. Our long term goal is to replace boiler systems at the end of their useful life and to upgrade the heating distribution system and control systems when possible. Substantial renovation projects generally include the replacement of the existing pneumatic control systems with digital systems that are tied into a central computer in the Plant Services office. The replacement of boilers and heat distribution and control systems generally result in significant energy cost savings and reduce the cost of maintenance.

Exterior School Building Improvements

The schools have an ongoing roofing replacement program funded with an annual appropriation. The cost of a roof replacement can vary widely depending upon the conditions found at the site. Generally, re-roofing costs between \$18 and \$23 per square foot. There is approximately 1,800,000 square feet of roofing on our school buildings. The replacement of the entire system at a \$21 per square foot cost would be \$37,800,000. A roof should last 25-30 years. Replacing the whole system every 25 years at \$21 a square foot, we should be spending \$1,500,000 annually on roof replacement. The life of a roof can be extended with good maintenance. During substantial renovation some re-roofing is usually accomplished. Conard included the replacement of a small area, and Hall's roofing was partially replaced in 1994. Braeburn roof was replaced in 1996, Charter Oak was replaced in 1999 and Duffy was replaced in 2001-2002. Webster Hill was replaced in the summer of 2003. Hall and Smith were partially re-roofed in 2004. Conard was partially re-roofed in 2005. Whiting Lane received a new roof in 2006, Wolcott School in 2007-2008, Norfeldt in 2009-2010 and Aiken in 2011. The majority of Conard was re-roofed in 2012 and 2013, King Philip's roof replacement began in 2015 and is expected to take two additional summers. Re-roofing projects often include, for an additional cost, the repair or replacement of parapet walls, hatches, skylights, roof drains and in most cases asbestos abatement.

Window replacement projects are funded within the CIP. The replacement of windows is both an energy efficiency investment and an improvement to classroom comfort. Most of the schools have the original single glazed windows that create a cold wall within the classrooms. This not only adds to heating costs, but also causes differential heating within the room, making them uncomfortable. Both Charter Oak School and Morley School replaced their original double hung windows in 1999 through the capital budget. Conard High School windows had been a problem for many years with both heating concerns in the winter and solar gain in the summer. The entire window wall system was replaced in the 1998 renovation. The windows at Braeburn School were replaced in the summer of 2004. The window wall system at Wolcott School was replaced in the summer of 2007. The window replacement program will continue, as funding is available.

**CAPITAL IMPROVEMENT
PROGRAM**

Interior School Building Improvements

This large category is utilized to address building and fire code updates, general appearance improvements such as painting and flooring replacements and programmatic needs. In the recent past, the work has concentrated on fire protection systems including alarms, detection, sprinklers and emergency lighting. More recent projects have focused on painting, flooring replacement and classroom improvements. While several schools have seen significant reinvestment in the past few years, others are still in need of renovation.

Site and Athletic Field Improvements

In 1997, the Town completed a study for twelve park and school athletic fields. The result of the study was that the Town and schools pooled their funding for joint improvements to these facilities. The renovations of Conard and Hall High fields were completed at a cost of \$1.4 million. Additional funding will be targeted to areas most in need and where we can get the most for our money. The school sites with large fields that serve both school and Town functions are likely near term candidates. Besides athletic fields, many school sites have parking lots, tennis courts, playgrounds, sidewalks and drainage systems that are also in need of renovation.

Stage & Auditorium Renovations

This category is devoted to addressing the needs of our stages and auditoriums. Projects include replacement of lighting and sound systems in our auditoriums as well as replacement or refurbishment of seating in auditoriums. Many of these projects replace equipment and seats that have been in place since the construction of the schools.

**CAPITAL IMPROVEMENT
PROGRAM**

PROGRAMMATIC ENHANCEMENTS

SCHOOL BUILDING EQUIPMENT AND TECHNOLOGY

Computer Infrastructure

It is a stated goal of the Board of Education to install technology wiring, servers and computers to all classrooms, offices and libraries in the school system. The schools have made substantial investment to wire their facilities for computer technology and provide the computer systems to meet program needs and the wiring framework for technology has been completed at all schools. In addition, installation of wireless access points and associated networking hardware and cabling to provide controlled access to wireless in all schools was completed in fiscal year 2013.

Furniture and Equipment Replacement

There is a continuing need to replace furniture and equipment as it wears out. Furniture is comprised of an estimated 10,000 student desks throughout the system and equipment includes items from gym equipment to lawn maintenance equipment and rolling stock. Each new classroom generally includes \$3,500 to \$5,000 in new furniture. In addition, this account provides the replacement of lockers in the schools as they wear out.

West Hartford Public School District

Agenda Item: Multi-Year Enrollment Projections
Meeting Date: November 17, 2015
From: Chip Ward, Director of Finance and Planning
Through: Tom Moore, Superintendent

Background:

This report presents the multi-year enrollment projections for the district. Mr. Ward will be available to answer questions.

Overall Summary:

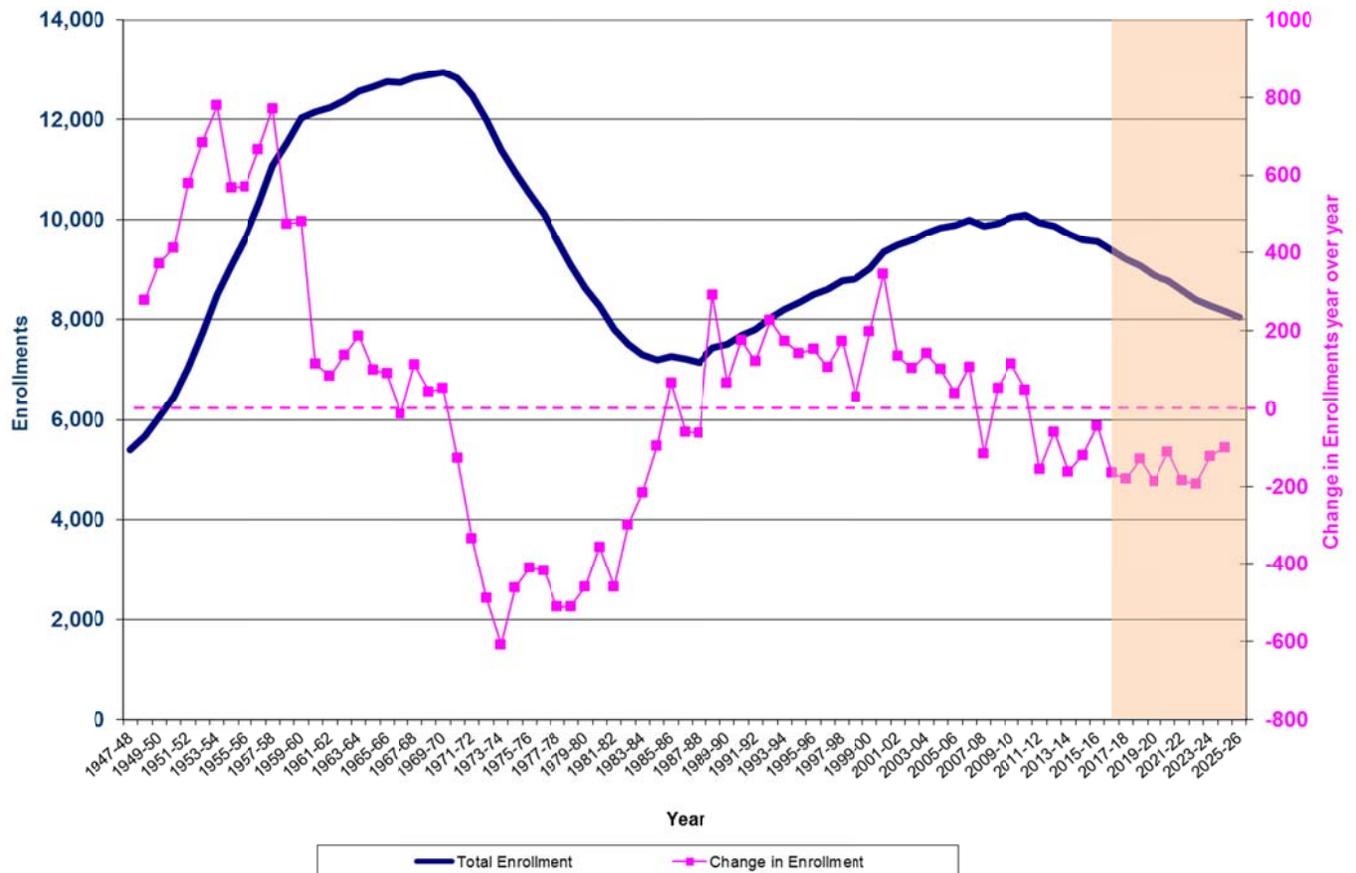
We continue to project a long term decline in the overall enrollment in West Hartford Public Schools. This year, on October 1, 2015, we had 9,483 K-12 students enrolled in West Hartford Public Schools. Next year, on October 1, 2016, we are projecting a total of 9,319 – a decline of 164 students. Thereafter, the enrollment is expected to gradually decline to 7,988 students in 10 years’ time. The trend comes from a decline in the number births in West Hartford since 2001, the declining trend statewide in K-12 enrollments, and the impact of the smaller number of Kindergarten students we saw in 2014-15 and 2015-16. We are projecting an average decline of 150 students per year for the next 10 years. We have adequate space at all school levels throughout the forecast period.

It is important to review these recent enrollment trends in a larger historical context. The chart at the top of the next page shows the trend in total enrollment in West Hartford Public Schools since the 1947-48 school year. The impact of the Baby Boom is evident in both the steep increases in enrollments in the 1950’s and the precipitous decreases in enrollments in the 1970’s. From 1947-48 to 1959-60 enrollment climbed from 5,402 to 12,038 – averaging an increase of 575 students per year. From 1970-71 to 1983-84, enrollment declined from 12,826 students to 7,283 – averaging a decrease of 425 students per year. The Baby Boom lasted 25 years from trough to trough.

The Baby Boom Echo is clearly evident in the 40 years from 1988-89 to the end of the projection period in 2025-26. Enrollment grew from 7,439 from 1988-89 to a peak of 10,091 in 2010-11 – averaging an increase of 120 students per year. Enrollment is projected to decline to 8,052 in 2025-26 – representing an average decrease of 135 students per year. Sometime around 2030-31 the Baby Boom Echo will end – lasting 40-45 years from trough to trough. Then the Baby Boom Echo Echo will begin – likely lasting a total of 70 years to the start of the 22nd century. I will not be there to report on the accuracy of that prediction.

Agenda Item:
X. B. 1.

WHPS Enrollments and Yearly Changes in Enrollments Over Time



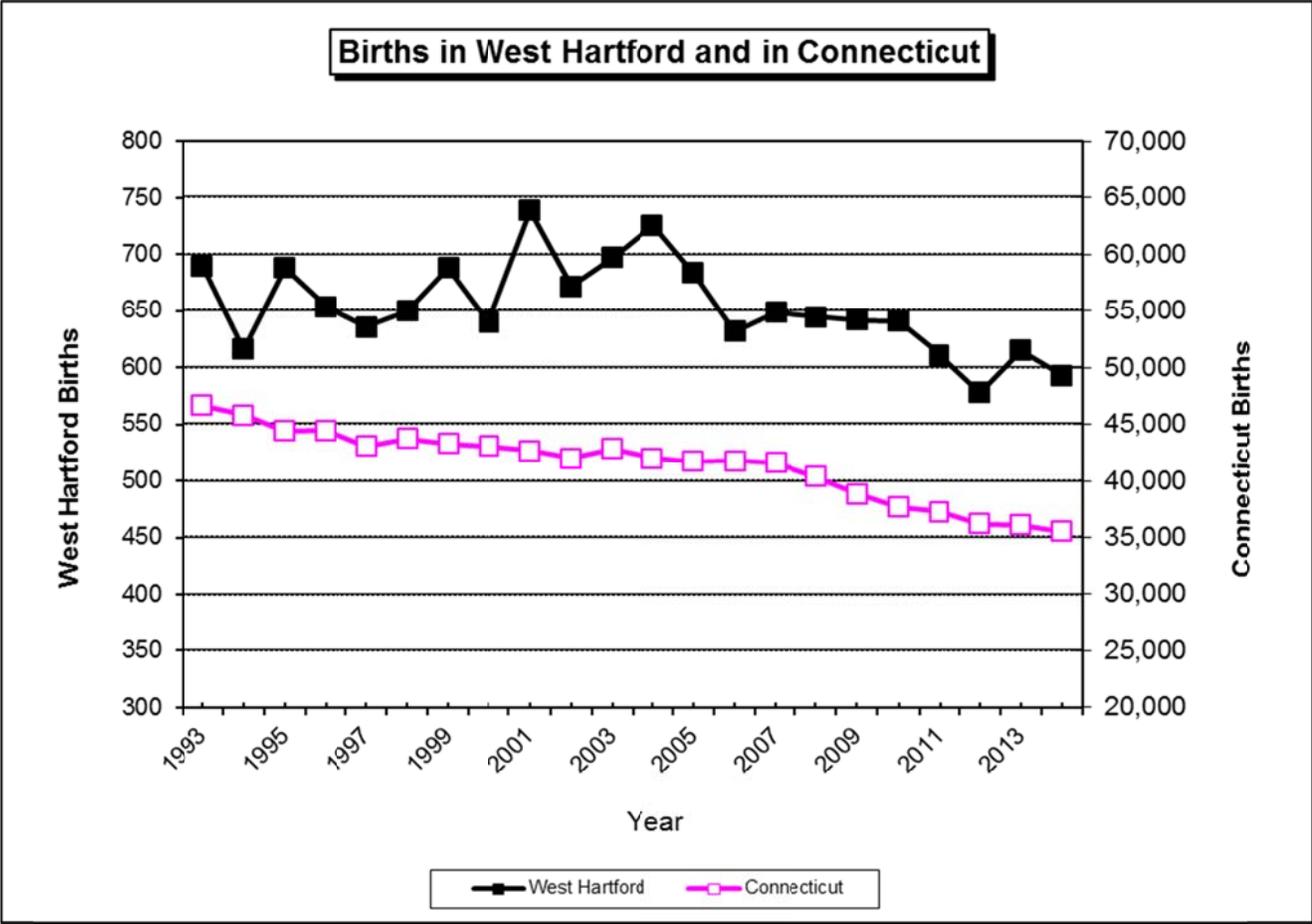
Multi-year Enrollment Projections:

Enrollment projections serve as the guidepost for staffing and capital allocations in the school district. Long-term enrollment projections are made once a year, soon after the October 1 enrollments have been tallied. This section of the report will discuss the enrollment projections and methodology and highlight the implications of the latest set of enrollment projections for the capital budgets.

The enrollment projections are based on the cohort-survival methodology. In this methodology, we follow a cohort of students as they move through the school system from birth to kindergarten to middle school to high school. We analyze the historical data to determine the specific cohort-survival ratios. The cohort-survival ratio is the ratio of the number of students at a grade level in one year to the number of students in the previous grade level the prior year. The single ratio encompasses a vast array of social and demographic factors - families moving to West Hartford for the schools, families making the decision to send their students to private school, families leaving West Hartford for economic or career reasons, and the turnover in the real estate market with older residents

leaving and younger families moving in. The historical cohort-survival ratios, when combined with the birth rates and the current enrollment profile, allow us to project enrollments a number of years into the future.

There are limitations to the reliability and accuracy of the cohort-survival methodology. It is most accurate in the short term and for the calculating the district’s enrollment as a whole. As the forecast period becomes greater and the purview of the forecast becomes smaller (e.g. for a school and not the whole district), the accuracy and reliability decrease.



The chart above shows the trends over the last 20 years in the number of births in West Hartford and the number of births in the state of Connecticut. Total births in the state peaked at approximately 50,000 in 1990 and have declined slowly and steadily over the last 23 years to approximately 35,500 in 2015. Over that same period West Hartford has experienced a significantly different trend with an increase in the number of births from 600 in 1990 to 739 in 2001 and 726 in 2004 (this year’s sixth grade – the last grade with an elementary enrollment over 800 students). While West Hartford’s birth rate has started to decline in recent years, West Hartford continues to maintain a growing share of births in Connecticut. In 1990, West Hartford accounted for 1.06% of the state’s births. In 2001 West Hartford’s share grew to 1.73%. In 2014, West Hartford’s share of births remained at 1.67% of the state total.

It is important to note that trends reflected in the birth rates do not show up until 5 years later when those children enroll in the elementary schools. The big boom in birth rates in 2001 hit the district's kindergartens in 2006 when we had 788 students in K. Six years ago with 726 births in 2004 we had 787 students in Kindergarten.

As was the case last year, the Kindergarten enrollment figures this year were significantly different from prior years. There were 641 births in West Hartford in 2010, but we only saw 590 resident Kindergarten students this year. For analysis purposes we calculate a Birth to K cohort survival ratio (BK-CSR). This is the ratio of the number of Kindergarteners on October 1 of a school year, divided by the number of births five years previously. We have tracked this data for 27 years from October 1 1989 through October 1, 2015. Excluding the last two years, the BK-CSR has ranged from 1.0016 to 1.1662 and averaged 1.0803. Last year the BK-CSR was 0.9143 and this year the BK-CSR was 0.9204. Both of these figures are 3.5 standard deviations below the average – which translates to about 2 in 10,000 odds of occurring due to chance.

We have been reviewing possible causes for the drop in Kindergarten but have found no obvious reason. The table below shows the complete Kindergarten enrollment data for the last 3 years.

Kindergarten Enrollments by School Type

	2013	2014	2015
Births (5 yrs prev)	645	642	641
WHPS –K Students	673	587	590
Other Public - K Students	45	44	31
Private – K Students	47	58	TBD
Total – K Students	765	689	
% of K in WHPS	88%	85%	86% -88%

Births have been relatively constant. Kindergarten enrollment in other public schools (primarily CREC and Hartford) has declined. Kindergarten enrollment in private schools went up slightly last year. We will get Kindergarten enrollment in private schools in March of 2016 – but it has never been higher than 70 students – and that was in a year with 100 more births in the cohort. We are still enrolling 85% to 88% of the available Kindergarten students in WHPS – there simply is just a smaller of available Kindergarten students.

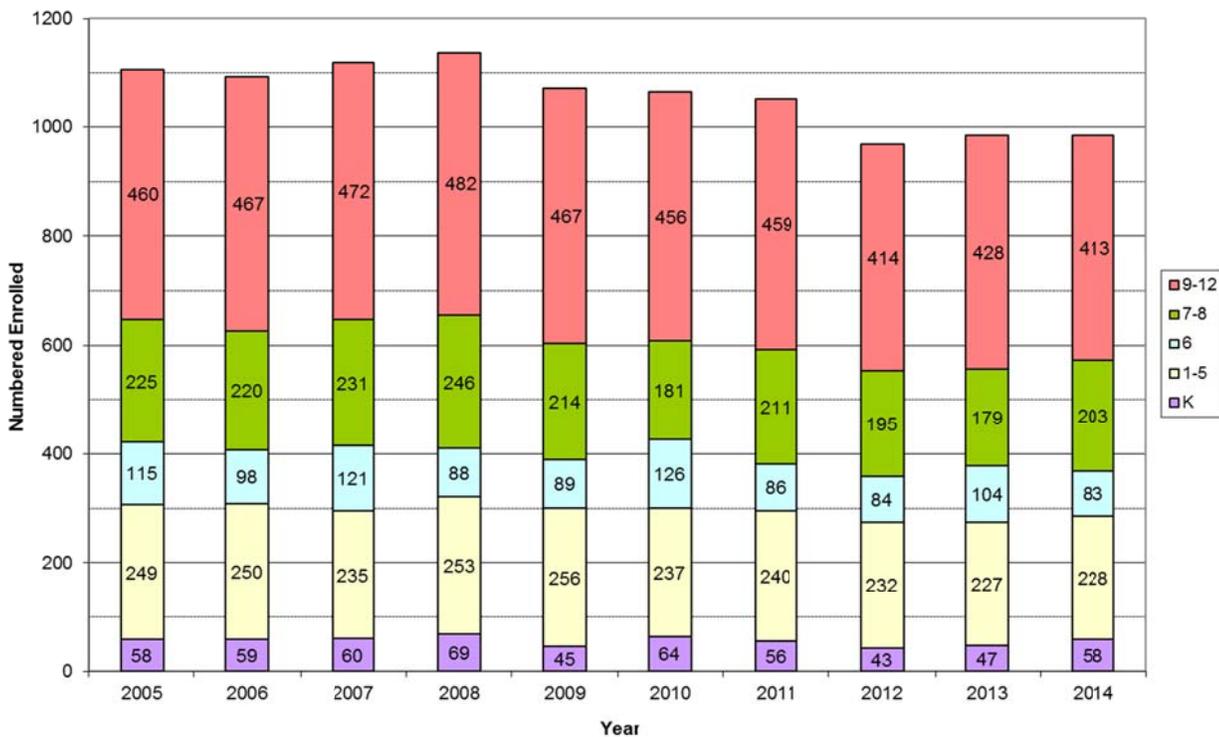
For future projections we average the three most recent year's BK-CSR's and are using a value of 0.959. This is the lowest it has ever been. This lower BK-CSR combines with generally lower birth rates to result in a steady decline in the number of entering Kindergarteners. We had 587 entering resident Kindergarten students last year, 590 this year and are projecting about 570 entering resident Kindergarten students for future years.

With the birth rates established, the most critical assumptions in the 2015 enrollment projections are the assumed future cohort-survival ratios (CSR). Figure 1 shows the actual average of all the individual grade K to grade 12 cohort-survival ratios from 2005 to 2015 and includes the base projection for the six-year enrollment projections. Figure 1

demonstrates that there has been some variability in the average cohort-survival ratio. The average CSR was at its highest in the last 10 years at a little over 1.01 in 2005. Since 2010, the average CSR has been slowly declining ever since. It dropped in 2014 to average of 0.9940 and rebounded in 2015 to 0.9988. We saw higher CSR's across all grade levels in 2015 compared to 2014. For the base enrollment projections we use the most recent 3-year CSR average (0.9970) as the key assumption for calculating future enrollments. This is the second time the overall average CSR used for enrollment projections is less than 1.0.

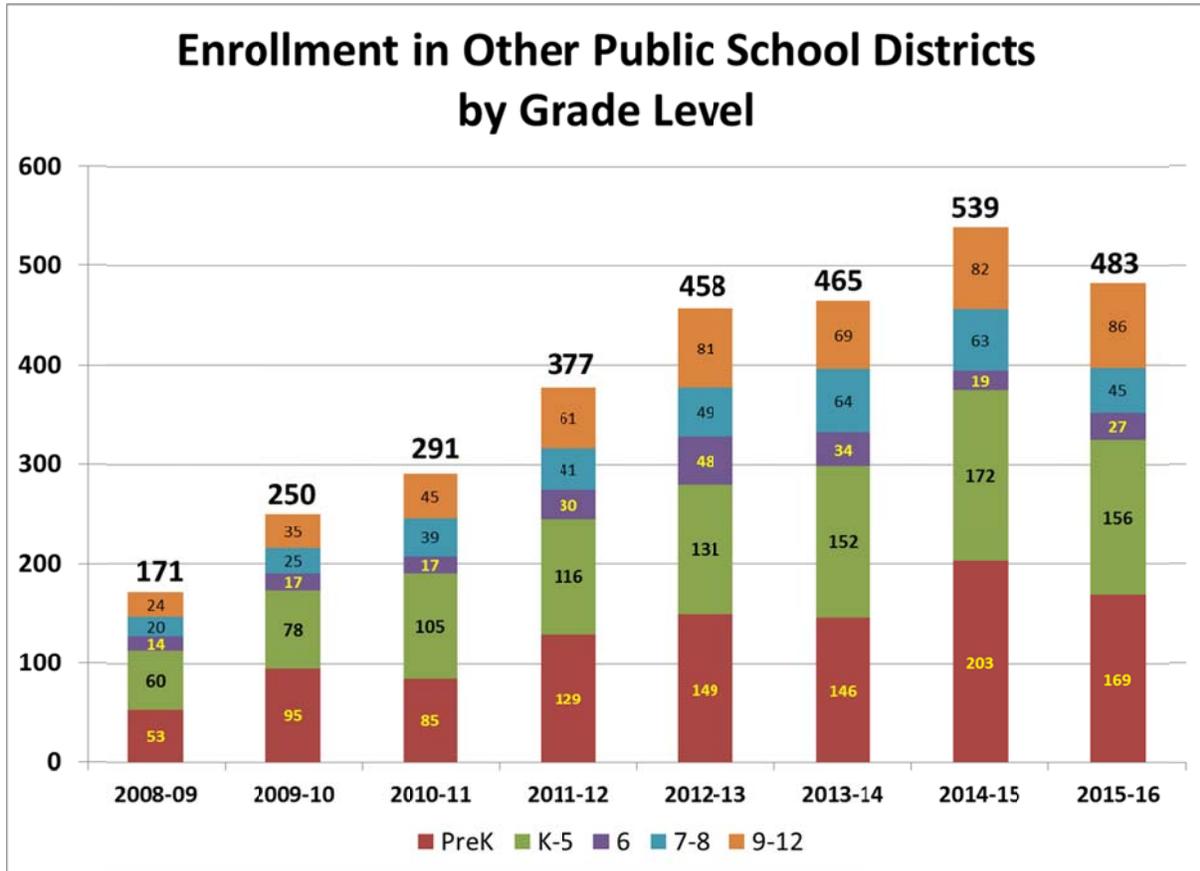
We carefully track private school enrollments to determine the relative attractiveness of the public and private school systems among parents. The chart below highlights the increasing competitiveness of West Hartford Public Schools with respect to private schools. Private school enrollment peaked at around 1300 students in 1998. From that peak through 2014 (the latest data available), private school enrollment declined by about 300 students (mostly at the elementary and middle levels). Over that same period public school enrollment grew by 700 students. Our schools continue to remain an attractive option for all parents.

Private School Enrollment



The other choice that West Hartford residents have is to attend magnet schools that are run by CREC or other local school districts. The chart on the next page shows the trend over the last eight years in PreK-12 enrollment in regular education public schools not located in West Hartford. It looks like enrollment in other public schools peaked last year at 539. For 2015-16 total enrollment in other public schools dropped by 56 students to 483 students. Most of that dropped occurred in the PreK and K-5 grade levels. With respect to where these students enroll, in 2015-16 approximately 55% of these PreK-12

students are enrolled in Hartford Public Schools, 31% in CREC Interdistrict magnets and about 11% in Bloomfield Public Schools.



CSR's have declined in recent years and we are using an average CSR of just slightly under 1.0 for future projections. Each year we will have slightly fewer students in each cohort. These factors – decline in in each cohort, a leveling of the birth rate and a decline in more recent years, and high school senior classes equal in size to or greater than incoming Kindergarten grades - means we will see the school population decline over the next 10 years.

Figure 2 shows the historical and assumed cohort-survival ratios (CSR's) for each of the four key grade groupings: Birth to Grade K, Grade 1 through Grade 5, Grade 6, and Grade 7 through Grade 12.

The birth-to-grade K CSR in the past has been significantly above 1.00 reflecting the fact that West Hartford is a town where historically we get a significant fraction of students whose parents move into town after their children are born in order to enroll them in school here. Now, for two years in a row, the birth-to-grade K CSR has been significantly below 1, strongly indicating that the movement patterns of pre-school age children has changed. The CSR observed in 2014 dropped significantly to 0.9143 and rose only slightly to 0.9204 in 2015. For the enrollment projections we are using a three-year average of

0.9594 meaning we are expecting 4.0% fewer Kindergartners than births five years ago. Last year we used 1.010 as the long term CSR.

The grade 1 to 5 CSR continues to remain consistently above 1.00 indicating that each cohort of students grows as they pass through the elementary years – reflecting the trend of families with elementary aged children moving to West Hartford for the schools. The 2015 average CSR for this group of students was 1.016. The base projected CSR for these grade levels is the simple three-year average of the most recent CSR's (1.011).

The Grade 6 CSR has historically been the lowest CSR for any grade level (typically at or below 0.98) as this is a natural breaking point for more affluent families to send their children to private/parochial school. This is also when many private/parochial schools have additional space and capacity for students. While in 2013 the grade 6 CSR was the lowest it had ever been – 0.887, it rebounded to 0.956 in 2014, and then dropped slightly to 0.949 in 2015. The future CSR is simply the three year average of the most current CSR's (0.931). This implies our grade 6 enrollments will be 6.9% below the previous year's grade 5 enrollments.

The average grade 7 to 12 CSR has varied mostly between 0.99 and 1.01 for the last 5 years, and 2014 was an above average year with a CSR of 1.006. This average is really a compilation of many different factors at the different grade levels. The CSR's for grade 7 and 8 dropped slightly to 1.001 in 2015 from 1.003 in 2014. The grade 9 CSR, which partly measures the net return of students to the high schools from private and parochial middle schools, was a normal value of 1.051. Grade 10 to 12 CSR's increased to 0.995 in 2015 from 0.980 in 2014. Using a three-year average, the average projected CSR for grade 7 to 12 is 1.003.

Figure 3 presents the 10-year enrollment projection for the elementary, middle and high schools. These projections show the elementary population peaked at approximately 4,680 students in 2009-10 and 2010-11. We are right now in the middle of a steady decline in the elementary population which is projected to stabilize at around 3,700 beginning in 2019-20. The combined middle school enrollments will stay near 2,200 until the smaller elementary grades hit in 2017-18 and then decline towards 1,750 in the out years. The high school population is projected to fluctuate between 2,900 and 3,000 students through 2020-21 and then is projected to start a decline.

Figure 4 presents a comparison of the projected 10-year district enrollments that have been made over the last 6 years. Enrollment projections from November 2010 through November 2012 were generally very similar with enrollments declining and 2019-20 enrollments generally in the 9,400 to 9,600 range. With the lower births seen beginning in 2012 and the low CSR in grade K in 2014 and 2015, this year's enrollment projections show only 8,800 students in 2019-20 and just 8,000 students in 2025-26 school year.

While the overall district projections are the most accurate, the most relevant projections for policy makers are the building by building projections.

Elementary School Forecasts:

The tables and charts at the end of this report provide the enrollment and space needs projection for each elementary school. Because of the inherent difficulty in projecting the enrollment for a single elementary building, the projections for years 4 through 6 need to be viewed as more speculative.

The total space needs include the space needs for regular education classrooms, art, vocal music, and any town-wide special education programs housed in the building. The notes at the bottom of the table detail the specific number of classrooms used for art, music and special education.

To calculate the number of regular education classrooms needed, a maximum class size of 23 was used for K-3 and 27 was used for grade 4 and 5. At Charter Oak and Smith, the maximum class sizes were 22 for K-3 and 23 for 4 and 5.

Charter Oak will open as a magnet school in the 2016-17 school year and for the purposes of the enrollment projection, we assume that Charter Oak will fill to the targeted 80 students per grade in grade K and 1 in that first year. Then over the next four years as that grade 1 cohort moves through the school, the K-5 student population will grow to 480 students by 2020-21. In addition, though not shown in this projection, we assume 80 PreK students from 2016-17 onward are enrolled at Charter Oak. The magnet students coming to Charter Oak are assumed to come from the other elementary school zones in their current proportions.

Long term, elementary enrollments are projected to decline as the lower birth rates (after 2004) result in fewer elementary students. With that longer term decline in elementary enrollments and the expansion of Charter Oak, enrollments at the other 10 elementary schools will drop. Three schools, Morley, Webster Hill and Whiting Lane, are projected to have enrollments under 250 students in the out-years. Space needs at all elementary schools will be adequate with current facilities. Many schools have multiple classrooms projected to be free.

Middle School Forecasts:

The tables for Bristow, King Philip, and Sedgwick are presented in a similar format as for the elementary schools - both population and space needs. The two middle school districts each comprise about one-half of the district's population rather than 1/11 at the elementary level. Bristow's enrollments will be totally controlled by lottery. As a consequence, there is a greater level of certainty in the out-year projections at the middle school level.

The middle school enrollments are projected to be relatively stable in total over the next couple of years. King Philip's population will peak at 957 students in 2016-17 and then decline gradually to fewer than 700 students by 2021-22. Sedgwick's population will decline steadily to under 800 students by the 2020-21 school year.

There is adequate space at all middle schools throughout the forecast period.

High School Forecasts:

Conard's enrollment will stay near 1,500 students for next year and gradually decline to near 1,400 students in 2021-22. Hall's enrollments will stay near 1,500 students throughout the forecast period. The enrollment projections for both schools are in line the building capacities throughout the forecast period.

Implications of Building Enrollment Forecasts on the Capital Budget:

Based on this year's enrollment projections which project a long-term decline in the future enrollments, we have adequate space overall at all school levels in the short and long term. No significant capital investment for space purposes is projected.

Figure 1:
Average Cohort Survival Ratio
History and Projections

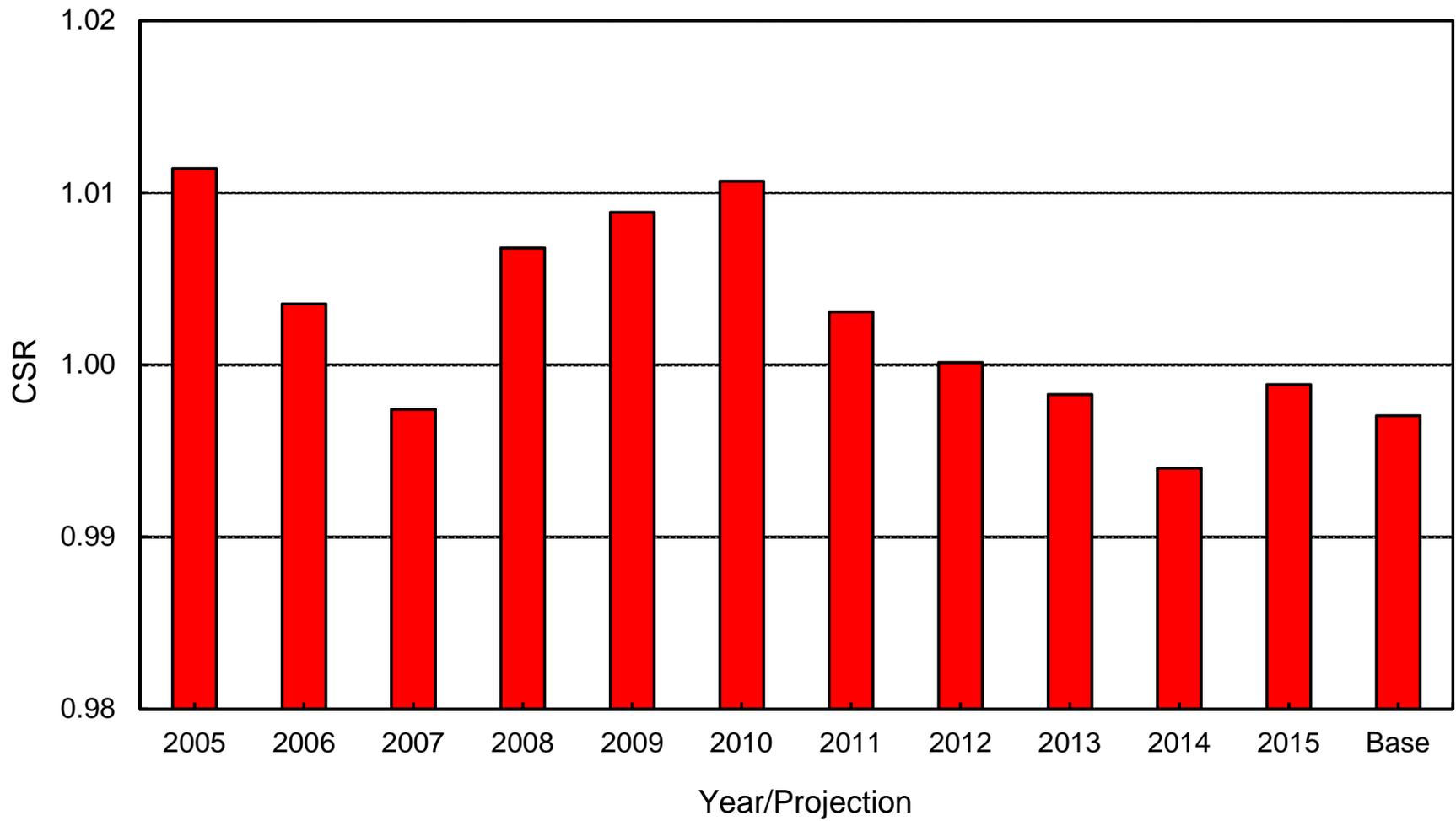


Figure 2:

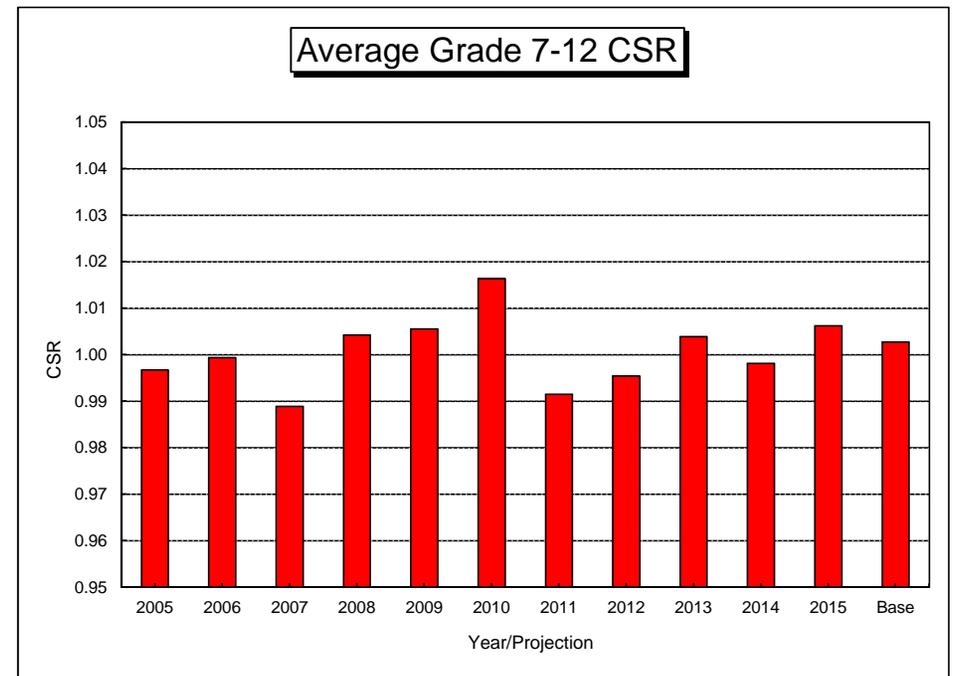
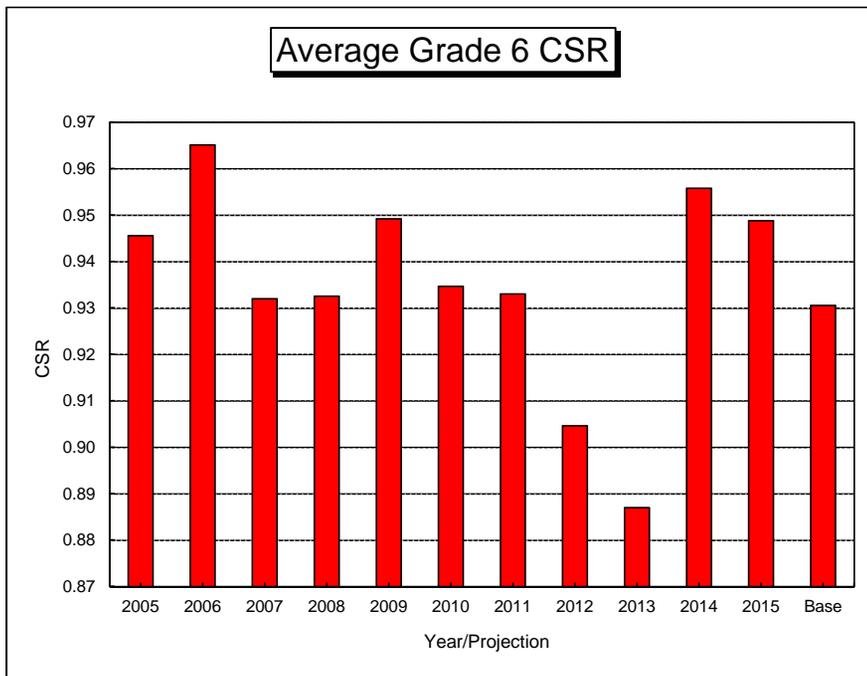
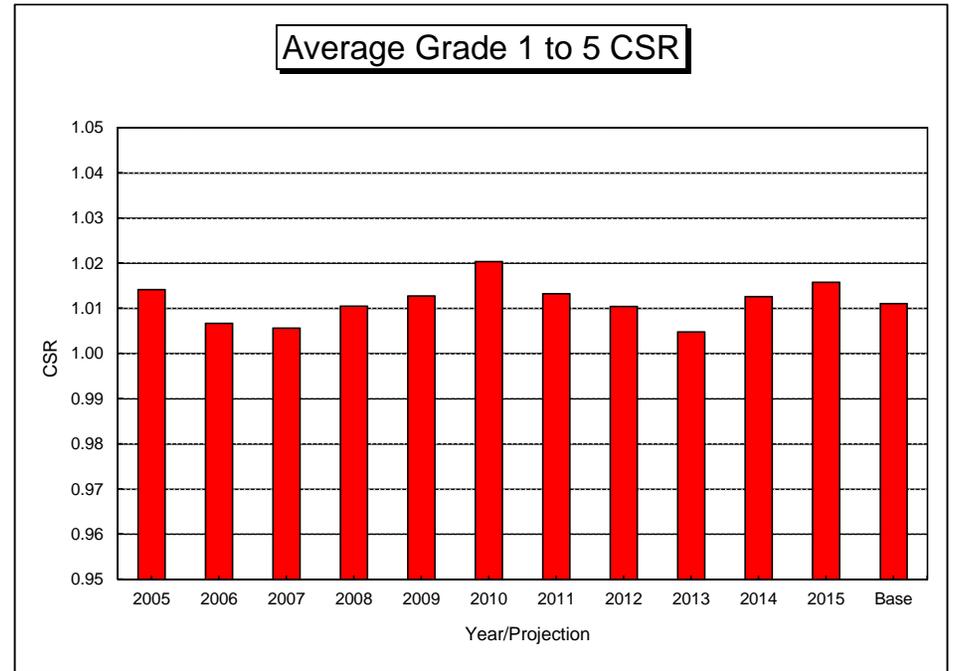
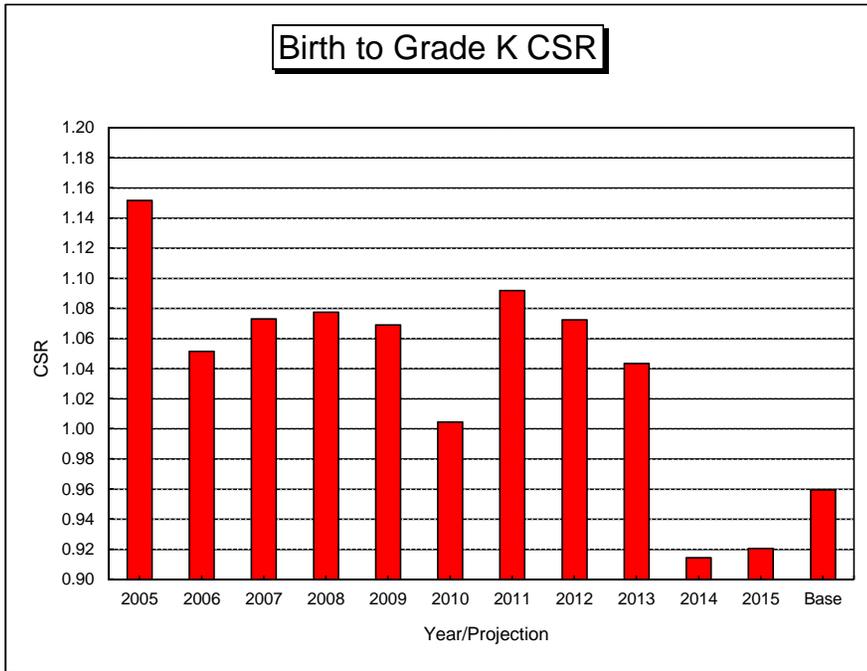


Figure 3
Enrollment History and Projections

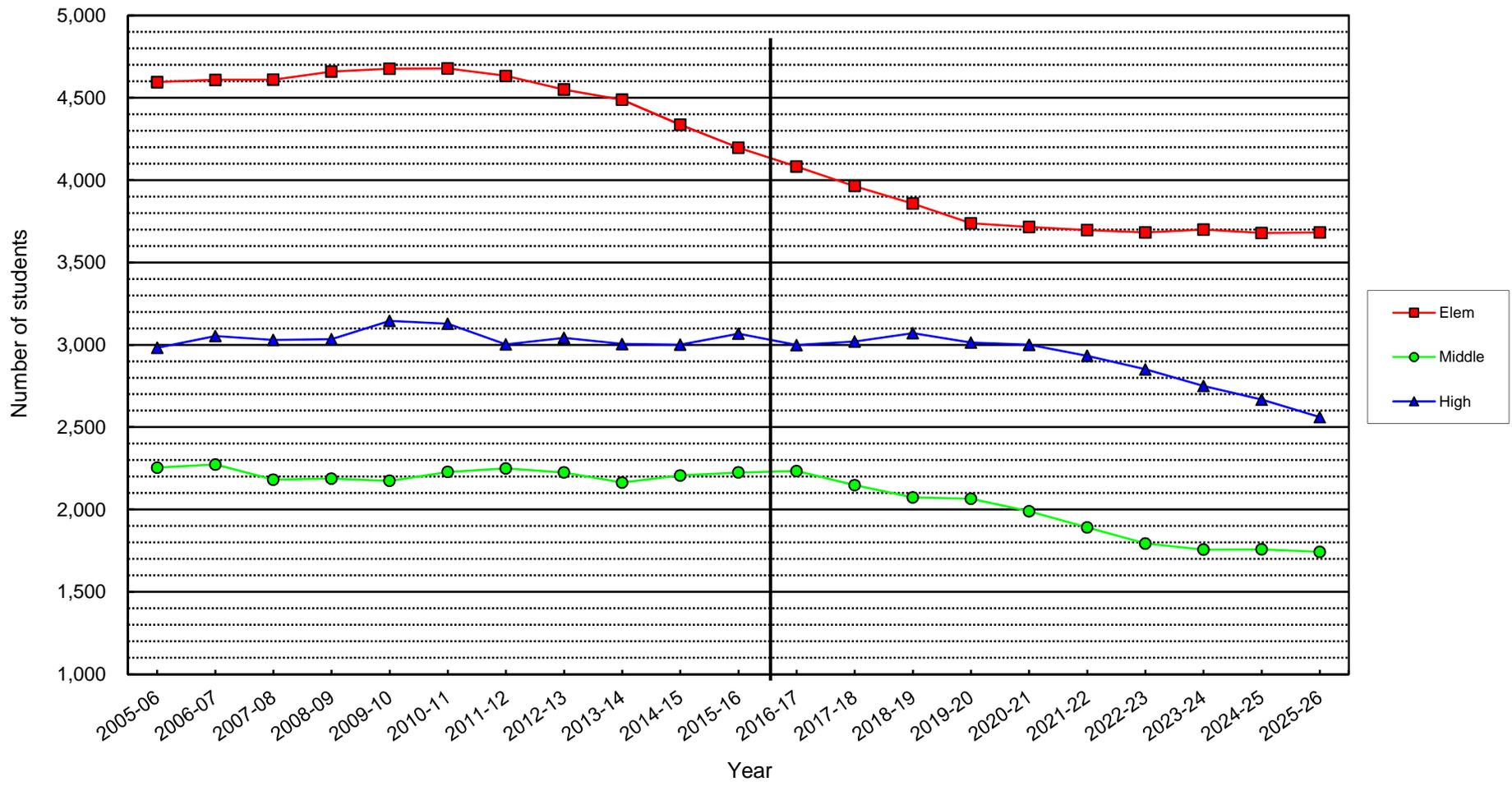
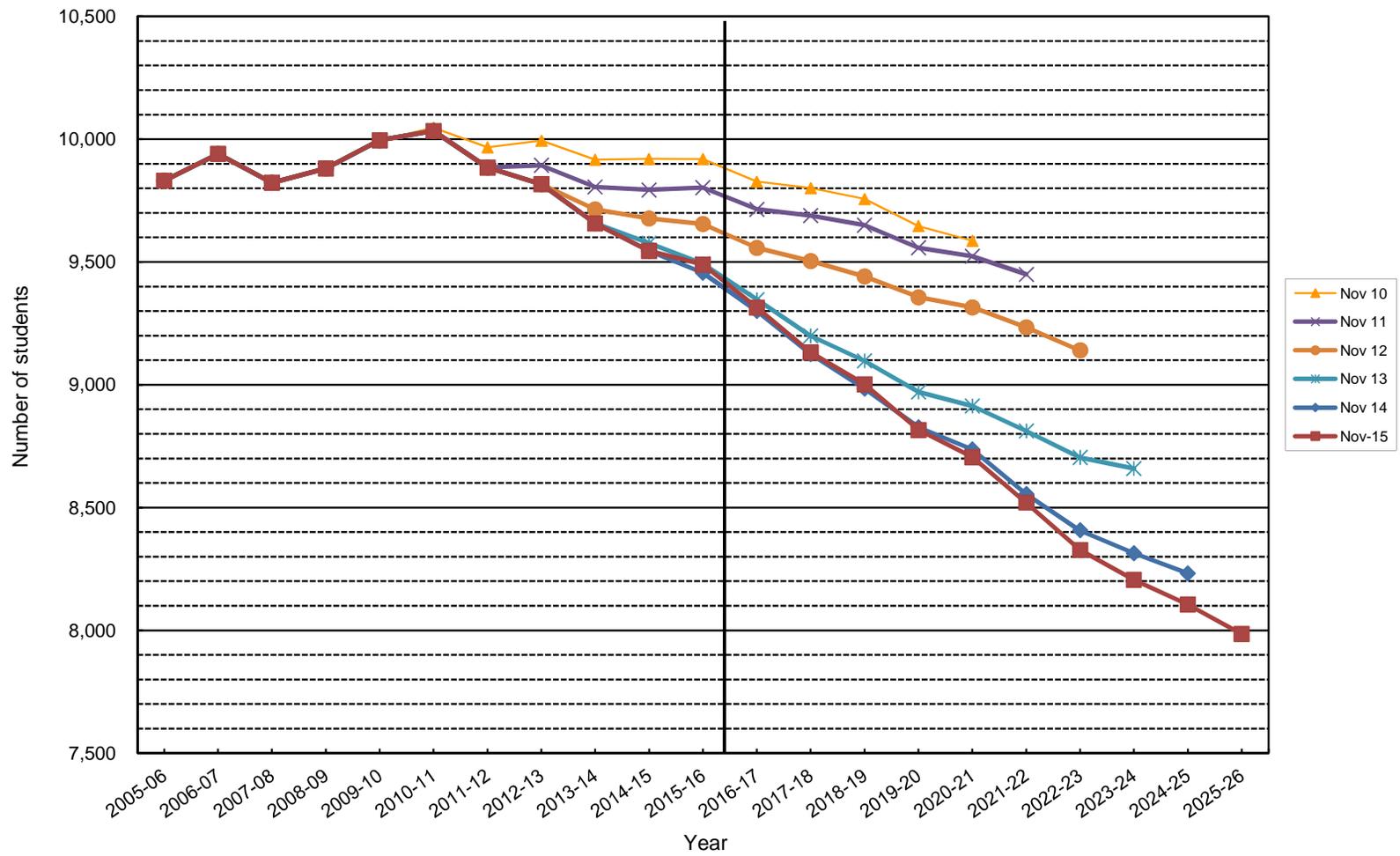


Figure 4
Comparison of K-12 Enrollment Projections



6 Year Enrollment Summary and Capacity Summary - November 2015

Elementary Schools

School	School Year	Projected Enrollment	Standard Classrooms				Surplus/(Deficit)
			Needed for Reg. Ed.	Other Needs	Total Needs	Total Available	
Aiken (23/27)	2015-16	383	19	4	23	26	3
	2016-17	350	17	4	21	26	5
	2017-18	343	17	4	21	26	5
	2018-19	322	17	4	21	26	5
	2019-20	318	16	4	20	26	6
	2020-21	311	16	4	20	26	6
	2021-22	314	16	4	20	26	6
Braeburn (23/27)	2015-16	354	18	4	22	25	3
	2016-17	339	18	4	22	25	3
	2017-18	331	17	4	21	25	4
	2018-19	326	18	4	22	25	3
	2019-20	320	18	4	22	25	3
	2020-21	312	17	4	21	25	4
	2021-22	305	16	4	20	25	5
Bugbee (23/27)	2015-16	430	22	0	22	21	-1
	2016-17	409	20	0	20	21	1
	2017-18	385	19	0	19	21	2
	2018-19	372	19	0	19	21	2
	2019-20	348	18	0	18	21	3
	2020-21	342	17	0	17	21	4
	2021-22	344	18	0	18	21	3
Charter Oak (22/23)	2015-16	307	17	3	20	22	2
	2016-17	360	19	8	27	32	5
	2017-18	406	21	8	29	32	3
	2018-19	429	22	8	30	32	2
	2019-20	457	23	8	31	32	1
	2020-21	483	24	8	32	32	0
	2021-22	481	24	8	32	32	0
Duffy (23/27)	2015-16	487	24	3	27	31	4
	2016-17	509	24	3	27	31	4
	2017-18	507	23	3	26	31	5
	2018-19	522	24	3	27	31	4
	2019-20	497	23	3	26	31	5
	2020-21	510	25	3	28	31	3
	2021-22	503	25	3	28	31	3
Morley (23/27)	2015-16	301	16	2	18	21	3
	2016-17	281	14	2	16	21	5
	2017-18	268	14	2	16	21	5
	2018-19	261	13	2	15	21	6
	2019-20	237	12	2	14	21	7
	2020-21	226	12	2	14	21	7
	2021-22	234	12	2	14	21	7

Description of needs for other standard classroom space

- Aiken Art, Vocal Music, ELC (2)
- Braeburn Art, Vocal Music, Special Education (1) , PreK (1)
- Bugbee Art, Vocal Music in basement classrooms
- Charter Oak Art, Family Resource Center , Pre - K , Vocal Music in smaller space (5 PreK in 16-17)
- Duffy Art, Vocal Music, PT Art/Music (1)
- Morley Art, Vocal Music

6 Year Enrollment Summary and Capacity Summary - November 2015 Elementary Schools

School	School Year	Projected Enrollment	Standard Classrooms				
			Needed for Reg. Ed.	Other Needs	Total Needs	Total Available	Surplus/(Deficit)
Norfeldt (23/27)	2015-16	355	19	5	24	27	3
	2016-17	344	18	5	23	27	4
	2017-18	333	16	5	21	27	6
	2018-19	326	16	5	21	27	6
	2019-20	349	17	5	22	27	5
	2020-21	348	18	5	23	27	4
	2021-22	345	17	5	22	27	5
Smith (22/23)	2015-16	343	18	5	23	24	1
	2016-17	341	18	5	23	24	1
	2017-18	339	18	5	23	24	1
	2018-19	336	18	5	23	24	1
	2019-20	337	18	5	23	24	1
	2020-21	344	18	5	23	24	1
	2021-22	352	18	5	23	24	1
Webster Hill (23/27)	2015-16	414	20	2	22	25	3
	2016-17	373	18	2	20	25	5
	2017-18	334	16	2	18	25	7
	2018-19	288	16	2	18	25	7
	2019-20	260	13	2	15	25	10
	2020-21	234	12	2	14	25	11
	2021-22	223	12	2	14	25	11
Whiting Lane (23/27)	2015-16	344	18	11	29	31	2
	2016-17	311	15	11	26	31	5
	2017-18	285	14	11	25	31	6
	2018-19	254	13	11	24	31	7
	2019-20	223	12	11	23	31	8
	2020-21	218	12	11	23	31	8
	2021-22	220	12	11	23	31	8
Wolcott (23/27)	2015-16	475	24	5	29	30	1
	2016-17	465	23	5	28	30	2
	2017-18	432	21	5	26	30	4
	2018-19	420	20	5	25	30	5
	2019-20	392	18	5	23	30	7
	2020-21	387	18	5	23	30	7
	2021-22	375	19	5	24	30	6
Elementary	2015-16	4193	215	44	259	283	24
	2016-17	4082	204	49	253	293	40
	2017-18	3963	196	49	245	293	48
	2018-19	3856	196	49	245	293	48
	2019-20	3738	188	49	237	293	56
	2020-21	3715	189	49	238	293	55
	2021-22	3696	189	49	238	293	55

Description of needs for other standard classroom space

Norfeldt	Art, Vocal Music, Special Education (3)
Smith	Art, Vocal Music, Instrumental Music, Science Lab, Preschool
Webster Hill	Art, Preschool, Vocal Music in smaller space
Whiting Lane	Art, Vocal Music, Special Education (3), Early Learning Center (6)
Wolcott	Art, Vocal Music, Special Education (3)

6 Year Enrollment Summary and Capacity Summary - November 2015

Middle Schools

School	School Year	Projected Enrollment	Standard Classrooms				Surplus/(Deficit)
			Needed for Reg. Ed.	Other Needs	Total Needs	Total Available	
King Philip	2015-16	939	45	19	64	74	10
	2016-17	957	45	19	64	74	10
	2017-18	895	42	19	61	74	13
	2018-19	834	40	19	59	74	15
	2019-20	831	37	19	56	74	18
	2020-21	788	35	19	54	74	20
	2021-22	690	32	19	51	74	23
Sedgwick	2015-16	861	40	21	61	67	6
	2016-17	856	42	21	63	67	4
	2017-18	832	40	21	61	67	6
	2018-19	790	37	21	58	67	9
	2019-20	814	37	21	58	67	9
	2020-21	781	35	21	56	67	11
	2021-22	780	35	21	56	67	11
Bristow	2015-16	422	22	5	27	27	0
	2016-17	420	22	5	27	27	0
	2017-18	420	22	5	27	27	0
	2018-19	420	22	5	27	27	0
	2019-20	420	22	5	27	27	0
	2020-21	420	22	5	27	27	0
	2021-22	420	22	5	27	27	0
Middle Schools	2015-16	2222	107	45	152	168	16
	2016-17	2233	109	45	154	168	14
	2017-18	2147	104	45	149	168	19
	2018-19	2044	99	45	144	168	24
	2019-20	2065	96	45	141	168	27
	2020-21	1989	92	45	137	168	31
	2021-22	1890	89	45	134	168	34

Description of needs for other standard classroom space

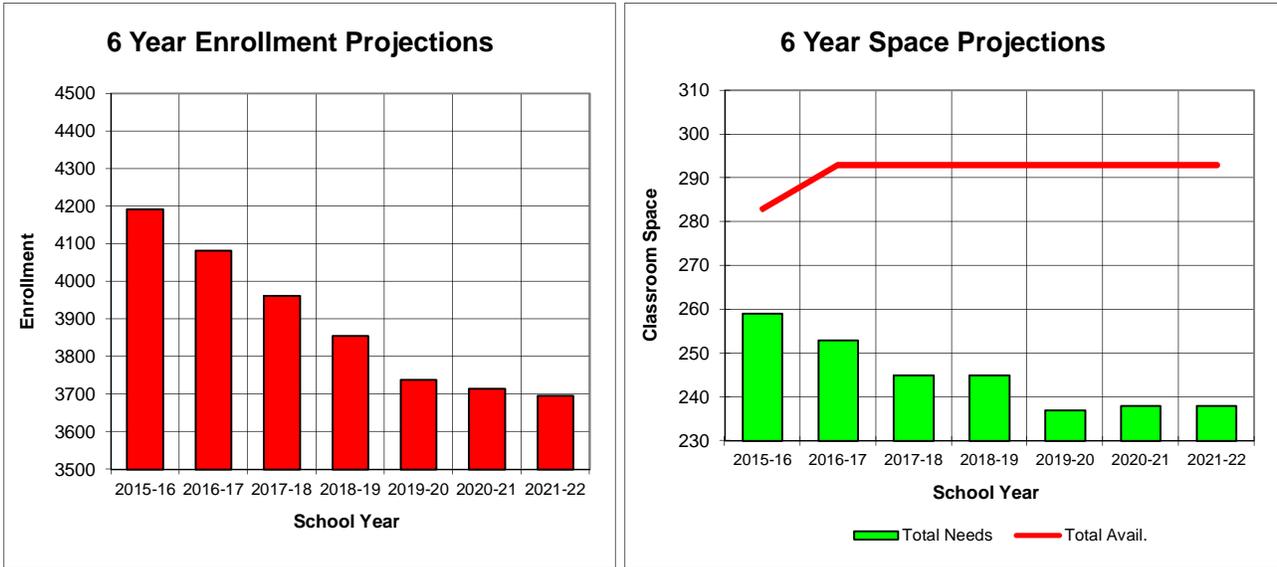
King Philip	Unified Arts (12), Special Ed (2), Computer Lab (2), 10th math teacher (1), Quest (1) Strive (1),
Sedgwick	Unified Arts (12), Special Ed (4), ESOL (1), Computer Lab (1), 10th math teacher (1) Strive (1), Alternative Middle School (1)
Bristow	Unified Arts (4), Computer Lab (1)

6 Year Enrollment Summary and Capacity Summary - November 2015
High Schools

School	School Year	Projected Enrollment
Conard	2015-16	1540
	2016-17	1478
	2017-18	1475
	2018-19	1494
	2019-20	1446
	2020-21	1448
	2021-22	1427
	Hall	2015-16
2016-17		1464
2017-18		1489
2018-19		1521
2019-20		1511
2020-21		1495
2021-22		1449
High Schools		2015-16
	2016-17	2942
	2017-18	2964
	2018-19	3015
	2019-20	2957
	2020-21	2943
	2021-22	2876

Space Needs Analysis November 2015 Projections

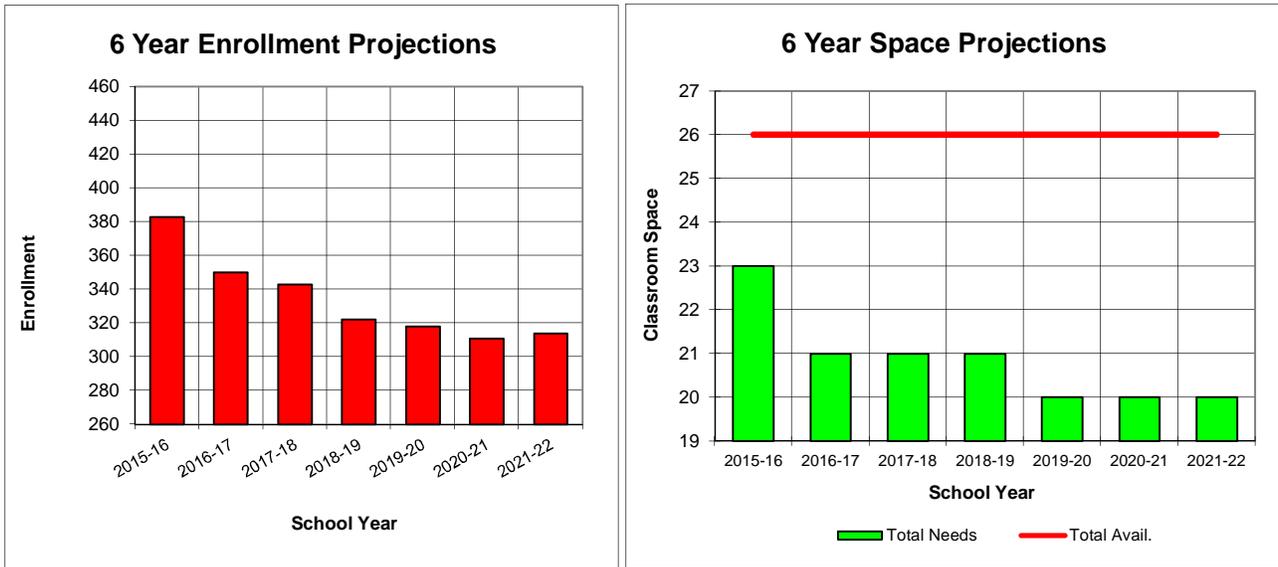
All Elementary Schools



Comments:

Space Needs Analysis November 2015 Projections

Aiken School



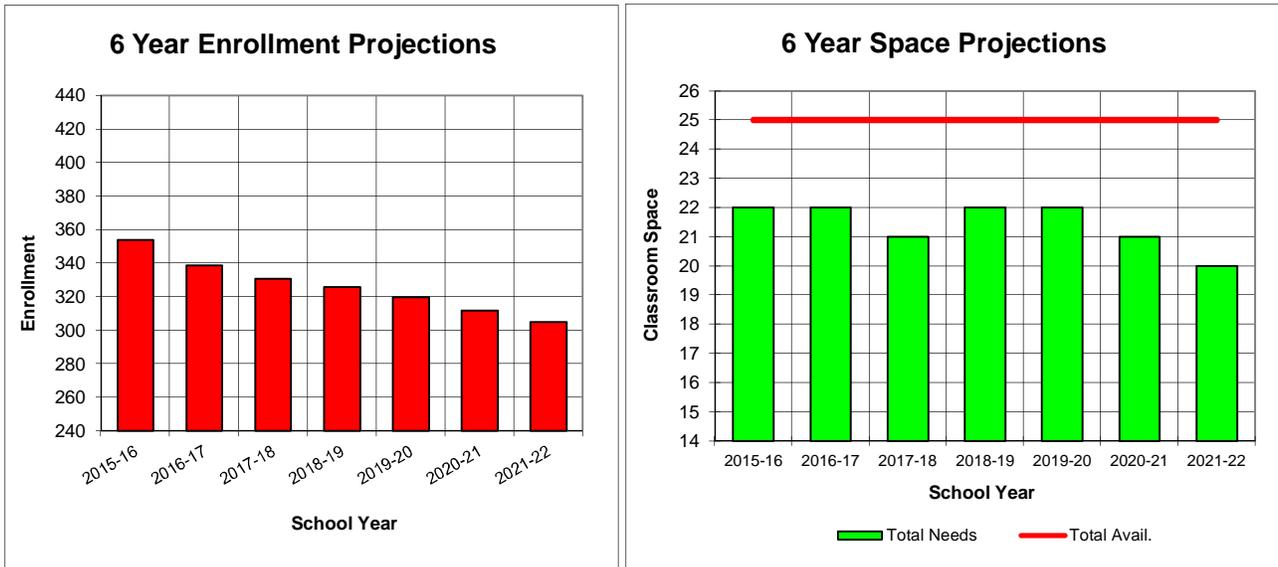
Comments:

Aiken shows a decreasing population trend

Aiken has a surplus of space throughout forecast period

Space Needs Analysis November 2015 Projections

Braeburn School



Comments:

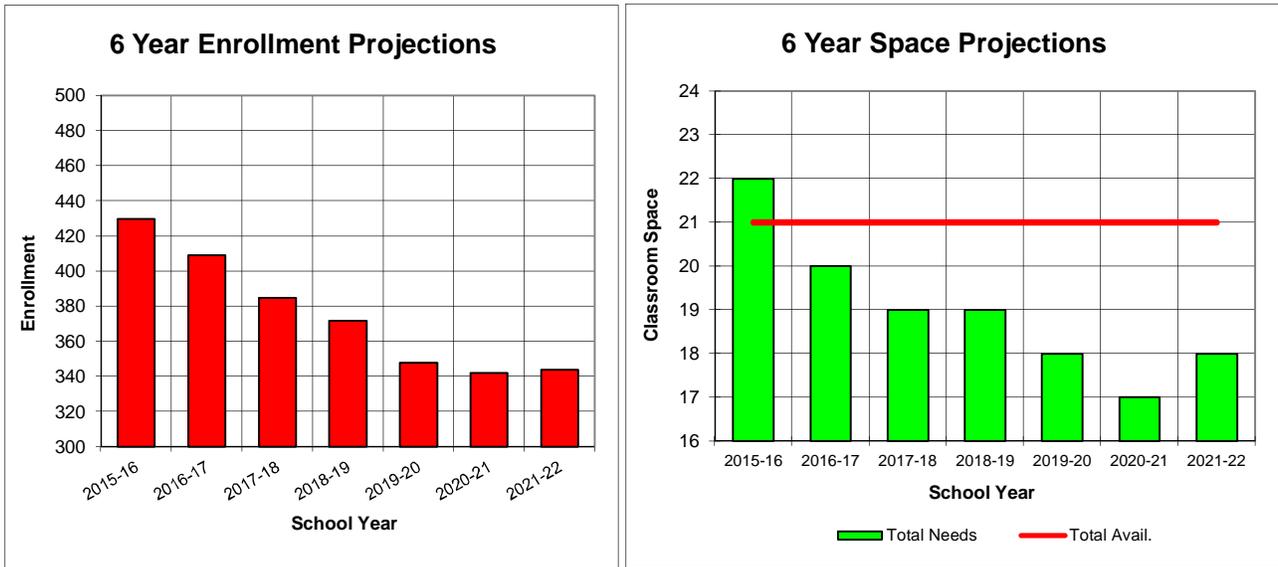
Braeburn shows a slowly decreasing population trend

Braeburn has a surplus of space throughout forecast period

The space available figure includes three modular classrooms

Space Needs Analysis November 2015 Projections

Bugbee School



Comments:

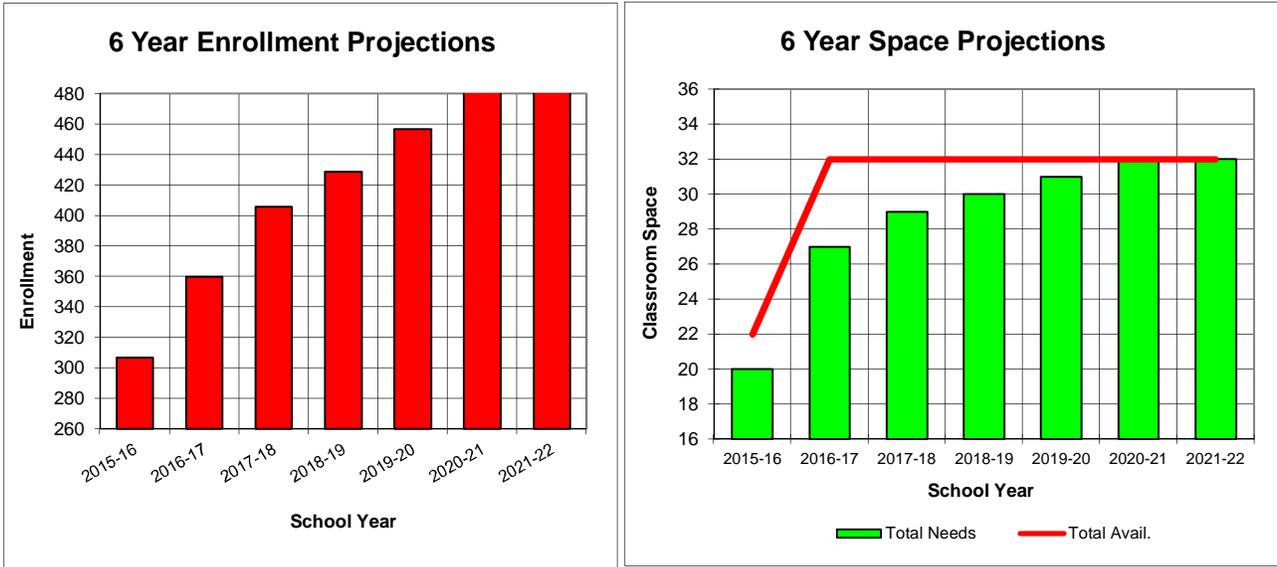
Bugbee shows a decreasing population trend

Space is adequate in the short terms and then a surplus develops in the later years

Bugbee has five modular classrooms in use.

Space Needs Analysis November 2015 Projections

Charter Oak School



Comments:

Charter Oak's enrollment grows as it expands to a 4 section per grade school throughout forecast period. This model assumes 4 sections of grade K and grade 1 in 16-17 and then slow growth following that cohort until 4 sections at each grade in 2020-21.

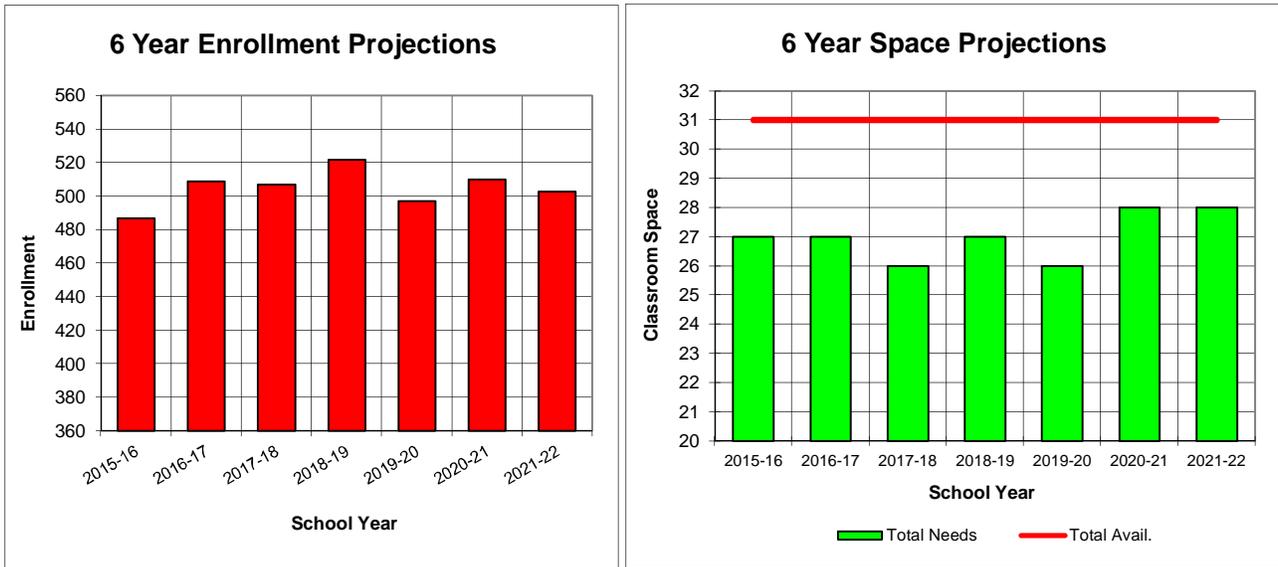
Charter Oak has 5 PreK classrooms with 80 PreK students beginning in 2016-17

Charter Oak has adequate space with the new building

Magnet Enrollments average approximately 45-50 students in grade K over the forecast period

Space Needs Analysis November 2015 Projections

Duffy School

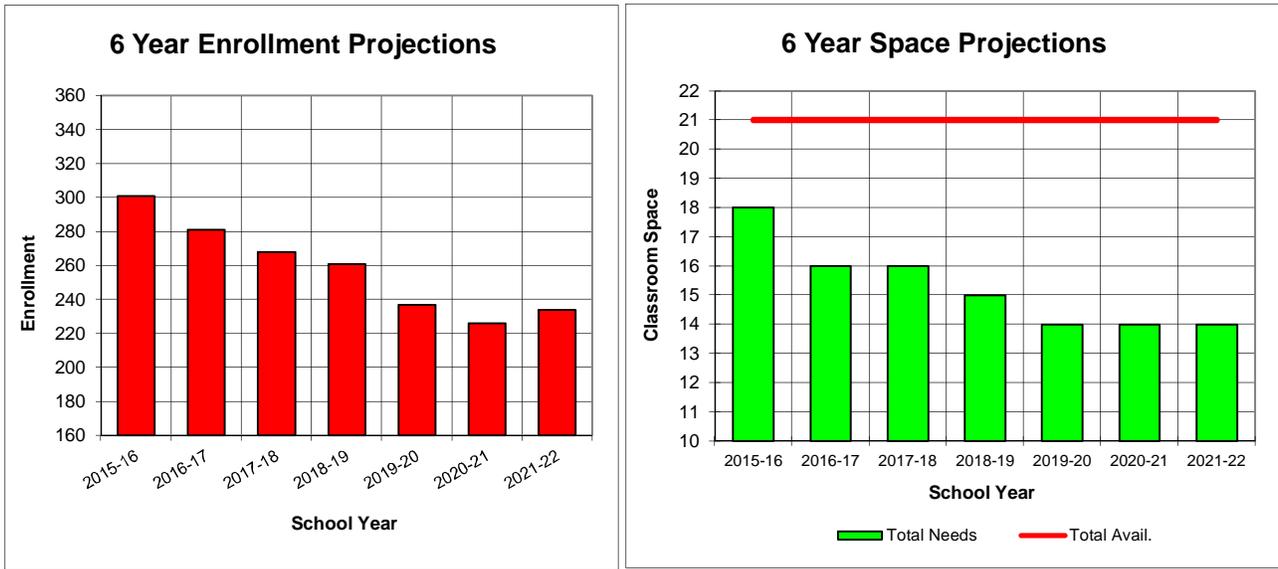


Comments:

- Duffy shows a stable trend in enrollment
- Duffy has a surplus of space throughout the forecast period
- Duffy has 3 modular classrooms in use

Space Needs Analysis November 2015 Projections

Morley School



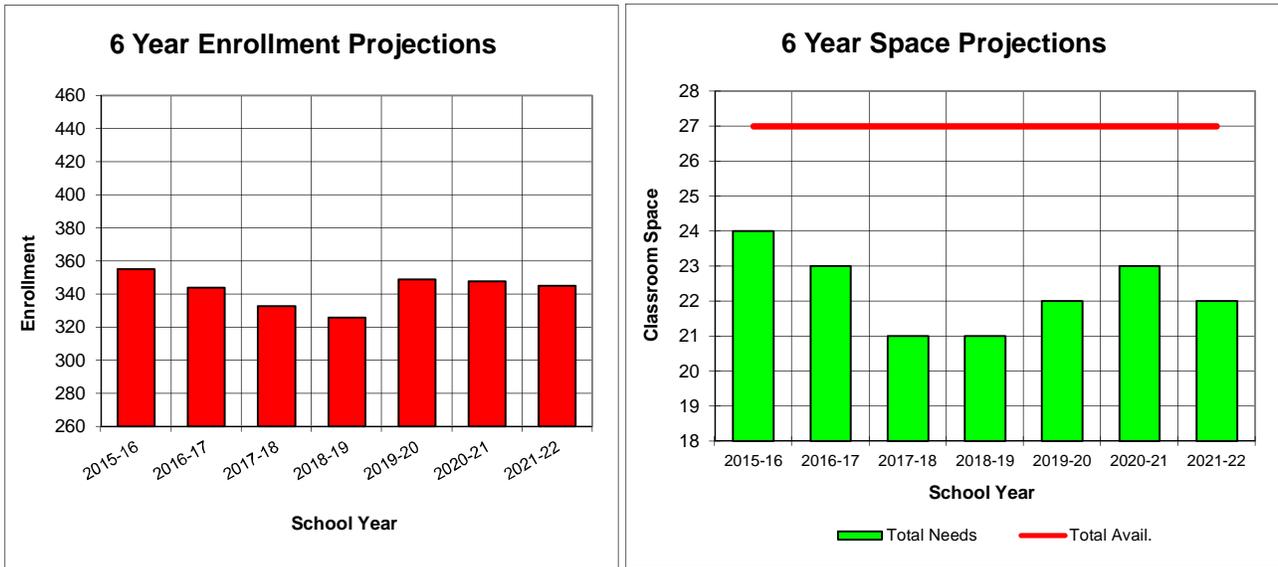
Comments:

Morley's enrollment is decreasing over the forecast period

Morley has a surplus of space throughout the forecast period

Space Needs Analysis November 2015 Projections

Norfeldt School



Comments:

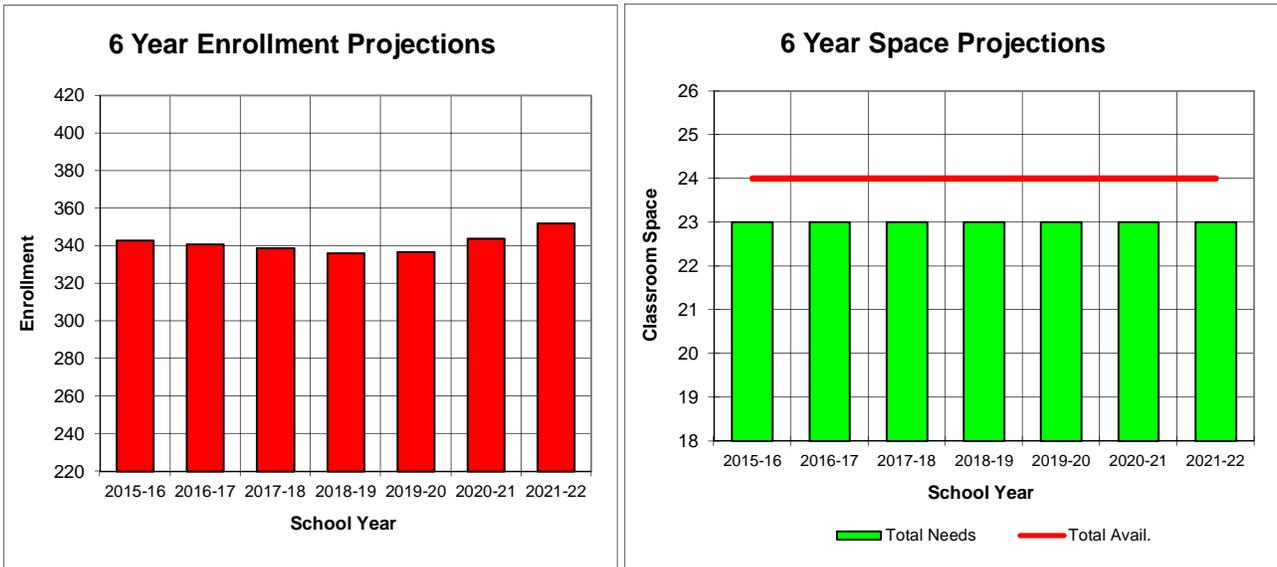
Norfeldt shows a stable/slightly decreasing enrollment trend.

Norfeldt has a surplus of space throughout the forecast period

Norfeldt has 4 modular classrooms

Space Needs Analysis November 2015 Projections

Smith School



Comments:

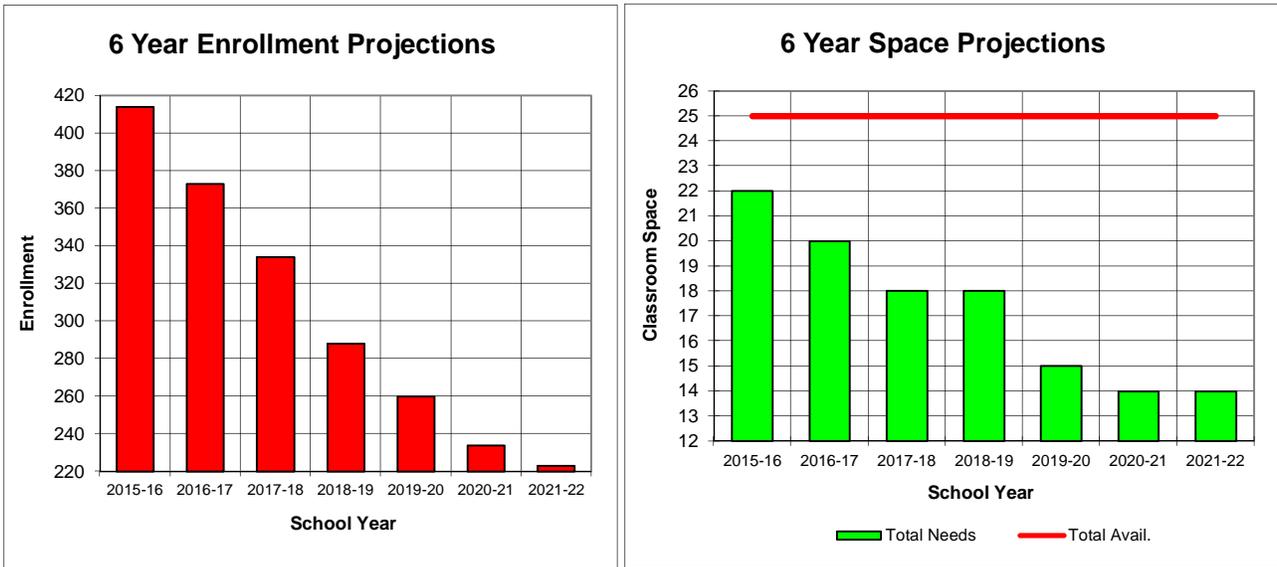
Smith's enrollments are stable as a magnet school.

Smith has adequate space

Magnet admissions average 25-30 per year at Grade K over the forecast period

Space Needs Analysis November 2015 Projections

Webster Hill School



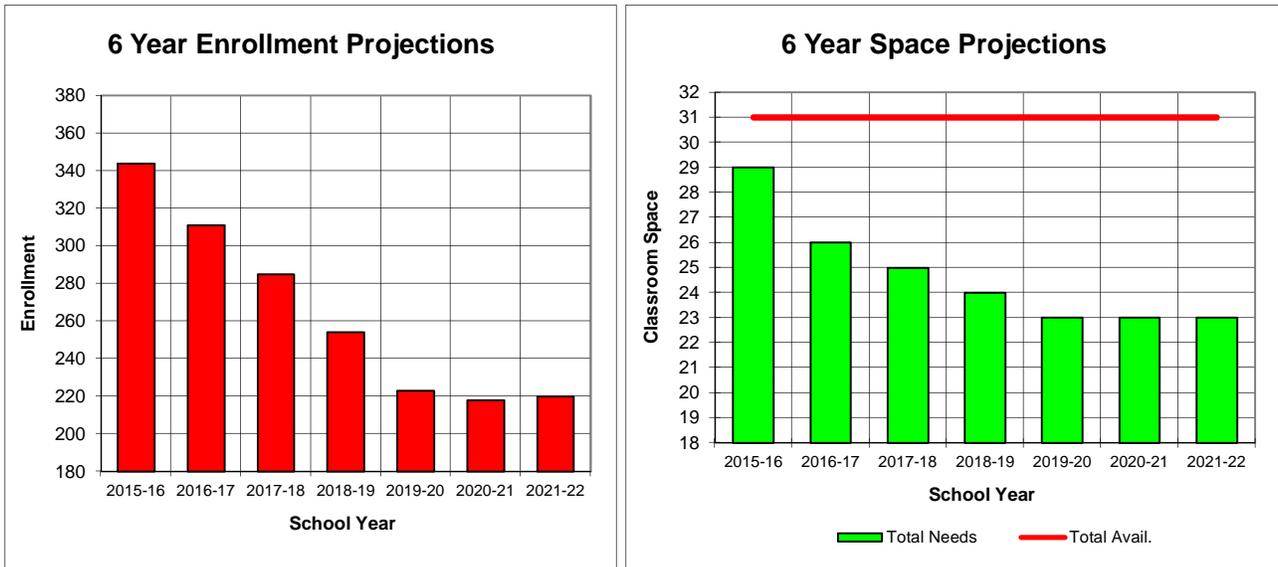
Comments:

Webster Hill shows a decreasing population trend.

Webster Hill has a surplus of space throughout the forecast period

Space Needs Analysis November 2015 Projections

Whiting Lane School



Comments:

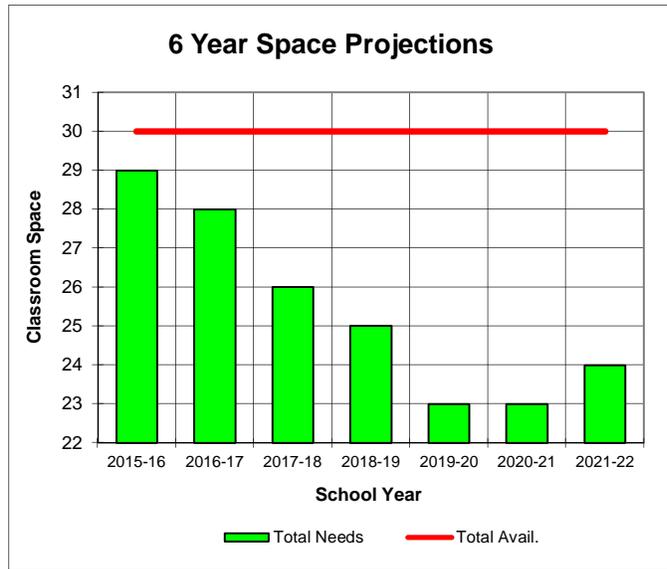
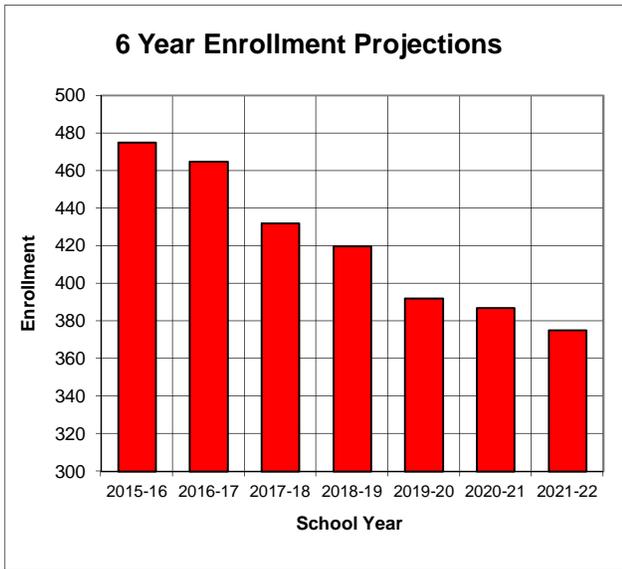
Whiting Lane shows a decreasing population trend.

Whiting Lane has a surplus of space over the forecast period

Whiting Lane has 2 modular classrooms

Space Needs Analysis November 2015 Projections

Wolcott School



Comments:

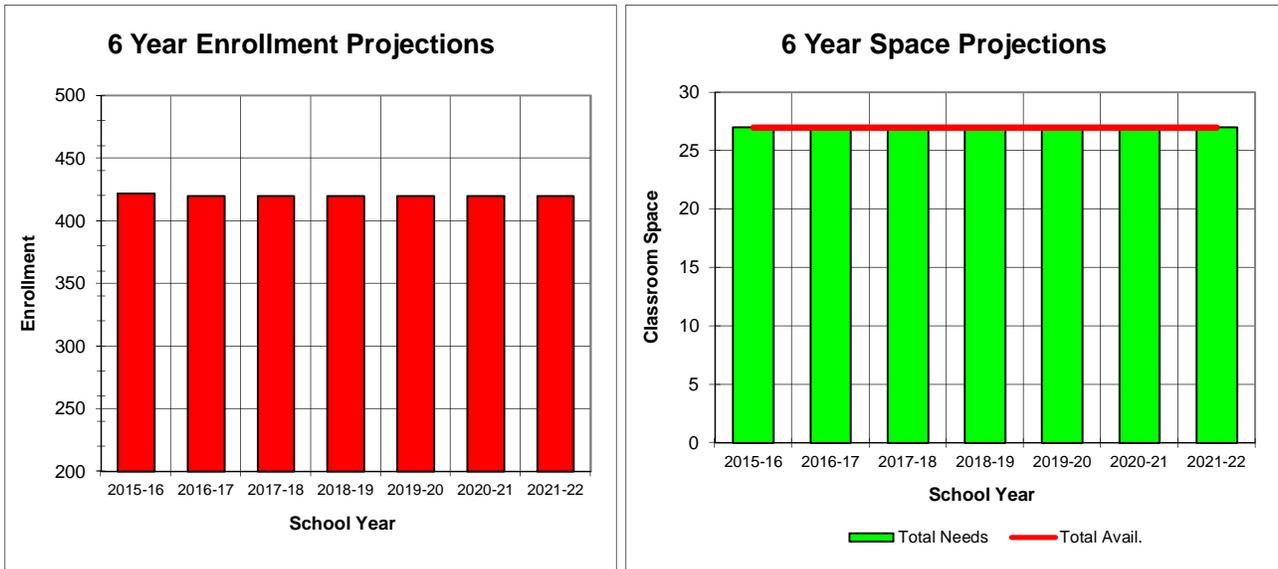
Wolcott shows a declining population over the forecast period.

Wolcott has a surplus of space over the forecast period

Wolcott has 4 modular classrooms

Space Needs Analysis November 2015 Projections

Bristow Middle School



Comments:

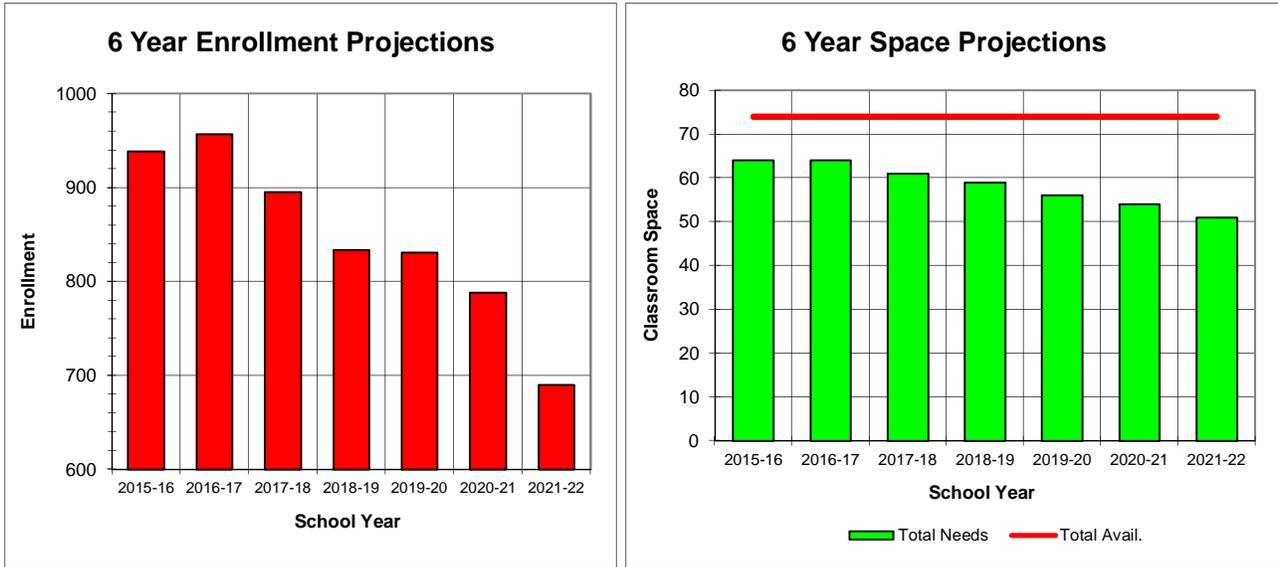
As a controlled enrollment school, Bristow has adequate space for its 420 6-8 students

Enrollment by Grade Level

	6	7	8
2015-16	142	140	138
2016-17	140	140	140
2017-18	140	140	140
2018-19	140	140	140
2019-20	140	140	140
2020-21	140	140	140
2021-22	140	140	140

Space Needs Analysis November 2015 Projections

King Philip Middle School



Comments:

KP's population peaks near 950 students in 16-17 and declines thereafter.

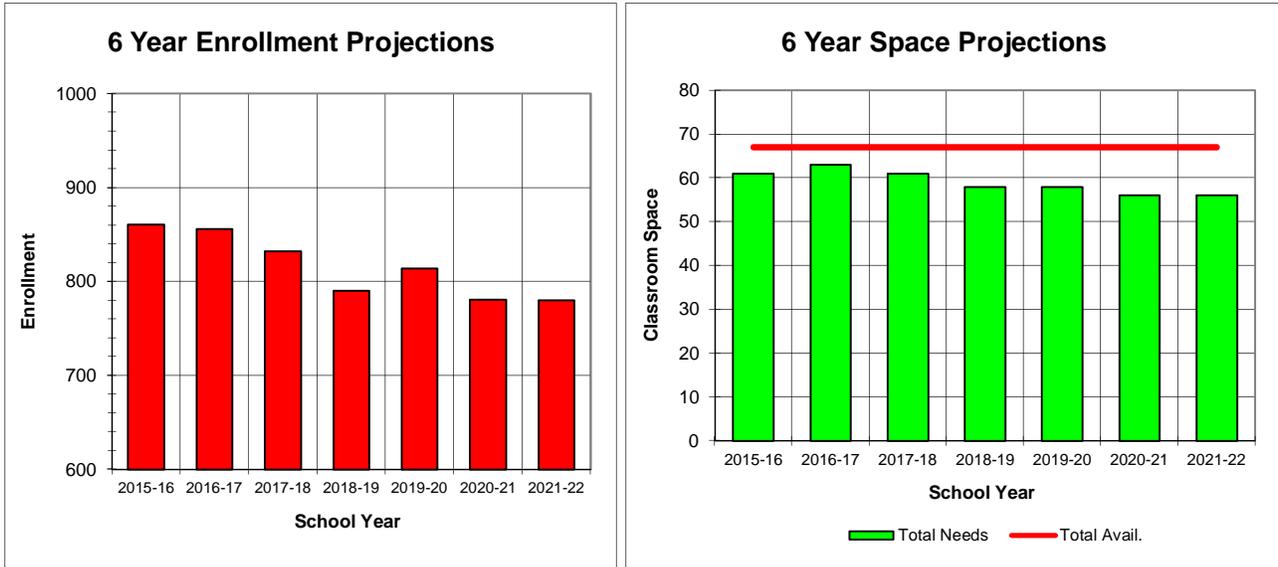
KP has a surplus of space across the forecast period

KP has 5 modular classrooms

Enrollment by grade level				
	Grade 6	Grade 7	Grade 8	Total
2015-16	320	334	285	939
2016-17	307	318	332	957
2017-18	274	304	317	895
2018-19	290	271	303	864
2019-20	275	286	270	831
2020-21	232	271	285	788
2021-22	191	229	270	690

Space Needs Analysis November 2015 Projections

Sedgwick Middle School



Comments:

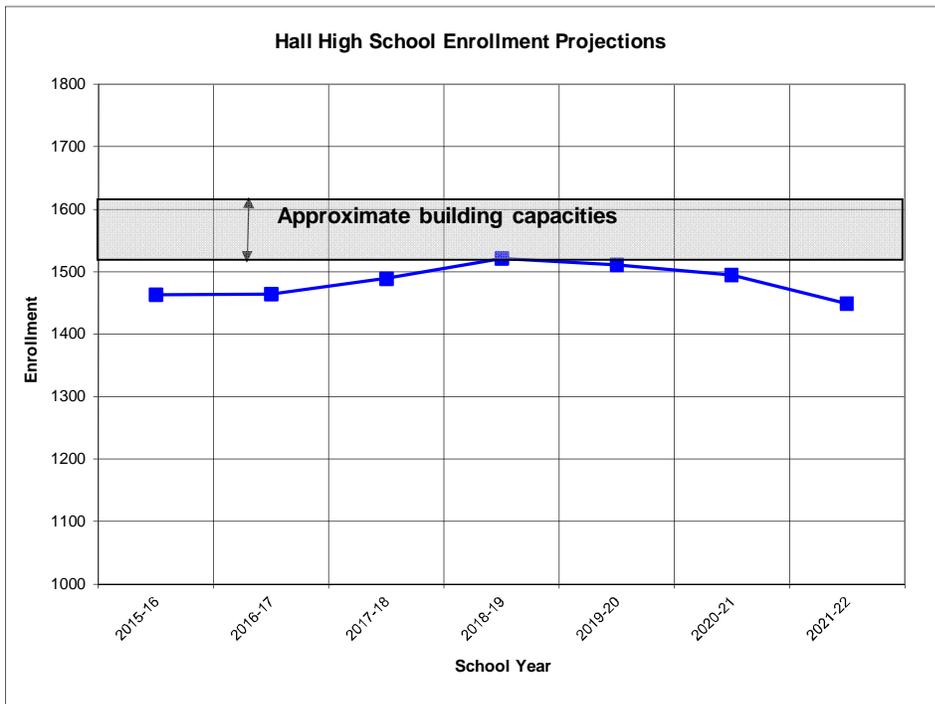
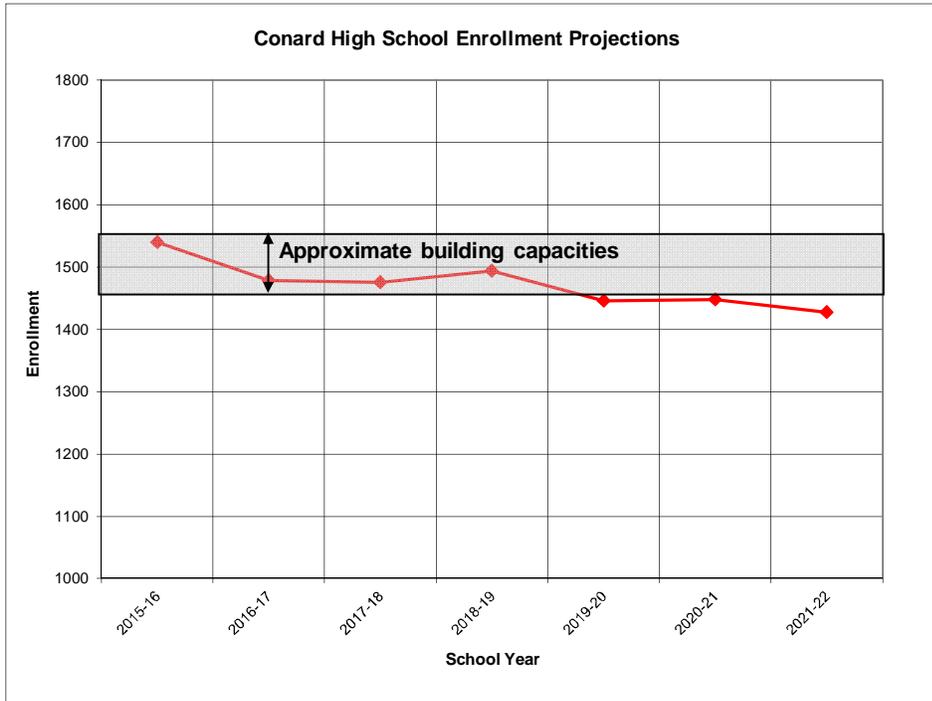
Sedgwick's enrollment drops steadily to near 780 at the end of the forecast period

Sedgwick has adequate space throughout the forecast period.

Enrollment by grade level				
	Grade 6	Grade 7	Grade 8	Total
2015-16	306	292	263	861
2016-17	252	314	290	856
2017-18	261	258	313	832
2018-19	266	267	257	790
2019-20	276	272	266	814
2020-21	229	281	271	781
2021-22	266	234	280	780

**Space Needs Analysis
November 2015 Projections**

Conard & Hall High Schools



Comments:

Conard's enrollment is projected to decline slowly to 1450 by the end of the forecast period. Conard has adequate space.

Hall's enrollment is projected to range between 1,440 and 1,530 students for the rest of the forecast period. Hall has adequate space

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**CAPITAL IMPROVEMENT
PROGRAM**

PARKS & RECREATION PROJECTS

The CIP contains recurring and individually identified projects to support the maintenance and operation of the community's public spaces used for active and passive recreational purposes. There is also more diversified financing available to support these investments from other Town funds, including the Westmoor Park Fund and the Leisure Services Enterprise Fund. The Town maintains and operates six major outdoor parks totaling more than 170 acres. Within these six neighborhood parks are numerous pools (4 full size, 1 teen slide and 4 spray decks), as well as eleven (11) major playground structures. Within the public spaces there are fifteen (15) ponds that are maintained. The Town also operates two (2) golf courses totaling 227 acres.

PARK IMPROVEMENTS

Major Active Public Parks

<u>Park</u>	<u>Acres</u>
Beachland Park	28.2
Eisenhower Park	15.0
Fernridge Park	26.6
Kennedy Park	21.8
Westmoor Park	52.0
Wolcott Park	<u>26.6</u>
TOTAL	170.2

Capital Investment Strategy

The assets of the public parks requiring investment include parking lots, walkways, fencing, tennis courts, hard surface play areas, exterior lighting and signage. A small amount is appropriated every year to maintain the exterior assets in the parks. Individual projects are identified on an as-needed basis. The underlying policy is to provide CIP funding in the parks for maintenance activities only and to minimize the resources required.

Minor projects in the parks to improve appearance and provide proper maintenance are funded through the CIP. Projects include fencing and playground equipment repairs, signage, repairs to hard surface areas, and tennis court painting and repairs. This program was originally included in the CIP & CNRE to provide flexibility to make improvements as required, as funding was reduced in the General Fund for maintenance activities. The project timing and funding has historically been included in the CIP.

Funding for projects to maintain and improve Westmoor Park is provided by the Westmoor Park Fund. Planned improvements include correcting drainage and grading problems in the demonstration farm courtyard; new interpretive signage throughout the park; a comprehensive landscaping plan through the common areas to trails and gardens to improve circulation and handicapped access and demonstration opportunities; renovation and repair to the old barn; and pond improvements.

**CAPITAL IMPROVEMENT
PROGRAM**

OUTDOOR POOL IMPROVEMENTS

Inventory of Pools

<u>Park</u>	<u>Number of Main Pools</u>	<u>Number of Spray Decks</u>	<u>Approximate Year Built</u>
Beachland	1	1	1936, 1966 & 2015
Eisenhower	1		1964
Fernridge	1	1	2012
Kennedy	2	1	1964 & 2003
Wolcott	–	<u>1</u>	2002
TOTAL	5	4	

Capital Investment Strategy:

The major investment areas in the outdoor pools include the pool tank, pool decking, bathhouses and the filtration systems. The concrete shells and decking deteriorate over time creating safety and integrity issues. The filtration systems also deteriorate over time resulting in cracked pipes and leaks, as well as the inability to maintain water quality and chemical balance. The underlying policy is to continue to operate the outdoor pools by providing CIP funding for maintenance repairs at the pools. A long-term pool replacement plan in the CIP has addressed the need to plan major renovations to meet changing State regulations on the disbursement of pool water and filtration systems. Changing State regulations on the disbursement of pool water has necessitated a greater reinvestment and modifications to the drainage systems at the outdoor pools. Eisenhower Pool remains the last pool to be addressed.

Periodically, the CIP funds minor improvements to pools that include repairs to concrete decks, underground pipes and filtration systems on an as-needed basis to ensure visitor safety and the effective opening of the pool season. The CIP provides flexibility to respond to yearly repairs to the plumbing and filtration systems at the outdoor pools.

**CAPITAL IMPROVEMENT
PROGRAM**

ATHLETIC FIELD IMPROVEMENTS

Inventory of Athletic Fields

<u>Athletic Fields Location</u>	<u>Field Acres</u>
Beachland Park	4.4
Eisenhower Park	4.4
Fernridge Park	4.4
Goodrich Property	6.6
Kennedy Park	6.6
Norfeldt Park	2.2
Solomon Schecter School	4.4
Southwoods	2.2
Sterling Field	11
UConn Property	8.8
Whiting Lane Park	6.6
Wolcott Park	<u>4.4</u>
TOTAL	66

In addition, there are 139 acres of athletic fields located on school property that are used for the Town's recreation programs after school hours.

Capital Investment Strategy:

Improvements to athletic fields are required for safety purposes. Fields become uneven, resulting in playing surfaces that can cause injuries to users of the fields. Refurbishment of the turf is also required for safety purposes by creating a cushioning effect. Full refurbishment includes stripping fields to the sub-surface and bringing in proper materials to create a sub-surface that improves the drainage of the fields. Drainage soils and topsoil is brought in over the sub-surface material and the field is sodded or seeded. Irrigation systems may also be considered to reduce long term maintenance costs.

**CAPITAL IMPROVEMENT
PROGRAM**

PLAYGROUNDS & PLAYSAPES

Inventory of Playscapes & Playgrounds

<u>Playground Location</u>	<u>Handicapped Accessible</u>	<u>Condition</u>
Beachland Park	Yes	Fair
Eisenhower Park	Yes	Good
Fernridge Park	Yes	Fair; New (2013)
Goodrich Property	Yes	Good
Kennedy Park	Yes	Fair
UConn Property	Yes	New (2012)
Vanderbilt Park	No	Poor
Wolcott Park	Yes	Fair
Southwoods	Yes	New (2013)
HANOC	Yes	Poor

Capital Investment Strategy:

Playscape and playground equipment periodically requires replacement for safety, maintenance and play value. A long-range plan for improvements to playgrounds and playscapes for both the Town and Schools was last done in the late 1990s and needs to be updated. The CIP includes funding to maintain and upgrade where necessary as well as meeting handicapped accessible requirements. These would include hard surface access routes, transfer points on the playground and signage. The CIP periodically funds the replacement and repair of playground structures. Existing structures are removed and new structures installed over an appropriate surface when necessary. New structures installed are fully handicapped accessible.

GOLF COURSES

Inventory of Golf Courses

<u>Golf Course</u>	<u>Holes</u>	<u>Acres</u>
Buena Vista	9	75
Rockledge	18	<u>152</u>
TOTAL		227

Capital Investment Strategy:

Capital Improvements required at the two golf courses have been identified in a long-range plan. Improvements will include fairways, tees and greens to improve the playability of the course and maintenance projects including paving, bridge upgrades, watercourses and buildings. The golf courses are operated as enterprise fund activities and capital investments are an important element in enhancing the courses' appeal and attractiveness to customers. Golf course projects are generally funded through a surcharge program begun in FY 2000.

Project needs at the golf course include building improvements to the club house, snack bar and maintenance facilities, drainage improvements and paving. Improvements are also made to greens, fairways, tees and the irrigation system to improve the playability of the courses. In addition, numerous watercourses require maintenance.

**CAPITAL IMPROVEMENT
PROGRAM**

TOWN BUILDING IMPROVEMENTS

INVENTORY OF TOWN BUILDINGS

<u>Building</u>	<u>Year Built</u>	<u>Year Remodeled</u>	<u>Square Footage</u>
Town Hall	1922	1987/2007	142,615
Elmwood Community Center	1928	1978	53,222
Police Station & Courthouse	1910	1981/2007	56,679
Noah Webster Library	1938	1962/2007	41,890
Faxon Branch Library	1954	1997	9,860
Bishops Corner Library	1966	2012	7,730
Cornerstone Pool	1961	1992	47,930
Rockledge Golf Course	Various	1996	12,621
Public Works Facilities	1958	1998	90,722
Veterans Memorial Skating Rink	1966	2000	29,342
Westmoor Park	Various	1995	18,590
Buena Vista Maintenance	1979	-	3,914
Beachland Maintenance	1967	1990	7,663
Fire Station #1	1915	-	7,892
Fire Station #2	1991	-	5,380
Fire Station #3	1930	1991	6,392
Fire Station #4	1954	1995	6,274
Fire Station #5	1963	-	4,477
Constructive Workshop	1980	-	10,280
Miscellaneous Buildings	Various		40,000
TOTAL			603,473

Capital Investment Strategy

The CIP includes funding for the renovation of and additions to municipal buildings. There is a recurring Town building improvement program which provides funding each year for the maintenance of and minor improvements to Town buildings. Major renovation projects, including expansions, are listed as separate projects and are usually developed with the assistance of an outside architect. A feasibility study is often produced which outlines the condition of the existing building and an examination of how the facility does or does not serve the program needs of the department(s) occupying the building.

Town Building Improvements

CIP projects provide for the general capital maintenance of Town facilities. Improvements that are undertaken include replacement of interior finishes, completion of minor carpentry work, replacement of building equipment, repair of building fixtures, replacement of building roofs and other exterior surfaces, and other minor projects of an on-going nature. Funding assists in maintaining and upgrading the appearance of buildings by completing minor projects and scheduled replacement of equipment and building structures. The CIP funding provides flexibility for smaller repairs and improvements. In addition, funding is included for energy conservation projects throughout the town facilities.

**CAPITAL IMPROVEMENT
PROGRAM**

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**CAPITAL IMPROVEMENT
PROGRAM**

MISCELLANEOUS IMPROVEMENTS

The Capital Improvement Program includes funding for miscellaneous equipment purchases and projects. These projects include the purchase of fire apparatus, major rolling stock for the Public Works Department, and investments in the Town's communications infrastructure.

Capital Investment Strategy

The CIP provides funding for projects and large equipment purchases that are difficult to fund in the annual operating budget due to the size of the required financing. With the exception of fire apparatus and large rolling stock purchases, these projects are financed with the annual amount generated by the Capital & Non-Recurring Expenditure Fund for capital projects.

The Town has an inventory of seven (7) fire vehicles, including 3 quints and 4 pumper trucks. Based upon a twenty (20) year replacement cycle, the CIP assumes a piece of fire apparatus will have to be replaced approximately every five (5) years.

Large public works equipment, which would include street sweepers and large dump trucks, is financed periodically through the CIP. Equipment in good repair is critical to the productive use of the department's resources. The Town has developed a multi-year plan to replace rolling stock based upon the condition of existing inventory and expected useful life. Timely replacement of rolling stock contributes to the efficiency and effectiveness of community maintenance services provided by the staff of the Department of Public Works.

Funding is included each year in the CIP to fund improvements and enhancements to the Town's communications infrastructure supporting voice and data communication for town departments and the public schools. This annual project provides the necessary investment in hardware and software to maintain and enhance this critical infrastructure. The maintenance of the infrastructure requires annual investments to replace obsolete hardware and software, and enhancements are required to maintain the performance of the infrastructure to support the continued and expanded utilization of voice and data communications. The communications infrastructure supports applications that utilize voice and data communication to improve organizational performance. Improved performance is the result of extending access to information throughout the organization making employees information independent in accessing resources to solve problems and provide customer service. The communications infrastructure supports applications that provide customers direct access to electronic services eliminating their dependencies on employees to receive customer service. Continued investment is required to maintain the infrastructure to support new applications and increased utilization while maintaining the security integrity of the infrastructure.

**CAPITAL IMPROVEMENT
PROGRAM**

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TOWN OF WEST HARTFORD