

# Town of West Hartford, Connecticut PROGRAM FOR CAPITAL IMPROVEMENTS 2011-2022

## Going Green!



New LED traffic signals will save \$30,000 in energy bills annually



Pedal Cab ordinance paves the way for an alternative mode of transportation



The half-mile Trout Brook Trail is the newest addition to town's greenway plan



New automated recycling barrel will reduce trash and encourage more recycling



Boiler replacements yield big energy savings and rebates

**Adopted by the Town Council,  
Town of West Hartford**

***Capital  
Improvement  
Program***

West Hartford  
Connecticut



***ADOPTED***  
**2011-2022**

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OFFICE OF THE  
TOWN MANAGER

April 27, 2010

Honorable Town Council  
Honorable Town Plan & Zoning Commission

I am transmitting the Town's adopted Capital Improvement Plan (CIP) for fiscal years 2011-2022, which invests \$149,390,000 in West Hartford during this twelve year period. While this Capital Improvement Plan continues the Town's long-term commitment to the maintenance of public schools, roads, storm sewers, parks and other public infrastructure, it also reflects the economic challenges we are faced with. As such, the CIP focuses only on maintaining the Town's infrastructure, not adding to it.

The capital financing plan needed to fund the projects included in the Capital Improvement Plan meets the standards established by the Town Council for debt limits, repayment and debt servicing costs. The Town's capital program has always been a financially driven program that carefully considers the community's ability to pay as well as its capital needs. This capital program for 2011-2022 reflects the community's ability to pay within the context of the current economic conditions.

Sincerely,



Ron Van Winkle  
Town Manager



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**CAPITAL IMPROVEMENT  
PROGRAM**

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**CAPITAL FINANCING SUMMARY**

The 2011-2022 Capital Improvement Plan (CIP) invests \$149,390,000 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. Due to the economic challenges currently being faced, this CIP focuses on maintaining the Town's infrastructure, not adding to it.

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.

- **Education** – In fiscal year 2011, there is \$500,000 designated for classroom expansion. These funds will be used for modular classrooms at Bugbee Elementary School.
- **Parks & Recreation** – Included in years 2-4 of the CIP (2012-2014) is \$3,000,000 for reconstruction of two of the Town's outdoor pools. During years 4-6 (2014-2016), \$5,500,000 is allocated for improvements to the Elmwood Campus.
- **Miscellaneous** – In fiscal year 2011, \$995,000 is included for replacement of the Town's radio communications system, bringing the three year project total to \$1,470,000. Also included is planned replacement of fire vehicles totaling \$2,875,000 and public works rolling stock totaling \$2,845,000 over the twelve year period.

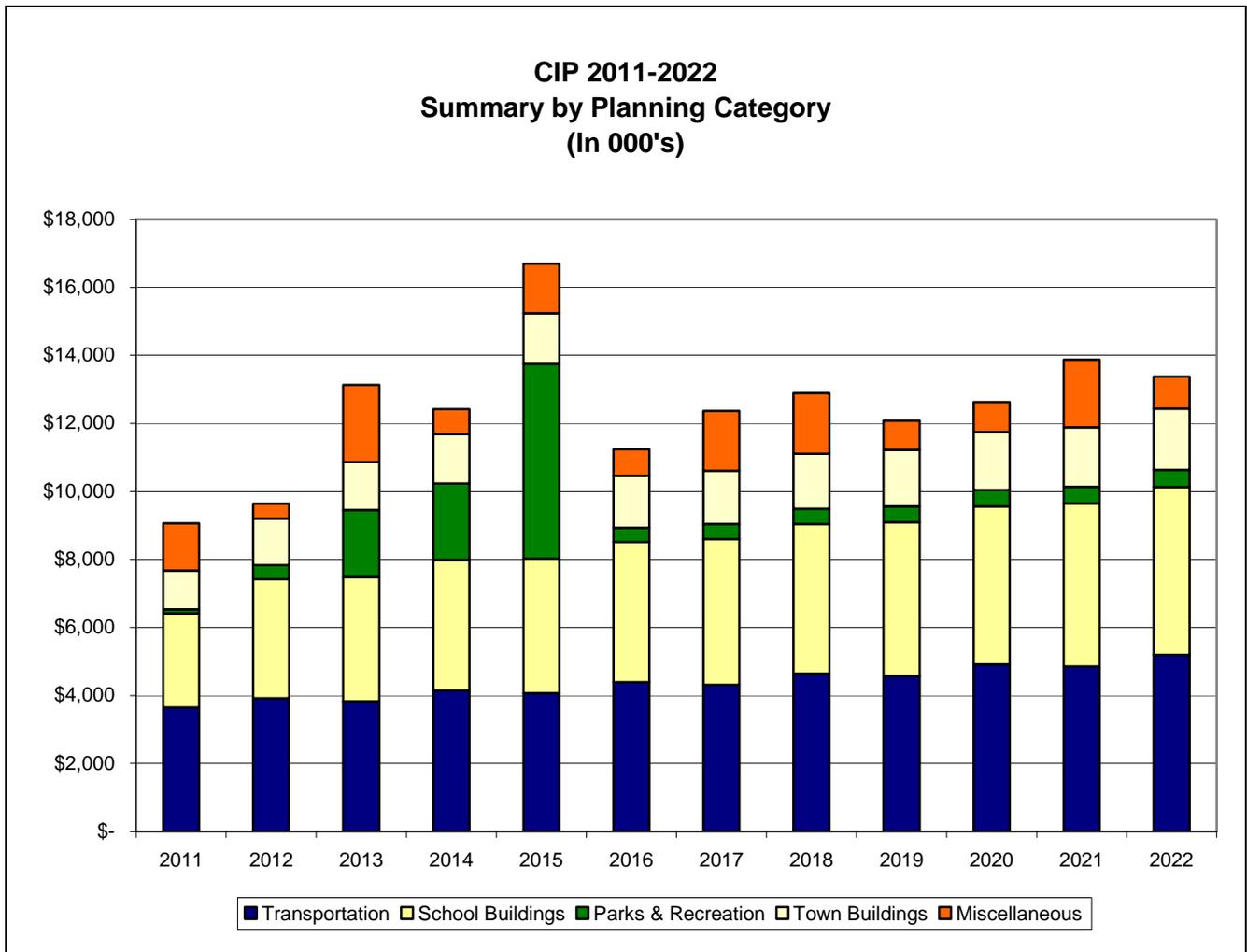
The Town utilizes four main financing sources for the projects in the CIP: long-term debt (General Obligation Bonds), the Capital and Non-Recurring Expenditure Fund, State and Federal Grants, and "other" funds. Projects being financed via other funds include projects at Rockledge Golf Course that will be financed through the 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 can be found on the following pages.

**CAPITAL IMPROVEMENT  
PROGRAM**

Town of West Hartford  
Capital Improvement Plan 2011-2022  
Summary by Planning Category  
(In 000's)

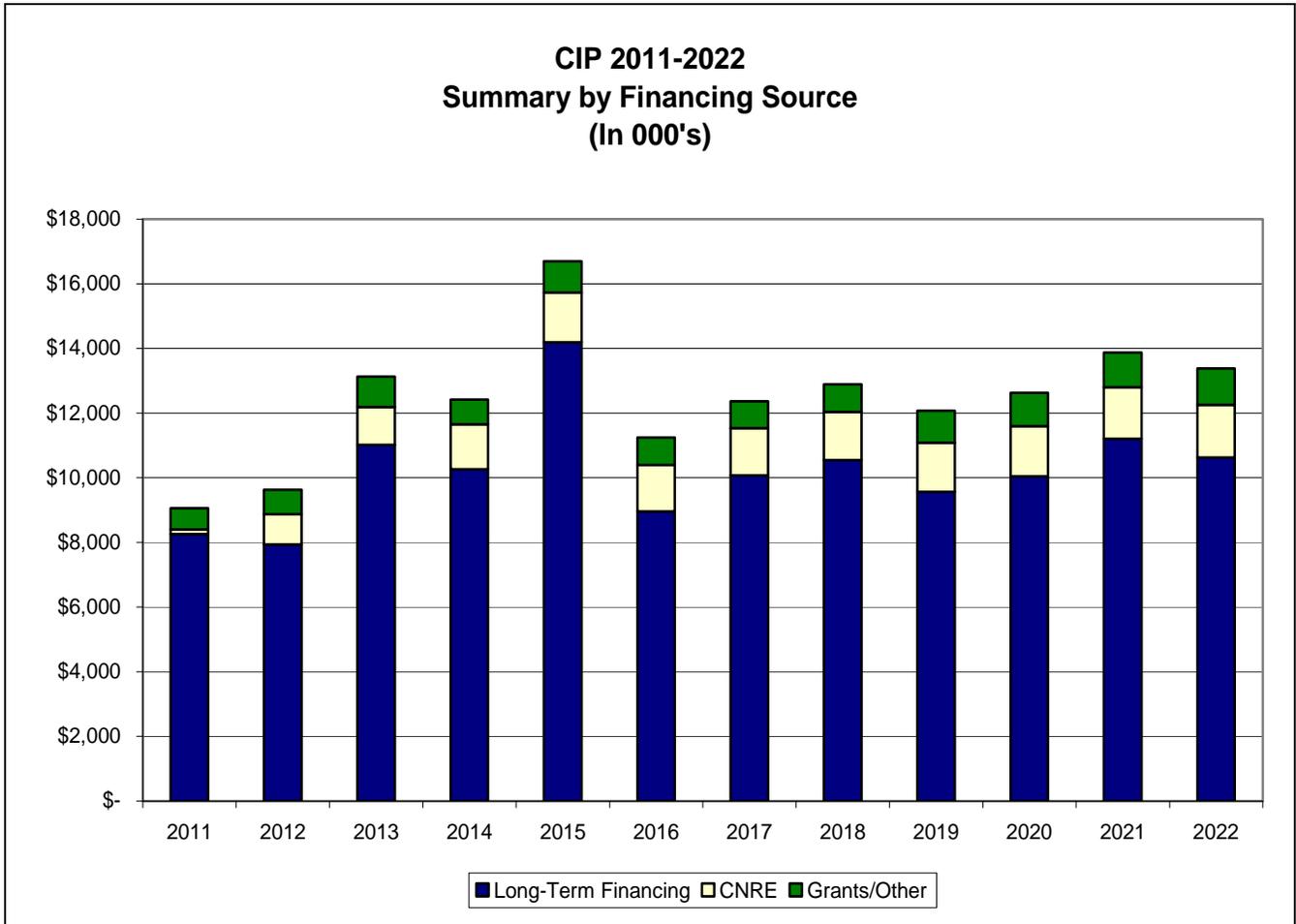
<u>Fiscal Year</u>	<u>Transportation &amp; Infrastructure</u>	<u>School Buildings</u>	<u>Parks &amp; Recreation</u>	<u>Town Buildings</u>	<u>Miscellaneous</u>	<u>Total</u>
2011	3,644	2,768	125	1,131	1,390	9,058
2012	3,917	3,497	417	1,368	436	9,635
2013	3,829	3,653	1,974	1,406	2,267	13,129
2014	4,145	3,840	2,251	1,445	739	12,420
2015	4,064	3,955	5,728	1,485	1,461	16,693
2016	4,387	4,120	425	1,527	784	11,243
2017	4,312	4,290	438	1,570	1,758	12,368
2018	4,641	4,400	451	1,614	1,782	12,888
2019	4,575	4,525	464	1,659	857	12,080
2020	4,912	4,650	477	1,706	883	12,628
2021	4,853	4,790	491	1,754	1,984	13,872
2022	<u>5,197</u>	<u>4,934</u>	<u>505</u>	<u>1,804</u>	<u>936</u>	<u>13,376</u>
<b>TOTAL</b>	<b>52,476</b>	<b>49,422</b>	<b>13,746</b>	<b>18,469</b>	<b>15,277</b>	<b>149,390</b>



**CAPITAL IMPROVEMENT  
PROGRAM**

Town of West Hartford  
Capital Improvement Plan 2011-2022  
Summary by Financing Source  
(In 000's)

<u>Fiscal Year</u>	<u>Long-Term Debt</u>	<u>Capital Non-Recurring Expenditure</u>	<u>Grants</u>	<u>Other</u>	<u>Total</u>
2011	8,263	140	630	25	9,058
2012	7,935	930	770	-	9,635
2013	11,011	1,180	738	200	13,129
2014	10,263	1,394	763	-	12,420
2015	14,187	1,539	817	150	16,693
2016	8,962	1,429	852	-	11,243
2017	10,075	1,461	832	-	12,368
2018	10,545	1,493	850	-	12,888
2019	9,558	1,526	996	-	12,080
2020	10,039	1,560	1,029	-	12,628
2021	11,202	1,595	1,075	-	13,872
2022	<u>10,623</u>	<u>1,630</u>	<u>1,123</u>	-	<u>13,376</u>
<b>TOTAL</b>	<b>122,663</b>	<b>15,877</b>	<b>10,475</b>	<b>375</b>	<b>149,390</b>

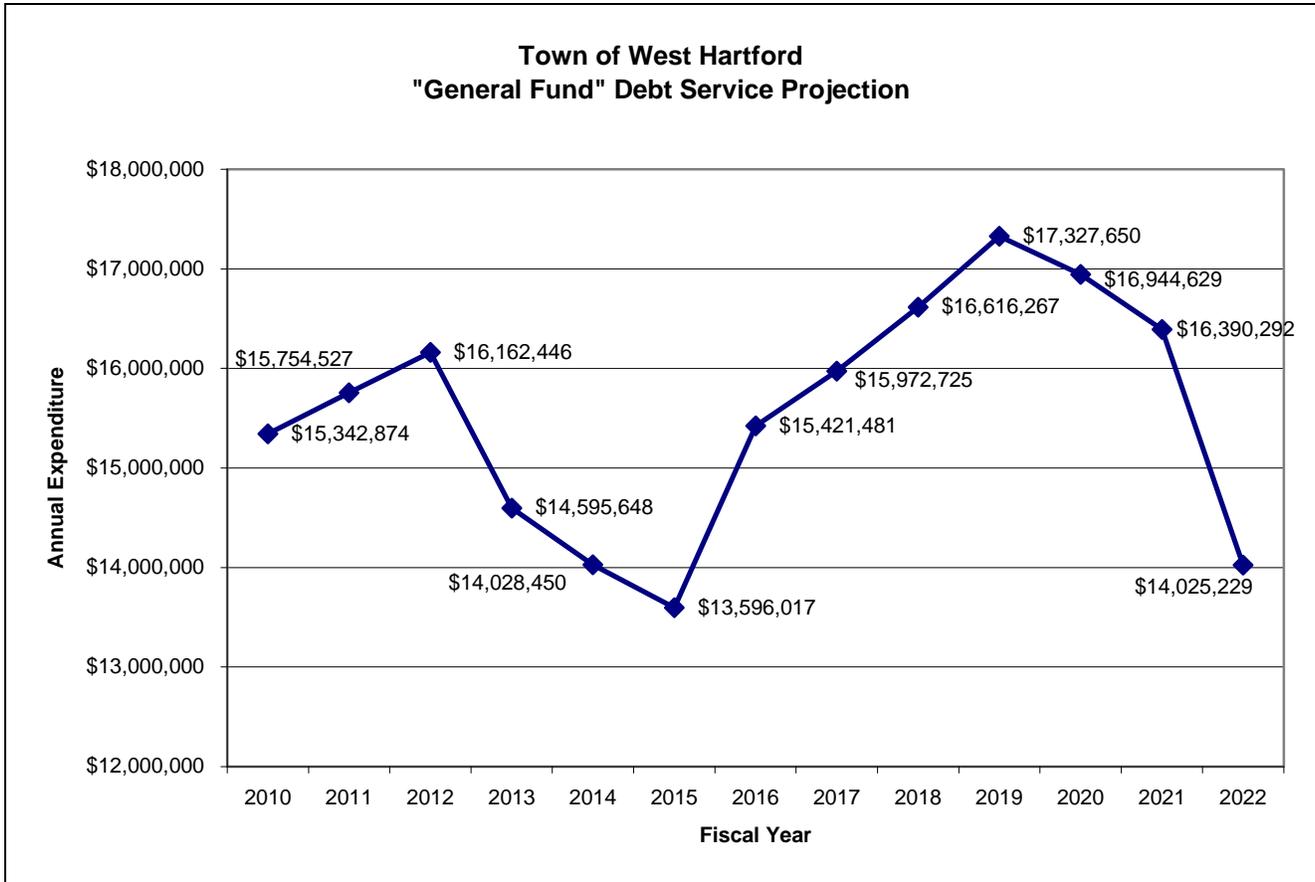


**CAPITAL IMPROVEMENT  
PROGRAM**

In order to ensure that 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.

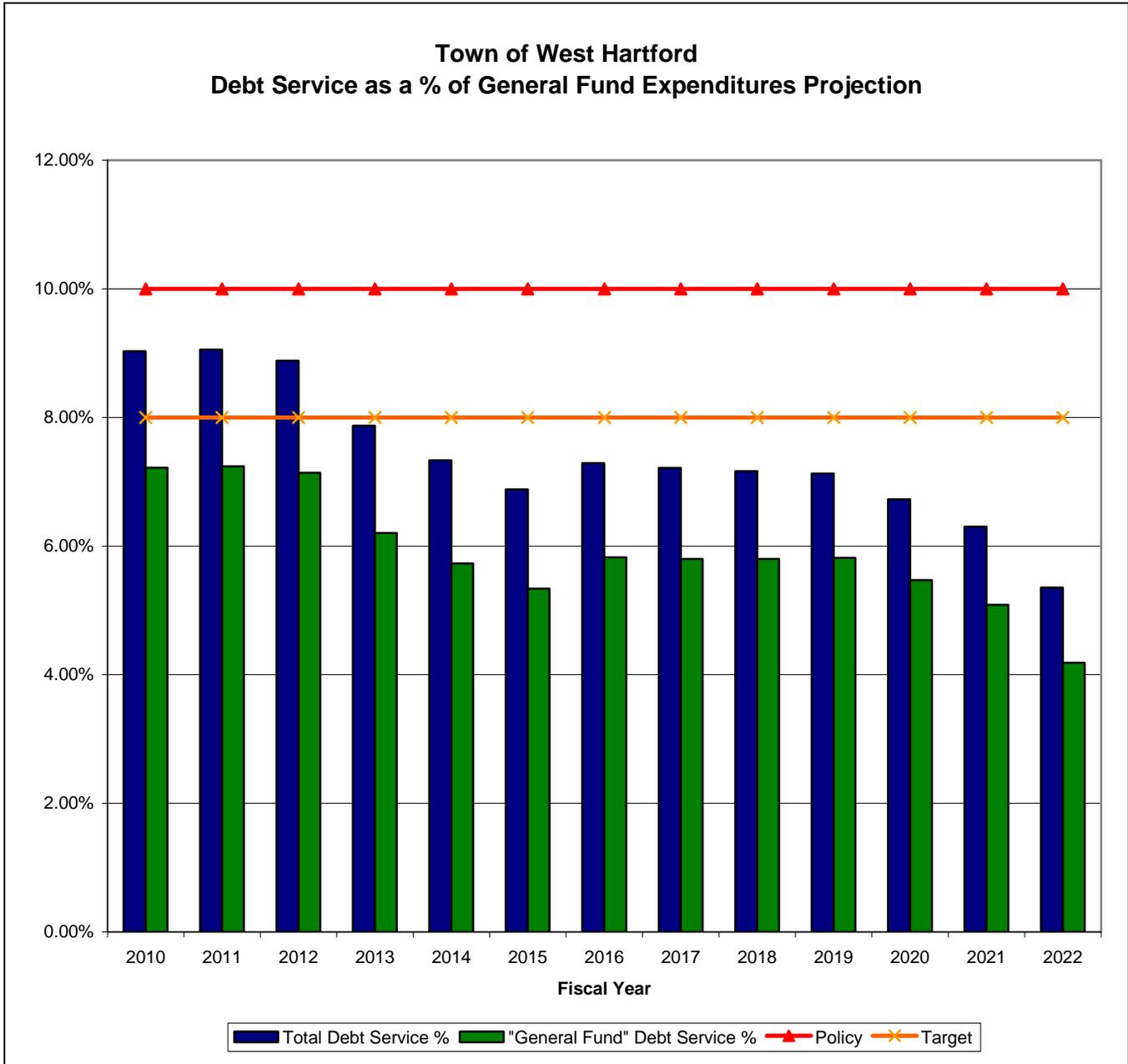
Based upon the CIP presented, it is expected that General Fund debt service, excluding the \$48,820,000 Blue Back Square (BBS) issuance which is being repaid by the project revenues, will vary from a low of \$13,596,017 in fiscal year 2015 to a high of \$17,327,650 in fiscal year 2019. These figures assume an average general obligation bond interest rate of 4.8% and an average term of 15 years, consistent with the type of projects being financed.

The Town refunded debt twice in fiscal year 2010 in order to take advantage of favorable interest rates, resulting in bonded debt service of \$15,754,527 for fiscal year 2011. The funding for debt service will come from two sources. First, \$14,745,488 is appropriated in the General Fund. Second, \$1,009,039 will be funded via the Town’s new Debt Service Fund. This fund is being established in fiscal year 2010 to accumulate resources for principal and interest payments maturing in future years. The initial funding for the Debt Service Fund comes from \$267,250 in bond premium from a previous debt issuance and \$2,758,897 of proceeds received by the Town for a litigation settlement. These proceeds will be utilized over a three year period (FY 2011-\$1,009,039, FY2012-\$1,666,958, FY 2013-\$350,150) to reduce the General Fund appropriation for capital financing to the level expected for fiscal year 2014 based upon the Town’s capital financing model.



**CAPITAL IMPROVEMENT  
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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 over the entire twelve-year period. When only “General Fund” debt service is considered, excluding the \$48,820,000 Blue Back Square (BBS) issuance which is being repaid by the project revenues, the Town meets the 8% target over the entire twelve-year period as well.



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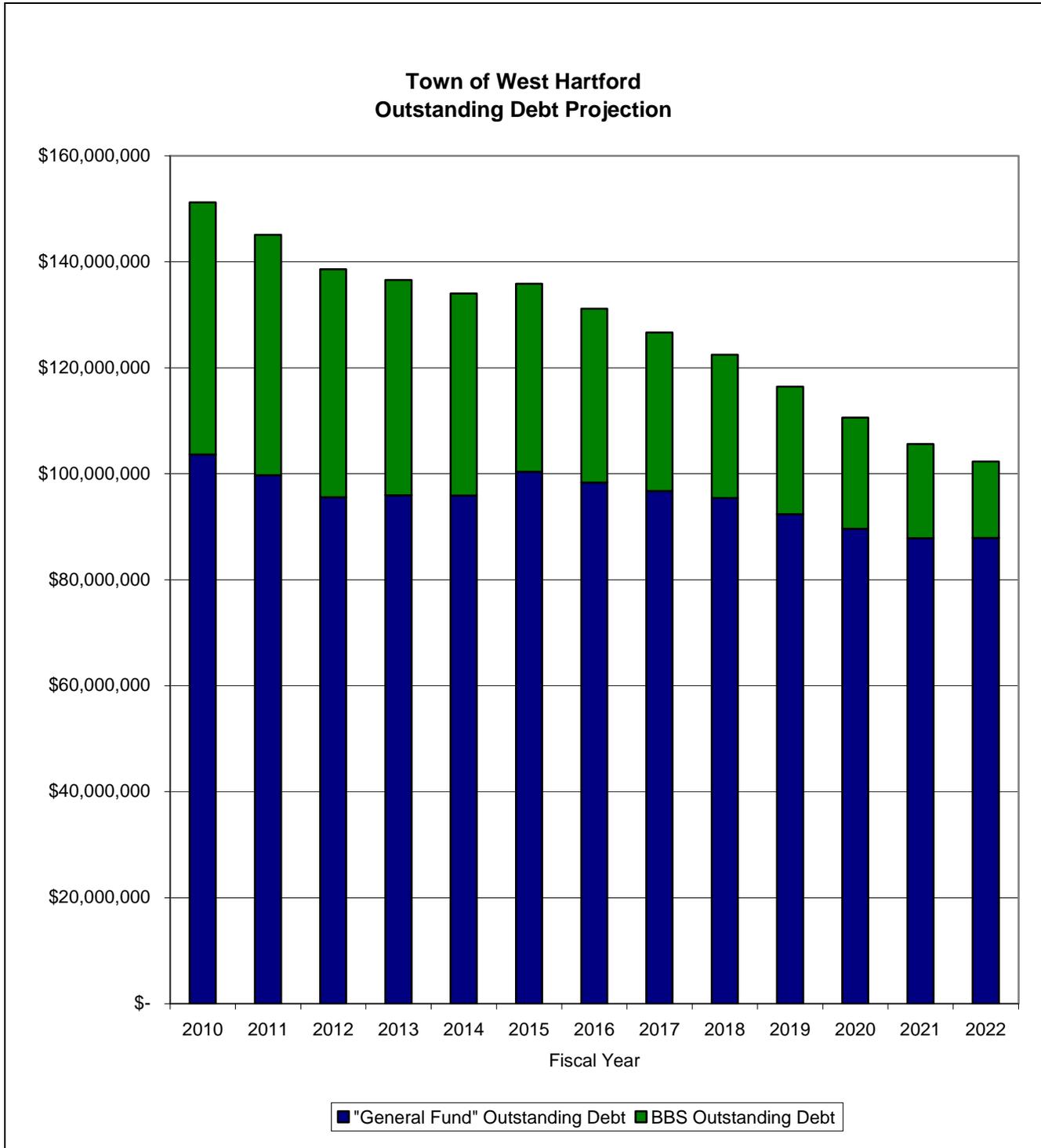
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**CAPITAL IMPROVEMENT  
PROGRAM**

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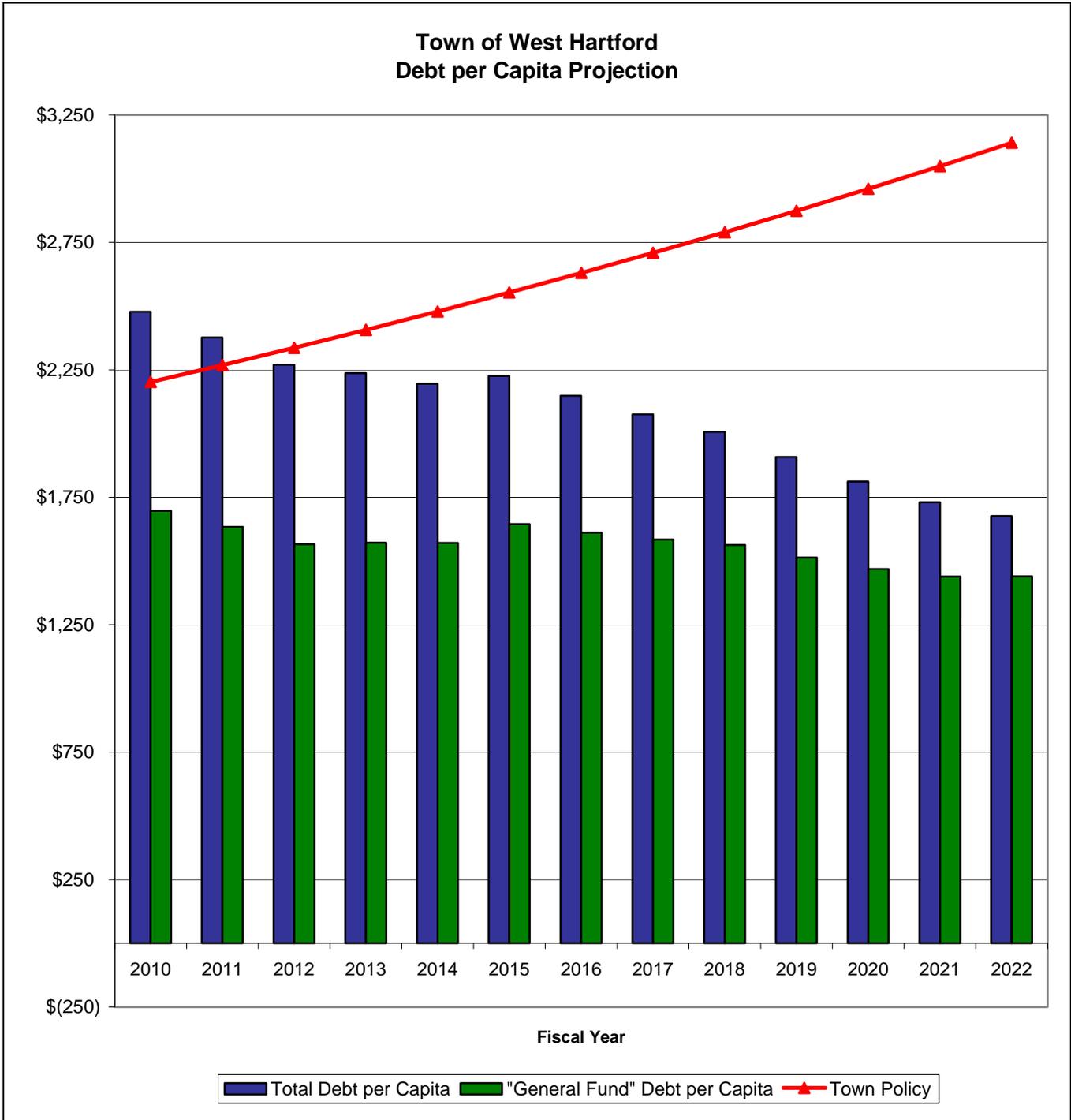
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Total outstanding debt peaked in fiscal year 2010 at \$151,225,000 (including the BBS issuance) and is expected to decrease over the remainder of the period presented.



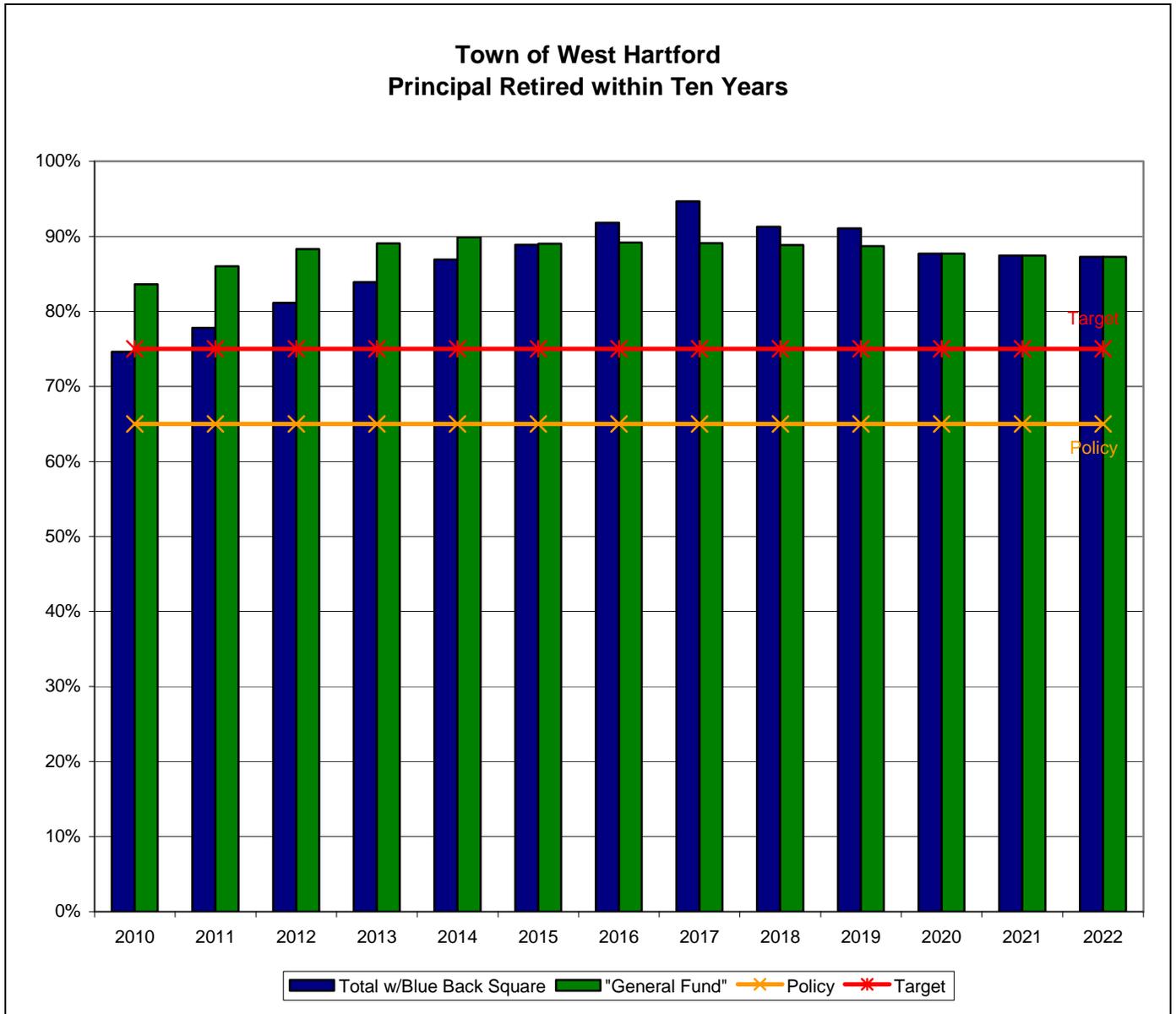
**CAPITAL IMPROVEMENT  
PROGRAM**

Per the Capital Financing Guidelines, debt per capita should not exceed an amount equal to \$2,202 in 2010 dollars (adjusted 3% annually for inflation). As detailed in the graph below, "General Fund" debt per capita is consistently within this parameter, while debt per capita including the BBS issuance is in compliance beginning in fiscal year 2012.



**CAPITAL IMPROVEMENT  
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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.



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.

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

**March 2007**

**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.

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**CAPITAL IMPROVEMENT  
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**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 \$1,900 in FY 2005 (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.

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**CAPITAL IMPROVEMENT  
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**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.
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.
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 directly from the General 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.

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**CAPITAL IMPROVEMENT  
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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 project priorities for each year. 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**

	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>Total</u></b>
Long Term Debt Funding	\$8,263,000	\$7,935,000	\$11,011,000	\$27,209,000
CNRE Contribution	140,000	930,000	1,180,000	2,250,000
Grants	630,000	770,000	738,000	2,138,000
Other	<u>25,000</u>	<u>                    </u>	<u>200,000</u>	<u>225,000</u>
<b>TOTAL</b>	<b>\$9,058,000</b>	<b>\$9,635,000</b>	<b>\$13,129,000</b>	<b>\$31,822,000</b>

**PROGRAM YEARS 1 – 3**

**PLANNING SUMMARY**

	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>Total</u></b>
Transportation & Circulation	\$3,644,000	\$3,917,000	\$3,829,000	\$11,390,000
Education	2,768,000	3,497,000	3,653,000	9,918,000
Parks & Recreation	125,000	417,000	1,974,000	2,516,000
Town Building Improvements	1,131,000	1,368,000	1,406,000	3,905,000
Miscellaneous Improvements	<u>1,390,000</u>	<u>436,000</u>	<u>2,267,000</u>	<u>4,093,000</u>
<b>TOTAL</b>	<b>\$9,058,000</b>	<b>\$9,635,000</b>	<b>\$13,129,000</b>	<b>\$31,822,000</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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TOWN COUNCIL ADOPTED  
SUMMARY OF CAPITAL IMPROVEMENTS  
PROGRAM YEAR 2010-2011  
(IN THOUSANDS)

	BONDS	CNRE	GRANTS	OTHER	TOTAL
<b><u>TRANSPORTATION &amp; CIRCULATION</u></b>					
Arterial Street Reconstruction	1,319				1,319
Neighborhood Street Reconstruction	1,283				1,283
Pedestrian & Bicycle Management	260				260
Storm Water Management	260				260
Street Resurfacing	<u>522</u>	—	—	—	<u>522</u>
Sub-Total	3,644	0	0	0	3,644
<b><u>EDUCATION</u></b>					
Asbestos Removal	70		30		100
Classroom Expansion	310		190		500
Computer Infrastructure		140			140
Heating & Ventilation Systems	750				750
Roofing & Masonry	510		340		850
School Building Improvements	108		70		178
Site and Athletic Field Improvements	<u>250</u>	—	—	—	<u>250</u>
Sub-Total	1,998	140	630	0	2,768
<b><u>PARKS &amp; RECREATION</u></b>					
Athletic Playfield Improvements	100				100
Rockledge Golf Course	—	—	—	<u>25</u>	<u>25</u>
Sub-Total	100	0	0	25	125
<b><u>TOWN BUILDING IMPROVEMENTS</u></b>					
Energy Conservation	100				100
Town Building Improvements	<u>1,031</u>	—	—	—	<u>1,031</u>
Sub-Total	1,131	0	0	0	1,131
<b><u>MISCELLANEOUS IMPROVEMENTS</u></b>					
Public Works Rolling Stock	395				395
Radio Communication System	<u>995</u>	—	—	—	<u>995</u>
Sub-Total	1,390	0	0	0	1,390
<b>TOTAL</b>	<b><u>8,263</u></b>	<b><u>140</u></b>	<b><u>630</u></b>	<b><u>25</u></b>	<b><u>9,058</u></b>

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Arterial Street Reconstruction	Funding Schedule	Program Year	\$1,319,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$1,319,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

### **Description & Justification**

The Arterial Street Reconstruction program is a continuous program to maintain and improve the condition and function of the Town's arterial street system. The Town of West Hartford has 210 miles of roadways of which 57 miles are classified as arterial or collector streets by the Town, the Capital Region Council of Governments, the State Department of Transportation and the Federal Highway Administration. The designation of arterial street allows for the submission of projects on these streets for State and Federal funding. Arterial streets are primarily for the conveyance of thru traffic and have higher traffic volumes. The majority of auto accidents occur on arterial streets. Arterial streets support mass transit systems and have many residential and commercial driveways. The yearly Pavement Condition Survey indicates 5 miles or 11% of arterial streets are in poor pavement condition. All arterial streets have been reconstructed with sufficient base and defined lane arrangements for traffic use over the last 25 years except Farmington Avenue from Trout Brook Drive to Whiting Lane. After a reconstruction project, the arterial street program becomes a rehabilitation of the pavement surface which is far less costly than the reconstruction of the entire pavement structure.

Arterial street reconstructions are coordinated with utility companies to improve the utility facilities serving abutting owners. Arterial street projects are selected based upon the available funding levels from the Town, State or Federal governments, the condition of utilities, accident history, pavement condition, and character of the adjacent properties. The design and appearance of arterial streets establishes the character of the adjacent properties and helps maintain property value, and economic stability.

Several arterial streets are State highways such as New Britain Avenue, Newington Road, Albany Avenue, Simsbury Road, and Bloomfield Avenue. State highways are owned and maintained by the State, however, sidewalks, street lighting and traffic signal power are generally the responsibility of the Town.

The goal is to reconstruct 1 mile of arterial street per year.

**Town of West Hartford** Capital Improvement Program

Project Title	Neighborhood Street Reconstruction	Funding Schedule	Program Year	\$1,283,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$1,283,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

The Neighborhood Street Reconstruction program maintains and improves the street condition, appearance and function of the neighborhood streets serving the majority of residential properties in West Hartford. The neighborhood streets selected for reconstruction are not eligible for State or Federal funds, have poor condition pavements, curbs and storm drainage facilities. The coordination with utility companies to replace gas mains, water mains, sanitary sewers, or other utilities affects the schedule of street reconstruction. The reconstruction of streets includes a detailed survey, replacement of permanent curbing to establish a desired street width, replacement of driveway ramps, sidewalk ramps, storm drainage structures, removal of the existing pavement surface, reconstruction of the existing stone roadway base, placement of 2 courses of new bituminous concrete, appropriate street signs and pavement markings. The purpose of the Neighborhood Street Reconstruction Projects is to maintain the street condition, the character of the street, help preserve property values and create economic stability for the neighborhood.

Neighborhood streets which are eligible for street reconstruction are those that have poor pavement and curbing conditions, have poor vertical geometry, have street parking and have a need for permanent curbing. There are approximately 53 miles of residential street eligible for street reconstruction projects of which about 16 miles are in poor condition. The program goal is the reconstruction of 1.5 miles of residential street per year.

<b>Town of West Hartford Capital Improvement Program</b>			
Project Title (formerly Sidewalk Repair, Commercial Area Development and Trout Brook Trail)	Pedestrian and Bicycle Management	Funding Schedule Program Year	\$260,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$260,000
Fiscal Year	2010-2011	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

### **Description & Justification**

There are 245 miles of sidewalk in Town. In commercial areas with high pedestrian traffic such as West Hartford Center, Elmwood Center, Bishops Corner and Park Road, brick pavers have been installed to reduce tripping hazards and increase sidewalk life expectancy. Pedestrian lighting has been installed in most commercial areas. The Town's residential concrete sidewalk system contains 260,000 slabs and costs approximately \$140/slab to replace. There is no inspection program for sidewalks. Sidewalk repairs are scheduled on a complaint basis. Currently there are about 150 outstanding sidewalk complaints with approximately 300 complaints received each year.

The Town developed preliminary plans for the Trout Brook MultiUse Trail to connect Elmwood with West Hartford Center and the UConn campus along Trout Brook. A section of the trail exists between Park Road and Farmington Avenue; and the Elmwood section of the trail was completed in June 2009 from New Park Avenue to South Quaker Lane connecting with the Elmwood Community Center. The Elmwood section was completed with 80% funding through the State Department of Transportation and about 20% Town funds. The section of the Trout Brook Trail between Farmington Avenue and Asylum Avenue remains to be completed. The estimated cost to complete this section, today, is \$650,000. The total length of the Trout Brook Trail would be 3-1/2 miles.

The Town will continue to respond to sidewalk complaints and address safety problems with sidewalk area.

There are no planned projects for commercial area improvement or expansion of the MultiUse Trail.

**Town of West Hartford Capital Improvement Program**

Project Title	Storm Water Management (formerly Storm Sewer, Bridge & Culvert)	Funding Schedule Program Year	\$260,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$260,000
Fiscal Year	2010-2011	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

There are 17 bridges, 105 culverts, 135 miles of storm sewers, 6,600 drain structures and 19 miles of watercourse within the Town of West Hartford. Bridges over 20 feet in length are inspected every two years by the State Department of Transportation. All bridges are in a safe condition; 4 are rated fair and 13 rated good. The 105 culverts have not been inspected for 8 years. The 135 miles of storm sewers are over 50 years old and have not been inspected. The 6,600 drainage structures are generally in poor condition and are repaired or replaced as part of street reconstruction or resurfacing projects by the curbing contractor or Public Works Department. There are 300 discharge locations of the storm sewer system into watercourses. The Department of Environmental Protection has imposed an unfunded permit program requiring the Town to test water quality with the intent of transferring responsibility for water quality enforcement to the Town at a future date. We do not have the staff capacity to accomplish this task at this time.

The storm water management program includes the repair and replacement of storm sewers as part of street reconstruction or resurfacing projects. There is no program for inspection and/or replacement of culverts or storm sewers. Storm sewer system failures create street ponding and possible property damage. There is undermining of foundations on the Fern Street bridge, North Main Street bridge and Quaker Lane bridge. Storm sewer flooding is occurring on Newport Avenue and North Steele Road. Storm sewer failures have been identified at Asylum Avenue and Trout Brook Drive, Meadowbrook Road, Mohawk Drive, and Farnham Road. Storm sewers are replaced or improved as a result of flooding complaints or roadway failures.

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Street Resurfacing	Funding Schedule	Program Year	\$522,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$522,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

The Townwide resurfacing program replaces poor condition pavement on the street roadway system that are not candidates for Arterial Street Reconstruction or Neighborhood Street Reconstruction programs. There are 100 miles of residential streets in Town eligible for street resurfacing. Street resurfacing includes milling the old pavement surface and replacing it with new bituminous concrete surface. Bituminous curbing is installed on erodible areas only. Driveway ramps are owned by the abutting owners and replaced if necessary to match the new pavement elevation.

Street pavement surfaces crack and break with age and vehicle loading. The broken pavement surface becomes irregular and a hazard to vehicles and pedestrians. Poor condition pavements project a lack of maintenance and deterioration of a street which is reflected in the value of the abutting properties. There are presently 38 miles of residential streets classified in poor condition. The program goal is to resurface 4.5 miles of street each year. The selection of streets is done based on a yearly survey of pavement conditions, geographical distribution throughout the Town, the age of the pavement, number of properties effected, coordination with utilities and available funds. The deterioration of street pavement condition, if not corrected, increases Town liability for property damage and personal injury.

**Town of West Hartford Capital Improvement Program**

Project Title	Asbestos Removal	Funding Schedule	
		Program Year	\$100,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$100,000
Fiscal Year	2010-2011	Funding Source	
		Bonds	\$70,000
		State Grant	\$30,000
Project Duration	Recurring	Operating Budget	
		Impact	None

**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	Classroom Expansion	Funding Schedule	
		Program Year	\$500,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$500,000
Fiscal Year	2010-2011	Funding Source	
		Bonds	\$310,000
		State Grant	\$190,000
Project Duration	Recurring	Operating Budget	
		Impact	None

**Description & Justification**

These funds will be used to purchase and install two modular classrooms at Bugbee school. The modulars will be added to the existing three modular classrooms at Bugbee.

In the current 2009-10 school year, Bugbee is experiencing a two classroom shortfall. Enrollment projections show a persistent one classroom shortfall for Bugbee over the six year projection period. Depending on future Kindergarten enrollment trends which are very difficult to forecast at the school level, that one classroom deficit could grow to a four classroom deficit. This two classroom project will meet the base case projected classroom shortfall within the total available CIP appropriation for the 2010-11 fiscal year.

**Town of West Hartford** Capital Improvement Program

Project Title	Computer Infrastructure	Funding Schedule	Program Year	\$140,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$140,000
Fiscal Year	2010-2011	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

**Description & Justification**

The funding for Computers Infrastructure is used to support the following critical areas:

**NETWORK HARDWARE:** As network devices are added at each school, this increases requirements for network switches, routers, and other hardware related to connecting district computers to the building networks and to the Internet. Funding is used not only to keep pace with network requirements, but in replacing older, slower network equipment with devices that can keep pace with current applications. In addition, these funds are used to purchase network servers, which function as file servers and application servers. Older servers which have reached end of life (in terms of warranty support) are replaced, and new servers for new applications are purchased with this funding. Out-of-warranty but still functional servers are kept on hand as emergency spares, or for less critical functions.

**PERSONAL COMPUTERS/LCD MONITORS:** Purchases of new PCs are made to keep schools up-to-date with hardware which can run all necessary applications, including state-mandated online testing. Bulk purchases are made through the bid process, and computer labs, primarily, are targeted for replacement. The lab PCs that are removed are then placed in classrooms, to replace the oldest computers in the building (which are in turn cannibalized for parts prior to recycling). Additionally, we have initiated wholesale replace of CRT monitors in labs with the more energy and space efficient LCD flat panels.

**PRESENTATION HARDWARE:** To improve classroom instruction, funding is allocated to classroom presentation hardware, which includes projectors (either on AV Carts or ceiling mounted), interactive whiteboards, and associated audio-visual devices. This specific hardware allows teachers to present interactive materials to support instruction.

**OTHER:** Computer Infrastructure funds are also used to purchase network printers for building print requirements, wireless applications where appropriate, laptops for both instructional and administrative use, and replacement of audio-visual hardware such as overhead projectors, etc.

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Heating and Ventilation Systems	Funding Schedule	Program Year	\$750,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$750,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None
<p><b>Description &amp; Justification</b></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. 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. The Board of Education began a replacement program a few years ago that began with the oldest boilers and is expected to run through 2016.</p> <p>This funding will go toward the replacement of ventilation equipment at Hall High School, and chiller replacement at Conard High School.</p>				

**Town of West Hartford Capital Improvement Program**

Project Title	Roofing and Masonry	Funding Schedule	
		Program Year	\$850,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$850,000
Fiscal Year	2010-2011	Funding Source	
		Bonds	\$510,000
		State Grant	\$340,000
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

With 16 buildings of varying age, re-roofing is an annual requirement. Due to financial limitations, most buildings are not totally re-roofed in one year. Rather, they are typically phased over a couple or a few years. Re-roofing includes removal of existing materials and in many cases, insulation with thicker denser materials to provide for increased energy conservation and improved drainage. It also includes the installation of necessary flashings, counter-flashings, drainage improvements and related masonry repairs.

The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces, left unchecked, exposes buildings to obvious water damage and not so obvious long-term structural damage. A systematic reroofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset.

This year's appropriation will be dedicated to the replacement of roofing at Aiken Elementary School and masonry repairs at Charter Oak School.

**Town of West Hartford Capital Improvement Program**

Project Title	School Building Improvements	Funding Schedule	Program Year	\$178,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$178,000
Fiscal Year	2010-2011	Funding Source	Bonds	\$108,000
			State Grant	\$70,000
Project Duration	Recurring	Operating Budget	Impact	None

**Description & Justification**

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.

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 our reinvestment in the schools and our commitment to maintain them in good condition.

Improvements this year will include drainage repairs at Charter Oak School, building repairs at Norfeldt School and Whiting Lane School. Additional funds will be directed to refurbishment of modular classrooms.

**Town of West Hartford** Capital Improvement Program

Project Title	Site and Athletic Field Improvements	Funding Schedule	Program Year	\$250,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$250,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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. This funding is used to upgrade those 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 dedicated to resurfacing and replacement of sidewalks, parking areas and play surfaces throughout the system.

**Town of West Hartford** Capital Improvement Program

Project Title	Athletic Playfield Improvements	Funding Schedule	Program Year	\$100,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$100,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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 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. In addition, funding will be used to upgrade several playgrounds as required.

**Town of West Hartford** Capital Improvement Program

Project Title	Rockledge Golf Course	Funding Schedule	
		Program Year	\$25,000
Department	Human & Leisure Services	Prior Years	-
Category	Parks & Recreation	Total Cost	\$25,000
Fiscal Year	2010-2011	Funding Source	Other
Project Duration	Single	Operating Budget Impact	None

**Description & Justification**

This project makes repairs and improvements at Rockledge Golf Club.

The concession stand building is in need of repairs. Improvements planned include a new roof, siding, and upgrade of the electrical service. In addition, a vending area will be added to serve patrons at times when the building is not open. A restroom facility will be constructed on the golf course to address patron requests and suggestions received from prior golf course surveys. In addition, various drainage improvements will be made throughout the course.

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Energy Conservation	Funding Schedule	Program Year	\$100,000
Department	Facilities Services	Prior Years		-
Category	Building Improvements	Total Cost		\$100,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None
<p><b>Description &amp; Justification</b></p> <p>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 management consultant 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 could 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.</p> <p>Natural gas and electricity costs have risen dramatically over the last several years and most likely will continue to increase in the near future. Investments need to be made that reduce the consumption of energy as one strategy in managing 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.</p>				

<b>Town of West Hartford Capital Improvement Program</b>			
Project Title	Town Building Improvements	Funding Schedule	Program Year \$1,031,000
Department	Facilities Services	Prior Years	-
Category	Building Improvements	Total Cost	\$1,031,000
Fiscal Year	2010-2011	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None
<p><b>Description &amp; Justification</b></p> <p>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 project allows for improvements to the Town's municipal buildings to maintain and upgrade the systems and appearance of the buildings by completing minor projects and replacing equipment and building amenities.</p> <p><b>Heating, Ventilation and Cooling (HVAC) Systems</b></p> <p>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 will lower operating costs.</p> <p>Anticipated HVAC projects in 2010-2011 include replacement of the air handling unit at Faxon Library, the furnace at the dog pound, and the boiler and water heater at Fern Park.</p> <p><b>Roofing and Masonry</b></p> <p>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.</p> <p>Anticipated projects in 2010-2011 include replacement of selected sections of the roof and masonry repairs at Town Hall, as well as waterproofing of elevator pits at Town Hall and Faxon Library.</p> <p><b>Interior Finishes, Fixtures and Furnishings</b></p> <p>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.</p> <p>In 2010-2011 we plan to replace carpeting on one floor of Town Hall.</p>			

**Town of West Hartford** Capital Improvement Program

Project Title	Town Building Improvements	Funding Schedule	Program Year	\$1,031,000
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**Description & Justification (continued)**

**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.

In 2010-2011 the Saltbox Gallery, a Town-owned building leased to the West Hartford Art League, will be renovated to address code compliance and structural issues. In addition, the Town will address the need for a fuel station and indoor wash bay at the Public Works Facility.

**Town of West Hartford** Capital Improvement Program

Project Title	Public Works Rolling Stock	Funding Schedule	Program Year	\$395,000
Department	Public Works	Prior Years		-
Category	Miscellaneous	Total Cost		\$395,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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.

Equipment that may be replaced with this appropriation include a loader, a mini-excavator, three (3) small dump trucks with plows, an F-350 pick-up truck, or other rolling stock to meet the operational needs of the department.

**Town of West Hartford** Capital Improvement Program

Project Title	Radio Communication System	Funding Schedule	Program Year	\$995,000
Department	Town-wide	Prior Years		\$475,000
Category	Miscellaneous	Total Cost		\$1,470,000
Fiscal Year	2010-2011	Funding Source		Bonds
Project Duration	Year 3 of 3	Operating Budget Impact		(\$24,000)

**Description & Justification**

This is the final year of the multi-year project to replace critical elements of the town-wide radio communications system to maintain operational reliability. There are 694 radios on the town-wide system used by the Police, Fire, Public Works, Leisure Services, Plant & Facilities and School Departments. The current system is an 800MHz trunked analog system with 5 channels that operates out of three remote sites (Avon Mountain off Deercliff Road in Avon, Hamilton Heights in West Hartford, Avery Heights in Hartford) which are connected by leased T-1 circuits to the main control room at the Police Station. The current system was purchased in 1998 and is now 12 years old. There are four (4) major components that comprise the radio system. At the core of the system are two controllers and six remote controllers which are no longer supported by Motorola and were replaced in September 2009. There are five (5) dispatch consoles in the Emergency Reporting Center which have existing life expectancy and do not yet have to be replaced. There are GPS repeaters at each of the four sites which are no longer supported, out of production and replacement parts are unavailable. The Town replaced one unit and the main unit in 2008 and the remaining two remote units in 2009. The 694 field radios comprise the final component of the system. After the completion of the radio system re-banding and the replacement of 62 mobile radios in late 2009, there remain 155 units that need to be replaced. Replacement of these 67 portable radios and 88 mobile radios will complete the upgrade of the radio system.

All of the backbone equipment, portable radios and mobile radios are past their life expectancy, no longer supported by Motorola and out of production. Repairs are made to our existing equipment only as long as parts are available. The leased circuits connecting the remote sites have repeated failures that have caused one or more of the remote sites to go down numerous times over the past 3 years, especially after heavy rain or snow storms. During these periods the radio system operates with limited coverage on 2 conventional channels set up for Police and Fire only. The Town replaced 391 subscriber units at no cost as part of the federal rebanding program. The federally mandated program between Sprint/Nextel and the federal government is aimed at eliminating interference between private cell phones, walkie-talkie radios and public safety radio systems. The Town's operating radio frequency has been moved to a new location on the 800 MHz radio band which required the replacing of many of the portable and mobile radio units at Sprint/Nextel's expense.

**Town of West Hartford Capital Improvement Program**

Project Title Radio Communication System	Funding Schedule Program Year                      \$995,000
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**Description & Justification (continued)**

Our main site is located in Avon and leased from WFSB. The Town pays \$1,500 per month for the use of the tower and radio equipment room and is subject to cost sharing assessments to upgrade the equipment room and pay for monthly utility charges. The Town considered moving to another facility, but was not able to terminate its lease with WFSB. As a result, the Town will retain its primary site, but utilize a Federal Grant received from the Federal Emergency Management Agency (FEMA) to purchase broadband wireless antenna equipment which will serve as the backbone of the public safety communication system and replace the leased T-1 circuits between antennae sites with wireless communications.

In evaluating the different options available to maintain system performance, cost, complexity of the project, reliability of the proposed technology and life expectancy were considered. The options ranged from the replacing the equipment that had exceeded its life expectancy (\$1,470,000) to a fully digital radio system (\$5,200,000). The project selected makes the minimum investment necessary to maintain the performance of the existing system for the next seven (7) years. There were two major additional considerations in recommending the minimal investment. The implementation of a digital system requires the purchase of a switch which costs upwards of \$1,000,000. The capacity of this switch far exceeds what would be required to support a digital system for West Hartford. There would be opportunities for the Town to partner with other municipalities to share this switch and share in the initial investment and on-going maintenance costs. Additionally, there are potentially new technologies on the horizon that would support the convergence of voice and data communication for public safety. This project will allow the Town to maintain the reliability of the existing system and provide sufficient time to explore these issues before deciding to invest in a fully digital system.

Funding in the first two years totaled \$475,000. In this third year of the project, the balance of the subscriber units will be replaced (\$995,000).

Project Summary

Antennae Relocation & Wireless Backbone	\$83,000
Replace controllers	260,000
Replace GPS units	132,000
Replace subscriber units	<u>995,000</u>
Project Total	\$1,470,000

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TOWN COUNCIL ADOPTED  
SUMMARY OF CAPITAL IMPROVEMENTS  
PROGRAM YEAR 2011-2012  
(IN THOUSANDS)

	BONDS	CNRE	GRANTS	OTHER	TOTAL
<b><u>TRANSPORTATION &amp; CIRCULATION</u></b>					
Arterial Street Reconstruction	1,208				1,208
Neighborhood Street Reconstruction	1,321				1,321
Pedestrian & Bicycle Management	268				268
Storm Water Management	320				320
Street Resurfacing	538				538
Traffic System Management	<u>200</u>	<u>62</u>	<u>—</u>	<u>—</u>	<u>262</u>
Sub-Total	3,855	62	0	0	3,917
<b><u>EDUCATION</u></b>					
Asbestos Removal	140		60		200
Computer Infrastructure		200			200
Furniture & Equipment Replacement		65			65
Heating & Ventilation Systems	750				750
Roofing & Masonry	510		340		850
School Building Improvements	562		370		932
Site and Athletic Field Improvements	250				250
Window Replacement	<u>250</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>250</u>
Sub-Total	2,462	265	770	0	3,497
<b><u>PARKS &amp; RECREATION</u></b>					
Athletic Playfield Improvements	100				100
Outdoor Pool Improvements		110			110
Park/Playscape Improvements		57			57
Pools – Fernridge	<u>150</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>150</u>
Sub-Total	250	167	0	0	417
<b><u>TOWN BUILDING IMPROVEMENTS</u></b>					
Energy Conservation	100				100
Town Building Improvements	<u>1,268</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>1,268</u>
Sub-Total	1,368	0	0	0	1,368
<b><u>MISCELLANEOUS IMPROVEMENTS</u></b>					
Communications Infrastructure		<u>436</u>			<u>436</u>
Sub-Total	0	436	0	0	436
<b>TOTAL</b>	<u>7,935</u>	<u>930</u>	<u>770</u>	<u>0</u>	<u>9,635</u>

<b>Town of West Hartford</b> Capital Improvement Program				
Project Title	Arterial Street Reconstruction	Funding Schedule	Program Year	\$1,208,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$1,208,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

### **Description & Justification**

The Arterial Street Reconstruction program is a continuous program to maintain and improve the condition and function of the Town's arterial street system. The Town of West Hartford has 210 miles of roadways of which 57 miles are classified as arterial or collector streets by the Town, the Capital Region Council of Governments, the State Department of Transportation and the Federal Highway Administration. The designation of arterial street allows for the submission of projects on these streets for State and Federal funding. Arterial streets are primarily for the conveyance of thru traffic and have higher traffic volumes. The majority of auto accidents occur on arterial streets. Arterial streets support mass transit systems and have many residential and commercial driveways. The yearly Pavement Condition Survey indicates 5 miles or 11% of arterial streets are in poor pavement condition. All arterial streets have been reconstructed with sufficient base and defined lane arrangements for traffic use over the last 25 years except Farmington Avenue from Trout Brook Drive to Whiting Lane. After a reconstruction project, the arterial street program becomes a rehabilitation of the pavement surface which is far less costly than the reconstruction of the entire pavement structure.

Arterial street reconstructions are coordinated with utility companies to improve the utility facilities serving abutting owners. Arterial street projects are selected based upon the available funding levels from the Town, State or Federal governments, the condition of utilities, accident history, pavement condition, and character of the adjacent properties. The design and appearance of arterial streets establishes the character of the adjacent properties and helps maintain property value, and economic stability.

Several arterial streets are State highways such as New Britain Avenue, Newington Road, Albany Avenue, Simsbury Road, and Bloomfield Avenue. State highways are owned and maintained by the State, however, sidewalks, street lighting and traffic signal power are generally the responsibility of the Town.

The goal is to reconstruct 1 mile of arterial street per year.

**Town of West Hartford** Capital Improvement Program

Project Title	Neighborhood Street Reconstruction	Funding Schedule	Program Year	\$1,321,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$1,321,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

The Neighborhood Street Reconstruction program maintains and improves the street condition, appearance and function of the neighborhood streets serving the majority of residential properties in West Hartford. The neighborhood streets selected for reconstruction are not eligible for State or Federal funds, have poor condition pavements, curbs and storm drainage facilities. The coordination with utility companies to replace gas mains, water mains, sanitary sewers, or other utilities affects the schedule of street reconstruction. The reconstruction of streets includes a detailed survey, replacement of permanent curbing to establish a desired street width, replacement of driveway ramps, sidewalk ramps, storm drainage structures, removal of the existing pavement surface, reconstruction of the existing stone roadway base, placement of 2 courses of new bituminous concrete, appropriate street signs and pavement markings. The purpose of the Neighborhood Street Reconstruction Projects is to maintain the street condition, the character of the street, help preserve property values and create economic stability for the neighborhood.

Neighborhood streets which are eligible for street reconstruction are those that have poor pavement and curbing conditions, have poor vertical geometry, have street parking and have a need for permanent curbing. There are approximately 53 miles of residential street eligible for street reconstruction projects of which about 16 miles are in poor condition. The program goal is the reconstruction of 1.5 miles of residential street per year.

<b>Town of West Hartford Capital Improvement Program</b>			
Project Title (formerly Sidewalk Repair, Commercial Area Development and Trout Brook Trail)	Pedestrian and Bicycle Management	Funding Schedule Program Year	\$268,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$268,000
Fiscal Year	2011-2012	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

### **Description & Justification**

There are 245 miles of sidewalk in Town. In commercial areas with high pedestrian traffic such as West Hartford Center, Elmwood Center, Bishops Corner and Park Road, brick pavers have been installed to reduce tripping hazards and increase sidewalk life expectancy. Pedestrian lighting has been installed in most commercial areas. The Town's residential concrete sidewalk system contains 260,000 slabs and costs approximately \$140/slab to replace. There is no inspection program for sidewalks. Sidewalk repairs are scheduled on a complaint basis. Currently there are about 150 outstanding sidewalk complaints with approximately 300 complaints received each year.

The Town has developed preliminary plans for the Trout Brook MultiUse Trail to connect Elmwood with West Hartford Center and the UConn campus along Trout Brook. A section of the trail exists between Park Road and Farmington Avenue; and the Elmwood section of the trail was completed in June 2009 from New Park Avenue to South Quaker Lane connecting with the Elmwood Community Center. The Elmwood section was completed with 80% funding through the State Department of Transportation and about 20% Town funds. The section of the Trout Brook Trail between Farmington Avenue and Asylum Avenue remains to be completed. The estimated cost to complete this section, today, is \$650,000. The total length of the Trout Brook Trail would be 3-1/2 miles.

The Town will continue to respond to sidewalk complaints and address safety problems with sidewalk area.

There are no planned projects for commercial area improvement or expansion of the MultiUse Trail.

**Town of West Hartford Capital Improvement Program**

Project Title	Storm Water Management (formerly Storm Sewer, Bridge & Culvert)	Funding Schedule	
		Program Year	\$320,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$320,000
Fiscal Year	2011-2012	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

There are 17 bridges, 105 culverts, 135 miles of storm sewers, 6,600 drain structures and 19 miles of watercourse within the Town of West Hartford. Bridges over 20 feet in length are inspected every two years by the State Department of Transportation. All bridges are in a safe condition; 4 are rated fair and 13 rated good. The 105 culverts have not been inspected for 8 years. The 135 miles of storm sewers are over 50 years old and have not been inspected. The 6,600 drainage structures are generally in poor condition and are repaired or replaced as part of street reconstruction or resurfacing projects by the curbing contractor or Public Works Department. There are 300 discharge locations of the storm sewer system into watercourses. The Department of Environmental Protection has imposed an unfunded permit program requiring the Town to test water quality with the intent of transferring responsibility for water quality enforcement to the Town at a future date. We do not have the staff capacity to accomplish this task at this time.

The storm water management program includes the repair and replacement of storm sewers as part of street reconstruction or resurfacing projects. There is no program for inspection and/or replacement of culverts or storm sewers. Storm sewer system failures create street ponding and possible property damage. There is undermining of foundations on the Fern Street bridge, North Main Street bridge and Quaker Lane bridge. Storm sewer flooding is occurring on Newport Avenue and North Steele Road. Storm sewer failures have been identified at Asylum Avenue and Trout Brook Drive, Meadowbrook Road, Mohawk Drive, and Farnham Road. Storm sewers are replaced or improved as a result of flooding complaints or roadway failures.

**Town of West Hartford** Capital Improvement Program

Project Title	Street Resurfacing	Funding Schedule	Program Year	\$538,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$538,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

The Townwide resurfacing program replaces poor condition pavement on the street roadway system that are not candidates for Arterial Street Reconstruction or Neighborhood Street Reconstruction programs. There are 100 miles of residential streets in Town eligible for street resurfacing. Street resurfacing includes milling the old pavement surface and replacing it with new bituminous concrete surface. Bituminous curbing is installed on erodible areas only. Driveway ramps are owned by the abutting owners and replaced if necessary to match the new pavement elevation.

Street pavement surfaces crack and break with age and vehicle loading. The broken pavement surface becomes irregular and a hazard to vehicles and pedestrians. Poor condition pavements project a lack of maintenance and deterioration of a street which is reflected in the value of the abutting properties. There are presently 38 miles of residential streets classified in poor condition. The program goal is to resurface 4.5 miles of street each year. The selection of streets is done based on a yearly survey of pavement conditions, geographical distribution throughout the Town, the age of the pavement, number of properties effected, coordination with utilities and available funds. The deterioration of street pavement condition, if not corrected, increases Town liability for property damage and personal injury.

<b>Town of West Hartford Capital Improvement Program</b>			
Project Title	Traffic System Management (formerly Traffic Signal Enhancement & Pavement Marking)	Funding Schedule	Program Year
			\$262,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$262,000
Fiscal Year	2011-2012	Funding Source	
		CNRE	\$62,000
		Bonds	\$200,000
Project Duration	Recurring	Operating Budget Impact	None
<p><b>Description &amp; Justification</b></p> <p>The Traffic System Management includes enhancements to the traffic signal system, roadway signs, pavement markings, guard rail installation, traffic calming measures, accident management and street lighting. There are 106 traffic signals, 45 owned and maintained by the State, 61 owned and maintained by the Town; 1,115 stop signs, 450 crosswalks, 30 miles of pavement markings and 2 miles of guard rail to assist hundreds of thousands of motorists, pedestrians, bicyclists and other forms of transportation that use Town streets each day. There are approximately 3,000 vehicle accidents per year, of which about 800 personal injuries occur. There are 6,500 street lights throughout the Town requiring \$475,000 for electricity from the operating budget. It is important to the quality of life to provide a safe transportation system.</p> <p>The Town has received Federal grants of \$6.5 million to replace 32 of the Town owned traffic signals. Of the 29 remaining, 12 Town owned traffic signals will need to be updated within the next 10 years. Significant energy conservation in addition to enhanced safety has resulted with the upgraded signals thus far.</p> <p>The street line painting has been expanded to channelize motorists and provide painted shoulder areas on some streets for cyclists. This has an added advantage, in some cases, of slowing traffic.</p> <p>Traffic calming features such as chicanes, planted islands, narrowing of through lanes, and left turn lanes have been created to increase driver attention, improve the appearance of the streetscape, and reduce accidents. The Town has recently purchased electronic speed display signs to help reduce speeds and a radar camera unit to notify vehicle owners of speeding.</p> <p>The Town is investigating measures to reduce the operating costs of the street lighting service including the removal of densely spaced lights, or the conversion to newer LED technology.</p>			

**Town of West Hartford Capital Improvement Program**

Project Title	Asbestos Removal	Funding Schedule	
		Program Year	\$200,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$200,000
Fiscal Year	2011-2012	Funding Source	
		Bonds	\$140,000
		State Grant	\$60,000
Project Duration	Recurring	Operating Budget	
		Impact	None

**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	Funding Schedule	Program Year	\$200,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$200,000
Fiscal Year	2011-2012	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

**Description & Justification**

The funding for Computers Infrastructure is used to support the following critical areas:

**NETWORK HARDWARE:** As network devices are added at each school, this increases requirements for network switches, routers, and other hardware related to connecting district computers to the building networks and to the Internet. Funding is used not only to keep pace with network requirements, but in replacing older, slower network equipment with devices that can keep pace with current applications. In addition, these funds are used to purchase network servers, which function as file servers and application servers. Older servers which have reached end of life (in terms of warranty support) are replaced, and new servers for new applications are purchased with this funding. Out-of-warranty but still functional servers are kept on hand as emergency spares, or for less critical functions.

**PERSONAL COMPUTERS/LCD MONITORS:** Purchases of new PCs are made to keep schools up-to-date with hardware which can run all necessary applications, including state-mandated online testing. Bulk purchases are made through the bid process, and computer labs, primarily, are targeted for replacement. The lab PCs that are removed are then placed in classrooms, to replace the oldest computers in the building (which are in turn cannibalized for parts prior to recycling). Additionally, we have initiated wholesale replace of CRT monitors in labs with the more energy and space efficient LCD flat panels.

**PRESENTATION HARDWARE:** To improve classroom instruction, funding is allocated to classroom presentation hardware, which includes projectors (either on AV Carts or ceiling mounted), interactive whiteboards, and associated audio-visual devices. This specific hardware allows teachers to present interactive materials to support instruction.

**OTHER:** Computer Infrastructure funds are also used to purchase network printers for building print requirements, wireless applications where appropriate, laptops for both instructional and administrative use, and replacement of audio-visual hardware such as overhead projectors, etc.

**Town of West Hartford Capital Improvement Program**

Project Title	Furniture and Equipment Replacement	Funding Schedule	Program Year	\$65,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$65,000
Fiscal Year	2011-2012	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

**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.

We have pushed the majority of our furniture and equipment inventory well beyond its life span and have only sporadically replaced furniture and equipment in the past few years. Much of our 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.

**Town of West Hartford Capital Improvement Program**

Project Title	Heating and Ventilation Systems	Funding Schedule	Program Year	\$750,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$750,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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. 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. The Board of Education began a replacement program a few years ago that began with the oldest boilers and is expected to run through 2016.

This funding will go toward the replacement of ventilation equipment in the King Philip auditorium and replacement of the boiler at Charter Oak school, as well as design work for an upgrade of the Bugbee ventilation system.

**Town of West Hartford Capital Improvement Program**

Project Title	Roofing and Masonry	Funding Schedule	
		Program Year	\$850,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$850,000
Fiscal Year	2011-2012	Funding Source	
		Bonds	\$510,000
		State Grant	\$340,000
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

With 16 buildings of varying age, re-roofing is an annual requirement. Due to financial limitations, most buildings are not totally re-roofed in one year. Rather, they are typically phased over a couple or a few years. Re-roofing includes removal of existing materials and in many cases, insulation with thicker denser materials to provide for increased energy conservation and improved drainage. It also includes the installation of necessary flashings, counter-flashings, drainage improvements and related masonry repairs.

The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces, left unchecked, exposes buildings to obvious water damage and not so obvious long-term structural damage. A systematic reroofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset.

This year's appropriation will be dedicated to the partial replacement of roofing at King Philip Middle School and masonry repairs at Hall High School.

**Town of West Hartford** Capital Improvement Program

Project Title	School Building Improvements	Funding Schedule	Program Year	\$932,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$932,000
Fiscal Year	2011-2012	Funding Source	Bonds	\$562,000
			State Grant	\$370,000
Project Duration	Recurring	Operating Budget	Impact	None

**Description & Justification**

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.

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 our reinvestment in the schools and our commitment to maintain them in good condition.

Improvements this year will include building and fire code improvements, continuation of accessibility improvements throughout the system, masonry improvements at various schools, elevator upgrades, flooring replacement system-wide, and a continuation of the refurbishment of modular classrooms.

**Town of West Hartford** Capital Improvement Program

Project Title	Site and Athletic Field Improvements	Funding Schedule	Program Year	\$250,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$250,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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. This funding is used to upgrade those 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 dedicated to resurfacing and replacement of sidewalks, parking areas and play surfaces throughout the system.

**Town of West Hartford** Capital Improvement Program

Project Title	Window Replacement	Funding Schedule	Program Year	\$250,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$250,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

These funds will be used for window replacement. Many of the buildings within the district have window systems nearly 50 years old with single pane glass. New window systems are double paned and energy efficient. Because the new windows are weather tight, only buildings with an adequate ventilation system may receive window upgrades. The cost of replacing the windows at any school can vary widely. At some schools the windows make up an entire exterior wall, while at others the windows can be only one third of that wall. This is an ongoing effort that will take many years to complete.

The existing windows at most elementary schools are the original single pane installations that are in some instances in poor condition. Window replacements will save energy and provide a better comfort level in the classrooms.

This year's allocation along with future allocations will be dedicated to the design and replacement of windows at Webster Hill Elementary School.

**Town of West Hartford** Capital Improvement Program

Project Title	Athletic Playfield Improvements	Funding Schedule	Program Year	\$100,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$100,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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 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. In addition, funding will be used to upgrade several playgrounds as required.

**Town of West Hartford** Capital Improvement Program

Project Title	Outdoor Pool Improvements	Funding Schedule	Program Year	\$110,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$110,000
Fiscal Year	2011-2012	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

**Description & Justification**

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.

This project will allow for improvements at the Town’s six outdoor pools, two wading pools and two 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.

**Town of West Hartford** Capital Improvement Program

Project Title	Park/Playscape Improvements	Funding Schedule	Program Year	\$57,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$57,000
Fiscal Year	2011-2012	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

**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	Pools - Fernridge	Funding Schedule	
		Program Year	\$150,000
Department	Human & Leisure Services	Prior Years	-
Category	Parks & Recreation	Total Cost	\$150,000
Fiscal Year	2011-2012	Funding Source	Bonds
Project Duration	Single	Operating Budget Impact	None

**Description & Justification**

The Fernridge Aquatics area consists of one 245,000 gallon “L” shaped main pool, one wading pool and a 2,670 square foot bath house. The last major renovation to the pool dates back to the 1960’s. This project will consist of major renovations to the main pool, the elimination of the wading pool and pump house, upgrades to the filtration, plumbing and gutter systems as well as building and fencing upgrades to meet current standards.

With the goal of meeting current standards and codes, the CIP plan will address the core issues of accessibility, efficiency, public safety and convenience for the outdated aquatics systems currently in place. All planned upgrades will be geared toward providing a more efficient, accessible and safe area intended to enhance aquatic offerings while meeting current standards.

**Town of West Hartford Capital Improvement Program**

Project Title	Energy Conservation	Funding Schedule	Program Year	\$100,000
Department	Facilities Services	Prior Years		-
Category	Building Improvements	Total Cost		\$100,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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 management consultant 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 could 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 have risen dramatically over the last several years and most likely will continue to increase in the near future. Investments need to be made that reduce the consumption of energy as one strategy in managing 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	Funding Schedule	Program Year	\$1,268,000
Department	Facilities Services	Prior Years		-
Category	Building Improvements	Total Cost		\$1,268,000
Fiscal Year	2011-2012	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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 project allows for improvements to the Town’s municipal buildings to maintain and upgrade the systems and appearance of the buildings by completing minor projects and replacing equipment and building amenities.

**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 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.

<b>Town of West Hartford</b> Capital Improvement Program				
Project Title	Communications Infrastructure	Funding Schedule	Program Year	\$436,000
Department	Financial Services	Prior Years		-
Category	Miscellaneous	Total Cost		\$436,000
Fiscal Year	2011-2012	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None
<p><b>Description &amp; Justification</b></p> <p>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.</p> <p>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.</p>				

TOWN COUNCIL ADOPTED  
SUMMARY OF CAPITAL IMPROVEMENTS  
PROGRAM YEAR 2012-2013  
(IN THOUSANDS)

	BONDS	CNRE	GRANTS	OTHER	TOTAL
<b><u>TRANSPORTATION &amp; CIRCULATION</u></b>					
Arterial Street Reconstruction	1,244				1,244
Neighborhood Street Reconstruction	1,361				1,361
Pedestrian & Bicycle Management	276				276
Storm Water Management	330				330
Street Resurfacing	554				554
Traffic System Management	—	<u>64</u>	—	—	<u>64</u>
Sub-Total	3,765	64	0	0	3,829
<b><u>EDUCATION</u></b>					
Asbestos Removal	140		60		200
Computer Infrastructure		250			250
Furniture & Equipment Replacement		75			75
Heating & Ventilation Systems	750				750
Roofing & Masonry	510		340		850
School Building Improvements	690		338		1,028
Site and Athletic Field Improvements	250				250
Window Replacement	<u>250</u>	—	—	—	<u>250</u>
Sub-Total	2,590	325	738	0	3,653
<b><u>PARKS &amp; RECREATION</u></b>					
Athletic Playfield Improvements	100				100
Outdoor Pool Improvements		113			113
Park/Playscape Improvements		61			61
Pools – Beachland	150				150
Pools – Fernridge	1,350				1,350
Rockledge Golf Course				100	100
Westmoor Park Improvements	—	—	—	<u>100</u>	<u>100</u>
Sub-Total	1,600	174	0	200	1,974
<b><u>TOWN BUILDING IMPROVEMENTS</u></b>					
Energy Conservation	100				100
Town Building Improvements	<u>1,306</u>	—	—	—	<u>1,306</u>
Sub-Total	1,406	0	0	0	1,406
<b><u>MISCELLANEOUS IMPROVEMENTS</u></b>					
Communications Infrastructure		617			617
Fire Apparatus	850				850
Public Works Rolling Stock	<u>800</u>	—	—	—	<u>800</u>
Sub-Total	1,650	617	0	0	2,267
<b>TOTAL</b>	<b><u>11,011</u></b>	<b><u>1,180</u></b>	<b><u>738</u></b>	<b><u>200</u></b>	<b><u>13,129</u></b>

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Arterial Street Reconstruction	Funding Schedule	Program Year	\$1,244,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$1,244,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

### **Description & Justification**

The Arterial Street Reconstruction program is a continuous program to maintain and improve the condition and function of the Town's arterial street system. The Town of West Hartford has 210 miles of roadways of which 57 miles are classified as arterial or collector streets by the Town, the Capital Region Council of Governments, the State Department of Transportation and the Federal Highway Administration. The designation of arterial street allows for the submission of projects on these streets for State and Federal funding. Arterial streets are primarily for the conveyance of thru traffic and have higher traffic volumes. The majority of auto accidents occur on arterial streets. Arterial streets support mass transit systems and have many residential and commercial driveways. The yearly Pavement Condition Survey indicates 5 miles or 11% of arterial streets are in poor pavement condition. All arterial streets have been reconstructed with sufficient base and defined lane arrangements for traffic use over the last 25 years except Farmington Avenue from Trout Brook Drive to Whiting Lane. After a reconstruction project, the arterial street program becomes a rehabilitation of the pavement surface which is far less costly than the reconstruction of the entire pavement structure.

Arterial street reconstructions are coordinated with utility companies to improve the utility facilities serving abutting owners. Arterial street projects are selected based upon the available funding levels from the Town, State or Federal governments, the condition of utilities, accident history, pavement condition, and character of the adjacent properties. The design and appearance of arterial streets establishes the character of the adjacent properties and helps maintain property value, and economic stability.

Several arterial streets are State highways such as New Britain Avenue, Newington Road, Albany Avenue, Simsbury Road, and Bloomfield Avenue. State highways are owned and maintained by the State, however, sidewalks, street lighting and traffic signal power are generally the responsibility of the Town.

The goal is to reconstruct 1 mile of arterial street per year.

**Town of West Hartford** Capital Improvement Program

Project Title	Neighborhood Street Reconstruction	Funding Schedule	Program Year	\$1,361,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$1,361,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

The Neighborhood Street Reconstruction program maintains and improves the street condition, appearance and function of the neighborhood streets serving the majority of residential properties in West Hartford. The neighborhood streets selected for reconstruction are not eligible for State or Federal funds, have poor condition pavements, curbs and storm drainage facilities. The coordination with utility companies to replace gas mains, water mains, sanitary sewers, or other utilities affects the schedule of street reconstruction. The reconstruction of streets includes a detailed survey, replacement of permanent curbing to establish a desired street width, replacement of driveway ramps, sidewalk ramps, storm drainage structures, removal of the existing pavement surface, reconstruction of the existing stone roadway base, placement of 2 coursers of new bituminous concrete, appropriate street signs and pavement markings. The purpose of the Neighborhood Street Reconstruction Projects is to maintain the street condition, the character of the street, help preserve property values and create economic stability for the neighborhood.

Neighborhood streets which are eligible for street reconstruction are those that have poor pavement and curbing conditions, have poor vertical geometry, have street parking and have a need for permanent curbing. There are approximately 53 miles of residential street eligible for street reconstruction projects of which about 16 miles are in poor condition. The program goal is the reconstruction of 1.5 miles of residential street per year.

**Town of West Hartford Capital Improvement Program**

Project Title (formerly Sidewalk Repair, Commercial Area Development and Trout Brook Trail)	Pedestrian and Bicycle Management	Funding Schedule Program Year	\$276,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$276,000
Fiscal Year	2012-2013	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

There are 245 miles of sidewalk in Town. In commercial areas with high pedestrian traffic such as West Hartford Center, Elmwood Center, Bishops Corner and Park Road, brick pavers have been installed to reduce tripping hazards and increase sidewalk life expectancy. Pedestrian lighting has been installed in most commercial areas. The Town's residential concrete sidewalk system contains 260,000 slabs and costs approximately \$140/slab to replace. There is no inspection program for sidewalks. Sidewalk repairs are scheduled on a complaint basis. Currently there are about 150 outstanding sidewalk complaints with approximately 300 complaints received each year.

The Town has developed preliminary plans for the Trout Brook MultiUse Trail to connect Elmwood with West Hartford Center and the UConn campus along Trout Brook. A section of the trail exists between Park Road and Farmington Avenue; and the Elmwood section of the trail was completed in June 2009 from New Park Avenue to South Quaker Lane connecting with the Elmwood Community Center. The Elmwood section was completed with 80% funding through the State Department of Transportation and about 20% Town funds. The section of the Trout Brook Trail between Farmington Avenue and Asylum Avenue remains to be completed. The estimated cost to complete this section, today, is \$650,000. The total length of the Trout Brook Trail would be 3-1/2 miles.

The Town will continue to respond to sidewalk complaints and address safety problems with sidewalk area.

There are no planned projects for commercial area improvement or expansion of the MultiUse Trail.

<b>Town of West Hartford Capital Improvement Program</b>			
Project Title	Storm Water Management (formerly Storm Sewer, Bridge & Culvert)	Funding Schedule Program Year	\$330,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$330,000
Fiscal Year	2012-2013	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None
<p><b>Description &amp; Justification</b></p> <p>There are 17 bridges, 105 culverts, 135 miles of storm sewers, 6,600 drain structures and 19 miles of watercourse within the Town of West Hartford. Bridges over 20 feet in length are inspected every two years by the State Department of Transportation. All bridges are in a safe condition; 4 are rated fair and 13 rated good. The 105 culverts have not been inspected for 8 years. The 135 miles of storm sewers are over 50 years old and have not been inspected. The 6,600 drainage structures are generally in poor condition and are repaired or replaced as part of street reconstruction or resurfacing projects by the curbing contractor or Public Works Department. There are 300 discharge locations of the storm sewer system into watercourses. The Department of Environmental Protection has imposed an unfunded permit program requiring the Town to test water quality with the intent of transferring responsibility for water quality enforcement to the Town at a future date. We do not have the staff capacity to accomplish this task at this time.</p> <p>The storm water management program includes the repair and replacement of storm sewers as part of street reconstruction or resurfacing projects. There is no program for inspection and/or replacement of culverts or storm sewers. Storm sewer system failures create street ponding and possible property damage. There is undermining of foundations on the Fern Street bridge, North Main Street bridge and Quaker Lane bridge. Storm sewer flooding is occurring on Newport Avenue and North Steele Road. Storm sewer failures have been identified at Asylum Avenue and Trout Brook Drive, Meadowbrook Road, Mohawk Drive, and Farnham Road. Storm sewers are replaced or improved as a result of flooding complaints or roadway failures.</p>			

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Street Resurfacing	Funding Schedule	Program Year	\$554,000
Department	Community Services	Prior Years		-
Category	Transportation & Circulation	Total Cost		\$554,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

### **Description & Justification**

The Townwide resurfacing program replaces poor condition pavement on the street roadway system that are not candidates for Arterial Street Reconstruction or Neighborhood Street Reconstruction programs. There are 100 miles of residential streets in Town eligible for street resurfacing. Street resurfacing includes milling the old pavement surface and replacing it with new bituminous concrete surface. Bituminous curbing is installed on erodible areas only. Driveway ramps are owned by the abutting owners and replaced if necessary to match the new pavement elevation.

Street pavement surfaces crack and break with age and vehicle loading. The broken pavement surface becomes irregular and a hazard to vehicles and pedestrians. Poor condition pavements project a lack of maintenance and deterioration of a street which is reflected in the value of the abutting properties. There are presently 38 miles of residential streets classified in poor condition. The program goal is to resurface 4.5 miles of street each year. The selection of streets is done based on a yearly survey of pavement conditions, geographical distribution throughout the Town, the age of the pavement, number of properties effected, coordination with utilities and available funds. The deterioration of street pavement condition, if not corrected, increases Town liability for property damage and personal injury.

<b>Town of West Hartford Capital Improvement Program</b>			
Project Title	Traffic System Management (formerly Traffic Signal Enhancement & Pavement Marking)	Funding Schedule	
		Program Year	\$64,000
Department	Community Services	Prior Years	-
Category	Transportation & Circulation	Total Cost	\$64,000
Fiscal Year	2012-2013	Funding Source	
		CNRE	\$64,000
Project Duration	Recurring	Operating Budget	
		Impact	None

### **Description & Justification**

The Traffic System Management includes enhancements to the traffic signal system, roadway signs, pavement markings, guard rail installation, traffic calming measures, accident management and street lighting. There are 106 traffic signals, 45 owned and maintained by the State, 61 owned and maintained by the Town; 1,115 stop signs, 450 crosswalks, 30 miles of pavement markings and 2 miles of guard rail to assist hundreds of thousands of motorists, pedestrians, bicyclists and other forms of transportation that use Town streets each day. There are approximately 3,000 vehicle accidents per year, of which about 800 personal injuries occur. There are 6,500 street lights throughout the Town requiring \$475,000 for electricity from the operating budget. It is important to the quality of life to provide a safe transportation system.

The Town has received Federal grants of \$6.5 million to replace 32 of the Town owned traffic signals. Of the 29 remaining, 12 Town owned traffic signals will need to be updated within the next 10 years. Significant energy conservation in addition to enhanced safety has resulted with the upgraded signals thus far.

The street line painting has been expanded to channelize motorists and provide painted shoulder areas on some streets for cyclists. This has an added advantage, in some cases, of slowing traffic.

Traffic calming features such as chicanes, planted islands, narrowing of through lanes, and left turn lanes have been created to increase driver attention, improve the appearance of the streetscape, and reduce accidents. The Town has recently purchased electronic speed display signs to help reduce speeds and a radar camera unit to notify vehicle owners of speeding.

The Town is investigating measures to reduce the operating costs of the street lighting service including the removal of densely spaced lights, or the conversion to newer LED technology.

**Town of West Hartford Capital Improvement Program**

Project Title	Asbestos Removal	Funding Schedule	
		Program Year	\$200,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$200,000
Fiscal Year	2012-2013	Funding Source	
		Bonds	\$140,000
		State Grant	\$60,000
Project Duration	Recurring	Operating Budget Impact	None

**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	Funding Schedule	Program Year	\$250,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$250,000
Fiscal Year	2012-2013	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

### Description & Justification

The funding for Computers Infrastructure is used to support the following critical areas:

**NETWORK HARDWARE:** As network devices are added at each school, this increases requirements for network switches, routers, and other hardware related to connecting district computers to the building networks and to the Internet. Funding is used not only to keep pace with network requirements, but in replacing older, slower network equipment with devices that can keep pace with current applications. In addition, these funds are used to purchase network servers, which function as file servers and application servers. Older servers which have reached end of life (in terms of warranty support) are replaced, and new servers for new applications are purchased with this funding. Out-of-warranty but still functional servers are kept on hand as emergency spares, or for less critical functions.

**PERSONAL COMPUTERS/LCD MONITORS:** Purchases of new PCs are made to keep schools up-to-date with hardware which can run all necessary applications, including state-mandated online testing. Bulk purchases are made through the bid process, and computer labs, primarily, are targeted for replacement. The lab PCs that are removed are then placed in classrooms, to replace the oldest computers in the building (which are in turn cannibalized for parts prior to recycling). Additionally, we have initiated wholesale replace of CRT monitors in labs with the more energy and space efficient LCD flat panels.

**PRESENTATION HARDWARE:** To improve classroom instruction, funding is allocated to classroom presentation hardware, which includes projectors (either on AV Carts or ceiling mounted), interactive whiteboards, and associated audio-visual devices. This specific hardware allows teachers to present interactive materials to support instruction.

**OTHER:** Computer Infrastructure funds are also used to purchase network printers for building print requirements, wireless applications where appropriate, laptops for both instructional and administrative use, and replacement of audio-visual hardware such as overhead projectors, etc.

**Town of West Hartford Capital Improvement Program**

Project Title	Furniture and Equipment Replacement	Funding Schedule	Program Year	\$75,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$75,000
Fiscal Year	2012-2013	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None

**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.

We have pushed the majority of our furniture and equipment inventory well beyond its life span and have only sporadically replaced furniture and equipment in the past few years. Much of our 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.

**Town of West Hartford Capital Improvement Program**

Project Title	Heating and Ventilation Systems	Funding Schedule	Program Year	\$750,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$750,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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. 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. The Board of Education began a replacement program a few years ago that began with the oldest boilers and is expected to run through 2016.

This funding will go toward the replacement of ventilation equipment at various schools.

**Town of West Hartford** Capital Improvement Program

Project Title	Roofing and Masonry	Funding Schedule	
		Program Year	\$850,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$850,000
Fiscal Year	2012-2013	Funding Source	
		Bonds	\$510,000
		State Grant	\$340,000
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

With 16 buildings of varying age, re-roofing is an annual requirement. Due to financial limitations, most buildings are not totally re-roofed in one year. Rather, they are typically phased over a couple or a few years. Re-roofing includes removal of existing materials and in many cases, insulation with thicker denser materials to provide for increased energy conservation and improved drainage. It also includes the installation of necessary flashings, counter-flashings, drainage improvements and related masonry repairs.

The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces, left unchecked, exposes buildings to obvious water damage and not so obvious long-term structural damage. A systematic reroofing program addresses the fact that building materials decay, while it ensures the useful life of the building and protects a significant capital asset.

This funding will be dedicated to the continued partial replacement of roofing at King Philip Middle School.

**Town of West Hartford Capital Improvement Program**

Project Title	School Building Improvements	Funding Schedule	
		Program Year	\$1,028,000
Department	Public Schools	Prior Years	-
Category	Education	Total Cost	\$1,028,000
Fiscal Year	2012-2013	Funding Source	
		Bonds	\$690,000
		State Grant	\$338,000
Project Duration	Recurring	Operating Budget Impact	None

**Description & Justification**

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.

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 our reinvestment in the schools and our commitment to maintain them in good condition.

Improvements this year will include building and fire code improvements, continuation of accessibility improvements throughout the system, masonry improvements at various schools, elevator upgrades, replacement of flooring system-wide, and a continuation of the refurbishment of modular classrooms.

**Town of West Hartford** Capital Improvement Program

Project Title	Site and Athletic Field Improvements	Funding Schedule	Program Year	\$250,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$250,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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. This funding is used to upgrade those 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 dedicated to resurfacing and replacement of sidewalks, parking areas and play surfaces throughout the system.

**Town of West Hartford Capital Improvement Program**

Project Title	Window Replacement	Funding Schedule	Program Year	\$250,000
Department	Public Schools	Prior Years		-
Category	Education	Total Cost		\$250,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**Description & Justification**

These funds will be used for window replacement. Many of the buildings within the district have window systems nearly 50 years old with single pane glass. New window systems are double paned and energy efficient. Because the new windows are weather tight, only buildings with an adequate ventilation system may receive window upgrades. The cost of replacing the windows at any school can vary widely. At some schools the windows make up an entire exterior wall, while at others the windows can be only one third of that wall. This is an ongoing effort that will take many years to complete.

The existing windows at most elementary schools are the original single pane installations that are in some instances in poor condition. Window replacements will save energy and provide a better comfort level in the classrooms.

This year's funding will be used with the funding from fiscal year 2001-2012 to design and replace windows at Webster Hill Elementary School.

**Town of West Hartford** Capital Improvement Program

Project Title	Athletic Playfield Improvements	Funding Schedule	Program Year	\$100,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$100,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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 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. In addition, funding will be used to upgrade several playgrounds as required.

**Town of West Hartford** Capital Improvement Program

Project Title	Outdoor Pool Improvements	Funding Schedule	
		Program Year	\$113,000
Department	Human & Leisure Services	Prior Years	-
Category	Parks & Recreation	Total Cost	\$113,000
Fiscal Year	2012-2013	Funding Source	
		Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	
		Impact	None

**Description & Justification**

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.

This project will allow for improvements at the Town’s six outdoor pools, two wading pools and two 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.

**Town of West Hartford** Capital Improvement Program

Project Title	Park/Playscape Improvements	Funding Schedule	
		Program Year	\$61,000
Department	Human & Leisure Services	Prior Years	-
Category	Parks & Recreation	Total Cost	\$61,000
Fiscal Year	2012-2013	Funding Source	
		Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget Impact	None

**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	Pools - Beachland	Funding Schedule	Program Year	\$150,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$150,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Single	Operating Budget Impact		None

**Description & Justification**

The Beachland Aquatics area consists of two fenced in pools, one 150,000 gallons and one 140,000 gallons, one wading pool with mushroom spray feature, 2,740 square foot bath house and one shade shelter. The last major pool renovation was in the 1960's with the addition of the deep pool.

This project will consist of major renovations to both main pools, the elimination of the wading pool and pump house, upgrades to the filtration, plumbing and gutter systems as well as building and fencing upgrades to meet current standards. One main pool will become a spray/wading pool within the fenced in area.

With the goal of meeting current standards and codes, the CIP plan will address the core issues of accessibility, efficiency, public safety and convenience for the outdated aquatics systems currently in place. All planned upgrades will be geared toward providing a more efficient, accessible and safe area intended to enhance aquatic offerings while meeting current standards.

**Town of West Hartford** Capital Improvement Program

Project Title	Pools - Fernridge	Funding Schedule	Program Year	\$1,350,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$1,350,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Single	Operating Budget Impact		None

**Description & Justification**

The Fernridge Aquatics area consists of one 245,000 gallon “L” shaped main pool, one wading pool and a 2,670 square foot bath house. The last major renovation to the pool dates back to the 1960’s. This project will consist of major renovations to the main pool, the elimination of the wading pool and pump house, upgrades to the filtration, plumbing and gutter systems as well as building and fencing upgrades to meet current standards.

With the goal of meeting current standards and codes, the CIP plan will address the core issues of accessibility, efficiency, public safety and convenience for the outdated aquatics systems currently in place. All planned upgrades will be geared toward providing a more efficient, accessible and safe area intended to enhance aquatic offerings while meeting current standards.

<b>Town of West Hartford</b> Capital Improvement Program				
Project Title	Rockledge Golf Course	Funding Schedule	Program Year	\$100,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$100,000
Fiscal Year	2012-2013	Funding Source		Other
Project Duration	Single	Operating Budget	Impact	None
<p><b>Description &amp; Justification</b></p> <p>This project will replace the main irrigation line and will involve the excavation, installation and backfilling of the main irrigation lines and isolation valves on all 18 fairways at Rockledge Golf Club. It will be funded via the capital projects user fee included in the rates at Rockledge Golf Club.</p>				

**Town of West Hartford Capital Improvement Program**

Project Title	Westmoor Park Improvements	Funding Schedule	Program Year	\$100,000
Department	Human & Leisure Services	Prior Years		-
Category	Parks & Recreation	Total Cost		\$100,000
Fiscal Year	2012-2013	Funding Source		Other
Project Duration	Single	Operating Budget Impact		None

**Description & Justification**

Clean Pond #1: Westmoor Park’s Pond #1, located between Flagg Road and the Wooden Foot Bridge is a man made pond along a portion of Hart Meadow Brook. Fifteen or more years have passed since any major work has been done in Pond #1 and during that time it has become very silted in and the banks have suffered the effects of erosion.

Add Floating Dock: Pond #3 in Westmoor Park has been the site for many of our water/aquatic study programs in past years. Students study the plants and animals in and around the pond as well as the water and its condition. Classes have been popular with students and school teachers because we focus on “Hands On” learning where students are outdoors; observing and handling the things they are studying.

Hart Meadow Brook and Pond #1 are important educational resources for aquatic education programs at Westmoor Park. In order to maintain healthy biological diversity in the stream and student accessibility to the ponds, it is important that the buildup of silt be removed and that the banks of the ponds are stabilized. Many of the educational programs conducted at the park require safe access to the ponds for study of the vertebrates and invertebrates and plant life found living there. Currently the banks of the pond are both very soft and muddy with very little water depth; or steep and slippery right to the edge of the water, making pond study difficult. A 50 to 60 foot section of dock secured to the bank at Pond #3 would provide the safe accessibility needed to improve this area.

**Town of West Hartford** Capital Improvement Program

Project Title	Energy Conservation	Funding Schedule	
		Program Year	\$100,000
Department	Facilities Services	Prior Years	-
Category	Building Improvements	Total Cost	\$100,000
Fiscal Year	2012-2013	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

**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 management consultant 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 could 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 have risen dramatically over the last several years and most likely will continue to increase in the near future. Investments need to be made that reduce the consumption of energy as one strategy in managing 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.

<b>Town of West Hartford</b> Capital Improvement Program			
Project Title	Town Building Improvements	Funding Schedule	Program Year
Department	Facilities Services	Prior Years	-
Category	Building Improvements	Total Cost	\$1,306,000
Fiscal Year	2012-2013	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

Project Title	Town Building Improvements	Funding Schedule	Program Year
Department	Facilities Services	Prior Years	-
Category	Building Improvements	Total Cost	\$1,306,000
Fiscal Year	2012-2013	Funding Source	Bonds
Project Duration	Recurring	Operating Budget Impact	None

**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 project allows for improvements to the Town’s municipal buildings to maintain and upgrade the systems and appearance of the buildings by completing minor projects and replacing equipment and building amenities.

**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 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.

<b>Town of West Hartford Capital Improvement Program</b>				
Project Title	Communications Infrastructure	Funding Schedule	Program Year	\$617,000
Department	Financial Services	Prior Years		-
Category	Miscellaneous	Total Cost		\$617,000
Fiscal Year	2012-2013	Funding Source	Capital Non-Recurring Expenditure Fund	
Project Duration	Recurring	Operating Budget	Impact	None
<p><b>Description &amp; Justification</b></p> <p>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.</p> <p>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.</p>				

**Town of West Hartford** Capital Improvement Program

Project Title	Fire Apparatus	Funding Schedule	Program Year	\$850,000
Department	Fire Department	Prior Years		-
Category	Miscellaneous	Total Cost		\$850,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Single	Operating Budget Impact		None

**Description & Justification**

The Town has an inventory of six (6) fire vehicles, including 2 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 four (4) years.

This funding will go toward the purchase of a quint, a combination ladder truck and pumper truck, for the Fire Department.

**Town of West Hartford** Capital Improvement Program

Project Title	Public Works Rolling Stock	Funding Schedule	Program Year	\$800,000
Department	Public Works	Prior Years		-
Category	Miscellaneous	Total Cost		\$800,000
Fiscal Year	2012-2013	Funding Source		Bonds
Project Duration	Recurring	Operating Budget Impact		None

**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.

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**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>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>
Long Term Debt Funding	\$10,263,000	\$14,187,000	\$8,962,000	\$33,412,000
CNRE Contribution	1,394,000	1,539,000	1,429,000	4,362,000
Grants/Other	<u>763,000</u>	<u>967,000</u>	<u>852,000</u>	<u>2,582,000</u>
<b>TOTAL</b>	<b>\$12,420,000</b>	<b>\$16,693,000</b>	<b>\$11,243,000</b>	<b>\$40,356,000</b>

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>Total</u>
Transportation & Circulation	\$4,145,000	\$4,064,000	\$4,387,000	\$12,596,000
Education	3,840,000	3,955,000	4,120,000	11,915,000
Parks & Recreation	2,251,000	5,728,000	425,000	8,404,000
Town Building Improvements	1,445,000	1,485,000	1,527,000	4,457,000
Miscellaneous Improvements	<u>739,000</u>	<u>1,461,000</u>	<u>784,000</u>	<u>2,984,000</u>
<b>TOTAL</b>	<b>\$12,420,000</b>	<b>\$16,693,000</b>	<b>\$11,243,000</b>	<b>\$40,356,000</b>

**CAPITAL IMPROVEMENT  
PROGRAM**

CAPITAL FINANCING MODEL FUNDING SUMMARY (In Thousands)

PROGRAM YEARS 2014 - 2016	<u>Bonds</u>	<u>CNRE</u>	<u>Grants/Other</u>	<u>Total</u>
<b><u>TRANSPORTATION &amp; CIRCULATION</u></b>				
Arterial Street Reconstruction	\$ 3,962	\$	\$	\$ 3,962
Neighborhood Street Reconstruction	4,333			4,333
Pedestrian & Bicycle Management	879			879
Storm Water Management	1,053			1,053
Street Resurfacing	1,765			1,765
Traffic System Management	<u>400</u>	<u>204</u>	—	<u>604</u>
Sub-Total	12,392	204	0	12,596
<b><u>EDUCATION</u></b>				
Asbestos Removal	471		204	675
Computer Infrastructure		800		800
Furniture & Equipment Replacement		325		325
Heating & Ventilation Systems	2,400			2,400
Roofing and Masonry	1,620		1,080	2,700
School Building Improvements	2,367		1,148	3,515
Site & Athletic Field Improvements	750			750
Window Replacement	<u>750</u>			<u>750</u>
Sub-Total	8,358	1,125	2,432	11,915
<b><u>PARKS &amp; RECREATION</u></b>				
Athletic Playfield Improvements	655			655
Elmwood Campus	5,500			5,500
Outdoor Pool Improvements		362		362
Park/Playscape Improvements		387		387
Pools – Beachland	1,350			1,350
Rockledge Golf Course - Irrigation			100	100
Westmoor Park Improvements			<u>50</u>	<u>50</u>
Sub-Total	<u>7,505</u>	<u>749</u>	<u>150</u>	<u>8,404</u>
<b><u>TOWN BUILDING IMPROVEMENTS</u></b>				
Energy Conservation	300			300
Town Building Improvements	<u>4,157</u>			<u>4,157</u>
Sub-Total	4,457	0	0	4,457
<b><u>MISCELLANEOUS IMPROVEMENTS</u></b>				
Communications Infrastructure		2,284		2,284
Public Works Rolling Stock	<u>700</u>			<u>700</u>
Sub-Total	700	2,284	0	2,984
<b>TOTAL CIP-PROGRAM YEARS 4 - 6</b>	<b>\$33,412</b>	<b>\$4,362</b>	<b>\$2,582</b>	<b>\$40,356</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**TRANSPORTATION & CIRCULATION**

**PROGRAM YEARS 4 – 6**

**SUMMARY OF ALL PROJECTS**

**(In Thousands)**

<b>Transportation &amp; Circulation</b>	<b>Bonds</b>	<b>CNRE</b>	<b>Total</b>
Arterial Street Reconstruction	\$ 3,962	\$	\$ 3,962
Neighborhood Street Reconstruction	4,333		4,333
Pedestrian & Bicycle Management	879		879
Storm Water Management	1,053		1,053
Street Resurfacing	1,765		1,765
Traffic System Management	<u>400</u>	<u>204</u>	<u>604</u>
<b>Total</b>	<b>\$12,392</b>	<b>\$ 204</b>	<b>\$12,596</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Transportation & Circulation  
Years 4-6 CIP Summary  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE <b>ARTERIAL STREET RECONSTRUCTION</b>	\$3,962
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**Description:**

This project provides the needed capital to improve the condition of arterial and collector streets. Included in this project are the installation of new storm sewers, the replacement of catch basins, the replacement of old combination curb and gutter, and equipment rental necessary for street repairs. During the 1960's West Hartford, using bonds, reconstructed many of its arterial streets. It has been proven that preventive maintenance to streets results in considerable savings. On the contrary, lack of maintenance leads to expensive reconstruction.

PROJECT TITLE <b>NEIGHBORHOOD STREET RECONSTRUCTION</b>	\$4,333
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**Description:**

This project, which covers resurfacing and reconditioning of road surfaces, includes the installation of new storm sewers, replacement of catch basins and old combination curb and gutter, and equipment rental necessary for street repairs. Priority will be given to neighborhoods where street conditions are poor, meaning the pavement condition is fair or poor and the combination curb and gutter is in poor condition. In addition, the old catch basins are deteriorating, the frames are antiquated and restrictive storm sewers are generally undersized.

PROJECT TITLE <b>PEDESTRIAN &amp; BICYCLE MANAGEMENT</b>	\$879
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**Description:**

Under this recurring program, Town construction inspectors determine the location of sidewalk sections which should be replaced or repaired by considering danger to health and safety and pedestrian traffic volume. The contractor submitting the successful project bid removes designated sidewalk slabs, installs processed stone base, and pours and finishes the concrete according to Town standards. The funds are used to repair and replace sidewalks throughout the Town. Complaints about sidewalk problems have declined due to the increased appropriation for sidewalk repair and an improved management system. Despite this decline, we will still struggle to address all of the existing complaints received in any single fiscal year.

There are no planned projects for commercial area improvement or expansion of the Multi Use Trail at this time.

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**CAPITAL IMPROVEMENT  
PROGRAM**

**Transportation & Circulation  
Years 4-6 CIP Summary  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE    **STORM WATER MANAGEMENT**

\$1,053

**Description:**

This project includes the construction of storm sewers at approximately 25 locations per year throughout the Town which are determined by the receipt and investigation of complaints. The construction is limited to relatively small diameter pipes of short length as well as some catch basins. This will include emergency storm sewer repairs. Each year the Engineering Division receives approximately 250 storm water related complaints. Each complaint is recorded and subsequently inspected. Of these, approximately 10% require the installation of a small section of pipe, a catch basin, etc.

There are 16 bridges and 94 culverts in the inventory of West Hartford's infrastructure. Town inspection staff has conducted annual inspections. However, there is a need to seek the services of a Structural Engineer periodically to perform a comprehensive analysis of the existing condition of these structures. The safety of vehicular and pedestrian traffic is of the utmost concern. This project provides funds for periodic professional inspection and for actual contracted maintenance of these facilities.

PROJECT TITLE    **STREET RESURFACING**

\$1,765

**Description:**

This project will fund the resurfacing of residential streets, and includes the reconstruction of catch basins, risers on manholes and 1 1/2 inches of bituminous overlay. Streets to be resurfaced are selected through the town's pavement management system, which classifies the condition of each street in Town. Streets scheduled to be repaved in these program years will be selected from those streets which have a surface condition of Class 5 (poor condition).

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Transportation & Circulation  
Years 4-6 CIP Summary  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE    **TRAFFIC SYSTEM MANAGEMENT**

\$604

**Description:**

There are 64 Town owned traffic signal installations in West Hartford which need periodic renovation to provide enhanced traffic control. This project includes new signal heads, detectors, instruments, etc. The general public, through elected and appointed officials, request modifications of signals to improve vehicular and pedestrian traffic. Many improvements require hardware enhancements necessary to achieve the improvement.

Traffic has significantly increased throughout the Town. Pavement marking is not only an important part of our traffic safety system, but has also been shown to be an effective means of traffic calming. In past years we used plastic pavement marking. However, our experience with plastic has been disappointing and we now use an epoxy paint that lasts several years before needing to be repainted. Pavement marking is an integral part of our traffic safety system. Over the past few years we have significantly increased the use of pavement markings for both pedestrian and traffic safety.

The Town owns approximately 6,000 feet of guardrail which protects vehicles from hazards such as bridge abutments, waterways, or steep slopes. The standards for end treatments of guardrail have been improved to assist vehicle recovery. Guardrails are an important safety feature of the transportation system. There are numerous existing end treatments which need modification to current design standards. There are several bridges and culverts which need protection with either guardrail or fencing.

The Town received State Department of Transportation grant funds over a several year period (fiscal years 2007, 2008 and 2009) to upgrade thirty-two of its traffic signals. The remaining signals are twenty years old and will also need to be upgraded to address traffic detection, timing sequence, span poles, controllers, and pedestrian actuation. These funds will allow upgrade of approximately one signal every other fiscal year.

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**CAPITAL IMPROVEMENT  
PROGRAM**

**EDUCATION**

**PROGRAM YEARS 4 – 6**

**SUMMARY OF ALL PROJECTS**

**(In Thousands)**

**Capital Financing Model**

<b>EDUCATION</b>	<b>Bonds</b>	<b>CNRE</b>	<b>Grants</b>	<b>Total</b>
Asbestos Removal	\$ 471	\$	\$ 204	\$ 675
Computer Infrastructure		800		800
Furniture & Equipment Replacement		325		325
Heating & Ventilation Systems	2,400			2,400
Roofing & Masonry	1,620		1,080	2,700
School Building Improvements	2,367		1,148	3,515
Site & Athletic Field Improvements	750			750
Window Replacement	<u>750</u>			<u>750</u>
<b>Total</b>	<b>\$8,358</b>	<b>\$1,125</b>	<b>\$2,432</b>	<b>\$11,915</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Education  
CIP Program Years 4-6  
Capital Projects Descriptions  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE    **ASBESTOS REMOVAL**

\$675

**Description:**

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, hygienists, 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.

PROJECT TITLE    **COMPUTER INFRASTRUCTURE**

\$800

**Description:**

All West Hartford Public Schools are networked, connected to the Internet, and linked together within the Town Wide Area Network. Computer Infrastructure funds are utilized to maintain that network capability, through upgraded servers, switches and other telecommunications equipment. Additionally, these funds are used annually to replace the oldest computers in the schools for current configurations capable of running educational and administrative software applications. This regular replacement ensures there will be no large scale expense in any single year for replacing outdated computers. These funds, combined with funding in the operating budget, make up our technology investment.

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.

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**CAPITAL IMPROVEMENT  
PROGRAM**

**Education**

**CIP Program Years 4-6**

**Capital Projects Descriptions**

**Fiscal Years 2014-2016**

**(In Thousands)**

PROJECT TITLE <b>FURNITURE AND EQUIPMENT REPLACEMENT</b>	\$325
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**Description:**

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 included in this replacement program: Classrooms and Laboratories, Administrative, Cafeteria, and Equipment. Furniture and equipment have been standardized throughout the district to streamline maintenance and repairs and so that items maybe transferred between schools as needed. We have pushed the majority of our furniture and equipment inventory well beyond its life span and have only sporadically replaced furniture and equipment in the past few years. Much of our 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.

PROJECT TITLE <b>HEATING AND VENTILATION SYSTEMS</b>	\$2,400
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**Description:**

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.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Education**

**CIP Program Years 4-6**

**Capital Projects Descriptions**

**Fiscal Years 2014-2016**

**(In Thousands)**

PROJECT TITLE **ROOFING AND MASONRY**

\$2,700

**Description:**

With 16 buildings of varying age re-roofing is an annual requirement. Due to financial limitations, most require several years' appropriations. Reroofing includes removal of existing materials and in many cases, re-insulation 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. The desirability of maintaining roofs in a good state of repair represents a prudent approach to building maintenance. Deterioration of roofing surfaces, left unchecked, exposes buildings to obvious water damage and not so obvious long term structural damage. 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.

PROJECT TITLE **SCHOOL BUILDING IMPROVEMENTS**

\$3,515

**Description:**

School building improvements are facility needs that are not specifically outlined as a separate capital project. These expenditures would 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. A study conducted by FRM several years ago outlined substantial needs and programmed those needs by priority. This appropriation continues that investment.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Education**

**CIP Program Years 4-6**

**Capital Projects Descriptions**

**Fiscal Years 2014-2016**

**(In Thousands)**

PROJECT TITLE    **SITE AND ATHLETIC FIELD IMPROVEMENTS**

\$750

**Description:**

This is a cooperative program between the Town and the Board of Education to expand, upgrade and improve West Hartford's athletic fields. Based on the work of an outside consultant, improvements are recommended at twelve locations. It is the intent of both the Town and schools to prioritize the major needs and attempt to address concerns as funding becomes available. The consultant's recommendations include a reorganization of certain fields, total reconstruction of poor fields, irrigation, re-grading and re-seeding of designated fields. In addition, funding will be used to upgrade several playgrounds, as required. 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. The purpose of these improvements is to provide safe playing conditions so that interscholastic and youth league injuries can be minimized. A long-term athletic field improvements program is needed to prevent further deterioration and to preserve these important community resources.

PROJECT TITLE    **WINDOW REPLACEMENTS**

\$750

**Description:**

This project replaces old single pane glass windows with new window systems which are energy efficient. Window replacements will save energy and provide a better comfort level in the classrooms.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**PARKS & RECREATION**

**PROGRAM YEARS 4 – 6**

**SUMMARY OF ALL PROJECTS**

**(In Thousands)**

<b>PARKS &amp; RECREATION</b>	<b>Bonds</b>	<b>CNRE</b>	<b>Other</b>	<b>Total</b>
Athletic Playfield Improvements	\$ 655	\$	\$	\$ 655
Elmwood Campus	5,500			5,500
Outdoor Pool Improvements		362		362
Park/Playscape Improvements		387		387
Pools – Beachland	1,350			1,350
Rockledge Golf Course – Irrigation			100	100
Westmoor Park Improvements	_____	_____	<u>50</u>	<u>50</u>
<b>Total</b>	<b>\$7,505</b>	<b>\$749</b>	<b>\$150</b>	<b>\$8,404</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Parks & Recreation  
CIP Program Years 4-6  
Capital Projects Descriptions  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE    **ATHLETIC PLAYFIELD IMPROVEMENTS**

\$655

**Description:**

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 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. In addition, funding will be used to upgrade several playgrounds as required.

PROJECT TITLE    **ELMWOOD CAMPUS**

\$5,500

**Description:**

This project will make improvements to the Elmwood Campus and consider the potential inclusion of other public and non-profit facilities on the site. The existing Elmwood Community Center should be transformed into a comfortable and attractive meeting and programming space that people will want to come to, with a large lobby that provides space for lounging, meeting tables, reading areas, and food. The Department envisions Elmwood as a revitalized, vibrant community center that (1) serves as a hub of activity (including event, entertainment, and learning support services), (2) runs regular and ongoing activities that draw people to stay in the area thereby creating greater demand for the complex's services, and (3) uses a mixed-use approach to space configurations, services, and activities. The intended multi-purpose nature of the facilities will attract additional customers to the facility and coupled with the potential sharing of facilities with other organizations will maximize revenue in the most cost effective manner. The expanded programming opportunities offered by the multi-purpose nature of the facilities will promote expanded opportunities for community engagement and healthy lifestyle initiatives.

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**CAPITAL IMPROVEMENT  
PROGRAM**

**Parks & Recreation  
CIP Program Years 4-6  
Capital Projects Descriptions  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE <b>OUTDOOR POOL IMPROVEMENTS</b>	\$362
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**Description:**

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. This project will allow for improvements at the Town's six outdoor pools, two wading pools and two 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.

PROJECT TITLE <b>PARK/PLAYSCAPE IMPROVEMENTS</b>	\$387
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**Description:**

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.

The money funded for this project will also be used to replace various signs, paint bituminous tennis courts and hard surface areas, and replace fencing where necessary. This is an ongoing program to improve and upgrade the town's parks. Funding under 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.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Parks & Recreation  
CIP Program Years 4-6  
Capital Projects Descriptions  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE    **POOLS – BEACHLAND**

\$1,350

**Description:**

The Beachland Aquatics area consists of two fenced in pools, one 150,000 gallons and one 140,000 gallons, one wading pool with mushroom spray feature, 2,740 square foot bath house and one shade shelter. The last major pool renovation was in the 1960's with the addition of the deep pool.

This project will consist of major renovations to both main pools, the elimination of the wading pool and pump house, upgrades to the filtration, plumbing and gutter systems as well as building and fencing upgrades to meet current standards. One main pool will become a spray/wading pool within the fenced in area.

With the goal of meeting current standards and codes, the CIP plan will address the core issues of accessibility, efficiency, public safety and convenience for the outdated aquatics systems currently in place. All planned upgrades will be geared toward providing a more efficient, accessible and safe area intended to enhance aquatic offerings while meeting current standards.

PROJECT TITLE    **ROCKLEDGE GOLF COURSE – IRRIGATION**

\$100

**Description:**

This project will replace the main irrigation line and will involve the excavation, installation and backfilling of the main irrigation lines and isolation valves on all 18 fairways at Rockledge Golf Club.

PROJECT TITLE    **WESTMOOR PARK IMPROVEMENTS**

\$50

**Description:**

Renovate Hunter House: The house that previously served as the residence for Charles and Leila Hunter now serves as the office building and main indoor program area for Westmoor Park. A renovated or new building designed for classes and programming would allow staff to better accommodate the demand for our services from local schools. The first step is to develop a plan which requires hiring an architect to guide the process.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**TOWN BUILDING IMPROVEMENTS**

**PROGRAM YEARS 4 – 6**

**SUMMARY OF ALL PROJECTS**

**(In Thousands)**

<b>Town Building Improvements</b>	<b>Bonds</b>	<b>Total</b>
Energy Conservation	\$ 300	\$ 300
Town Building Improvements	<u>4,157</u>	<u>4,157</u>
<b>Total</b>	<b>\$4,457</b>	<b>\$4,457</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Town Building Improvements  
CIP Program Years 4-6  
Capital Projects Descriptions  
Fiscal Years 2014-2016  
(In Thousands)**

PROJECT TITLE    **ENERGY CONSERVATION**

\$300

**Description:**

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 management consultant 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 could 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 have risen dramatically over the last several years and most likely will continue to increase in the near future. Investments need to be made that reduce the consumption of energy as one strategy in managing 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.

PROJECT TITLE    **TOWN BUILDING IMPROVEMENTS**

\$4,157

**Description:**

This project provides for the general capital maintenance of Town facilities. Improvements to be undertaken would 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 project 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 DEP guidelines. A wash facility is planned that will allow Town vehicles and equipment to be washed throughout the year in compliance with EPA and DEP guidelines.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**MISCELLANEOUS IMPROVEMENTS**

**PROGRAM YEARS 4 – 6**

**SUMMARY OF ALL PROJECTS**

**(In Thousands)**

<b>Miscellaneous Improvements</b>	<b>Bonds</b>	<b>CNRE</b>	<b>Total</b>
Communications Infrastructure	\$	\$2,284	\$2,284
Public Works Rolling Stock	<u>700</u>	<u>          </u>	<u>700</u>
<b>Total</b>	<b>\$ 700</b>	<b>\$2,284</b>	<b>\$2,984</b>

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**Miscellaneous Improvements  
CIP Program Years 4-6  
Capital Projects Description  
Fiscal Years 2014-2016  
(In Thousands)**

<b>PROJECT TITLE</b>	<b>COMMUNICATIONS INFRASTRUCTURE</b>	<b>\$2,284</b>
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**Description:**

This project represents the continued investment in the organization's communication infrastructure supporting voice and data communication for town departments and the public schools. Annual funding 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.

<b>PROJECT TITLE</b>	<b>PUBLIC WORKS ROLLING STOCK</b>	<b>\$700</b>
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**Description:**

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  
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**CAPITAL IMPROVEMENT  
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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. This discussion reflects the identification of all potential projects that could emerge and enter the 4–6 year period.

YEARS 7–12 CIP SUMMARY BY FINANCING

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Long-Term Debt Funding	\$10,075,000	\$10,545,000	\$9,558,000	\$10,039,000	\$11,202,000	\$10,623,000	\$62,042,000
CNRE Contribution	1,461,000	1,493,000	1,526,000	1,560,000	1,595,000	1,630,000	9,265,000
School Grants	<u>832,000</u>	<u>850,000</u>	<u>996,000</u>	<u>1,029,000</u>	<u>1,075,000</u>	<u>1,123,000</u>	<u>5,905,000</u>
<b>TOTAL</b>	\$12,368,000	\$12,888,000	\$12,080,000	\$12,628,000	\$13,872,000	\$13,376,000	\$77,212,000

YEARS 7 – 12 CIP SUMMARY BY PLANNING CATEGORY

	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>Total</u>
Transportation & Circulation	\$4,312,000	\$4,641,000	\$4,575,000	\$4,912,000	\$4,853,000	\$5,197,000	\$28,490,000
Education	4,290,000	4,400,000	4,525,000	4,650,000	4,790,000	4,934,000	27,589,000
Parks & Recreation	438,000	451,000	464,000	477,000	491,000	505,000	2,826,000
Town Building Improvements	1,570,000	1,614,000	1,659,000	1,706,000	1,754,000	1,804,000	10,107,000
Miscellaneous Improvements	<u>1,758,000</u>	<u>1,782,000</u>	<u>857,000</u>	<u>883,000</u>	<u>1,984,000</u>	<u>936,000</u>	<u>8,200,000</u>
<b>Total Adopted CIP Years 7-12</b>	\$12,368,000	\$12,888,000	\$12,080,000	\$12,628,000	\$13,872,000	\$13,376,000	\$77,212,000

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**CAPITAL IMPROVEMENT  
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**TRANSPORTATION & CIRCULATION**

**Inventory of Public Infrastructure**

210	Miles of Roads
110	Bridges and Culverts
245	Miles of Sidewalks
170	Miles of Storm Drainage Pipes
6,600	Storm Drains
8.5	Miles of Water Courses on Town Property
1,135	Stop Signs
495	Crosswalks
106	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 and storm sewers. This CIP category consists primarily of recurring projects that fund renovation of and improvements to the 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 community is considered essential in retaining and attracting residents and investment in the private infrastructure of the community.

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**CAPITAL IMPROVEMENT  
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**STREET IMPROVEMENTS**

West Hartford has an extensive network of well maintained roads. 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. Residential 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	37
Collector Streets	20
Residential Streets	<u>153</u>
TOTAL	210

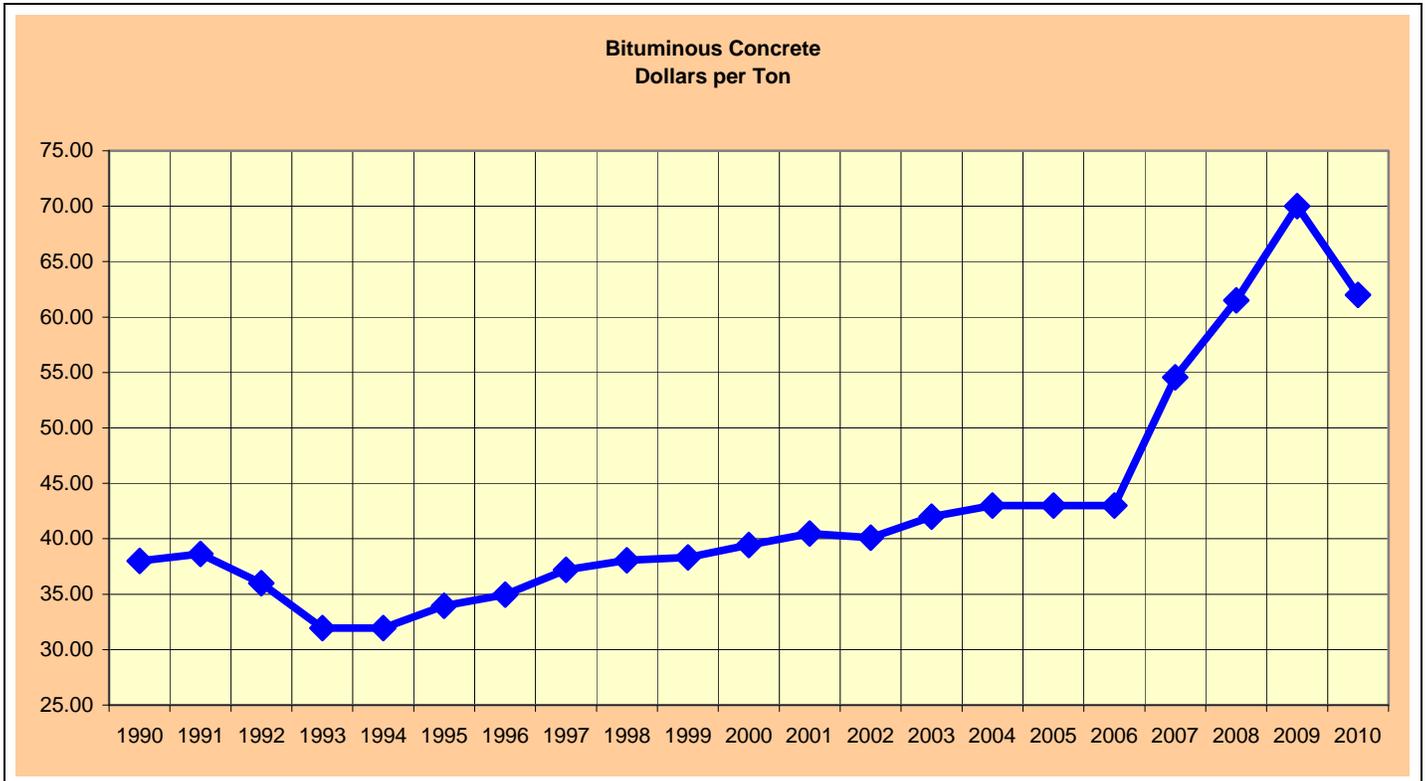
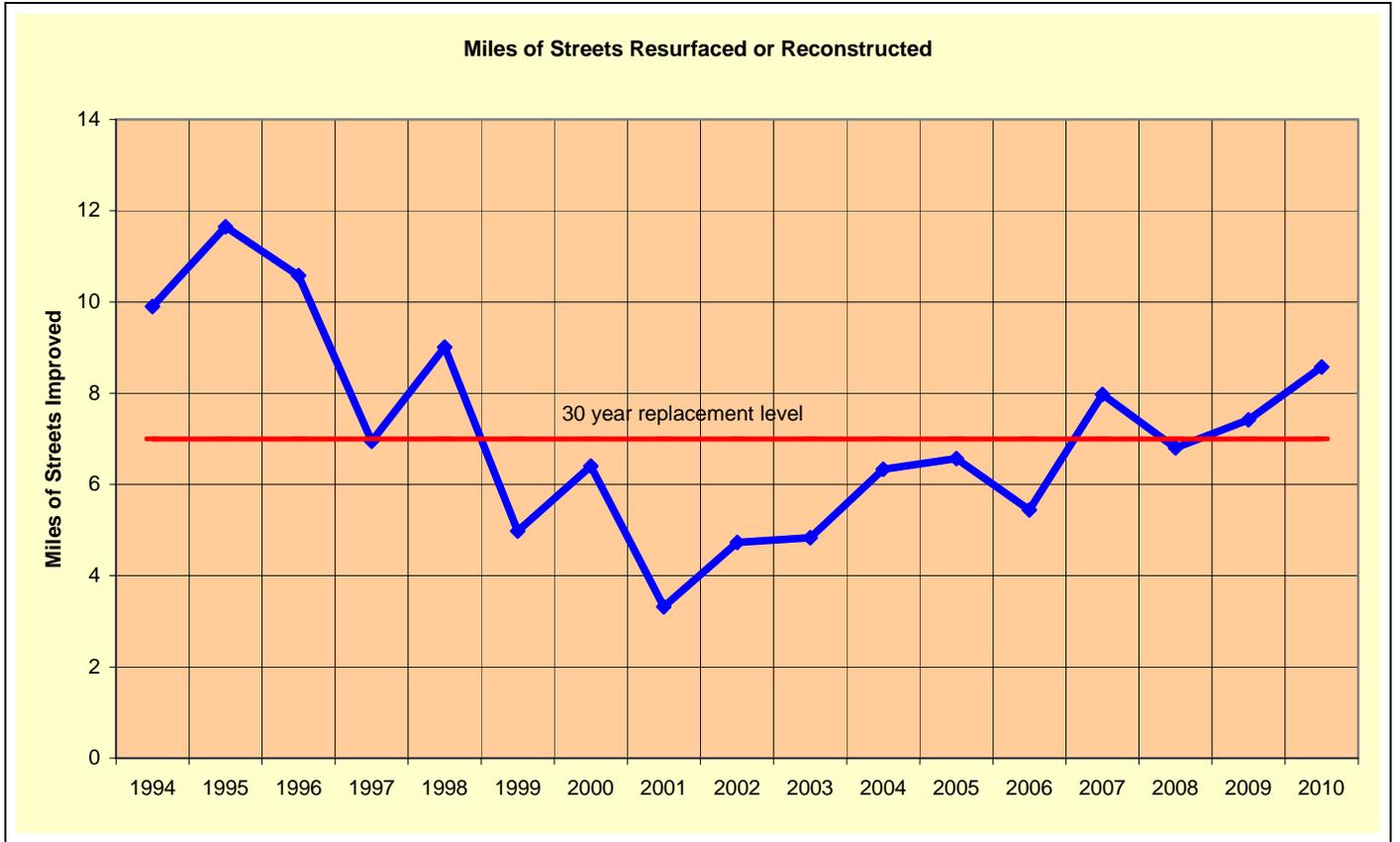
Note: These figures represent linear miles of streets. Some streets are multiple lanes and require larger investment than the mileage would suggest. In addition, there are 15 miles of State highways and 11 miles of private roads in West Hartford.

**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 in otherwise good condition. Street resurfacing overlays are undertaken on streets where the existing structure of the pavement is in sufficiently good condition to allow an overlay. The expected life of an overlay 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 sewer or curbing replacement, or cannot sustain an additional overlay 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 was the goal of the street program to treat approximately 10 miles of streets with some form of improvement each year, but in past years rising oil prices and budget constraints have reduced our street improvements to less than 7 miles per year. This puts the Town on a 30 year cycle for the replacement of streets, the outer parameter of an acceptable timeframe.

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 includes catch basin replacement and storm drainage improvements if necessary, curb and driveway apron replacement, fixing of the roadway base, repaving, and striping.

## CAPITAL IMPROVEMENT PROGRAM



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**CAPITAL IMPROVEMENT  
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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. From 1976 through 2010, the total amount of State and Federally funded improvements is approximately \$36,950,000. The Town pursues this funding whenever available and has never failed to receive a grant from this program. In fact, our applications are regularly ranked number one on the list of grants to be awarded.

**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	750,000	0.1
Farmington Ave. @ Trout Brook	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 – 2008)	3,300,000	0.5
New Britain Ave Reconstruction (2011)	<u>9,000,000</u>	<u>0.7</u>
TOTAL	\$36,950,000	11.4

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, re-paving and striping. 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 risers on manholes and a one and a half-inch overlay of bituminous. Often streets are milled, which removes part of the pavement, prior to resurfacing. Resurfacing is done on streets that are in reasonably good condition (good base and curbing) to extend the useful life of the street. 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 three 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. The bituminous curbing and driveway grading has been eliminated from the program in order to increase the area of street pavement improved.

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**CAPITAL IMPROVEMENT  
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**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 lines, crosswalks, arrows, edge lines, parking stalls, handicap stencils, lane lines 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. In the past few years we have placed much more paint on our streets as a form of traffic calming. Edge lines and warnings are common throughout the town.

**BRIDGE & CULVERTS**

**Inventory of Bridges & Culverts**

	<u>Number</u>	<u>Estimated Value</u>
Bridges	16	\$7,500,000
Culverts	94	\$27,800,000

Note: There are also 47 State, 17 private and 2 railroad bridges and culverts in West Hartford.

**Capital Investment Strategy:**

An amount is included each year in the CIP for the maintenance of bridges and culverts. This funding is sufficient to make minor repairs and perform small maintenance projects on culverts and bridges. Major bridge or culvert projects are funded separately in the CIP.

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 delamination; cleaning, reinforcing, injection grouting and painting of the concrete; and installation of a V-shaped lining.

There are three structures currently being monitored by the Town:

1. Still Road over Tumbledown Brook
2. North Main Street over Trout Brook
3. Fern Street over Trout Brook at Fernridge Park

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**CAPITAL IMPROVEMENT  
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**TRAFFIC SIGNALS**

**Inventory of Traffic Signals**

Traffic Signals 106

**Capital Investment Strategy:**

In 1984 the Town received State and Federal Grants to replace all of its traffic signals. Old mechanical technology was replaced with electronic technology. Some of those signals have again been upgraded with a more sophisticated computer based technology. Recently the Town received grants to replace 32 traffic signals. This project will be completed by June 2010. There are 14 traffic signals which need to be upgraded to the current standards established by this recent project. A new traffic signal costs about \$150,000-\$200,000 per installation. Traffic signal enhancements are funded through the CIP biannually.

CIP funding is used to renovate the signals, which includes new signal heads, detectors and instruments. Periodic maintenance is required to refurbish and replace old parts or upgrade existing electronics. In addition, modifications to existing signals require hardware enhancements and these funds have also been used for electronic speed control signs in school zones.

**SIDEWALKS**

**Inventory of Sidewalks**

Sidewalk Miles 245

**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. We are able to address about 80 of those complaints annually. At this time there are 150 open complaints, down from nearly 700 complaints only five years ago. We also identify repair needs through our own survey and through fall down claims. Those slabs that are determined to be the most dangerous tripping hazard are given priority. Annual funding provides for the replacement of approximately  $\frac{3}{4}$  of a mile of sidewalks and relay of approximately 2.0 miles of sidewalks, although this can vary widely year to year.

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. Replacement of sidewalks is accomplished one slab at a time.

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**CAPITAL IMPROVEMENT  
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**STORM SEWERS**

**Inventory of Storm Sewers**

Catch Basins	6,600
Miles of Pipe	170

**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 we seek 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.

On the eastside of the Town, the Eastridge sewer system is a combined sanitary and storm system that results in basement flooding during high intensity storms. The Metropolitan District Commission is responsible for installing a new storm sewer to the West Hartford town line at two locations. The MDC has scheduled funding for Beverly Road and Arnoldale Road sewer separation in 2010. While sewer separation is not part of the Town's planned program it seems increasingly likely that we will continue to respond to neighborhood concerns by separating the sewers ourselves when funding is available.

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. Sewer separation will be undertaken as part of street reconstructions.

The CIP provides annual funding for storm sewer repairs. This project provides for repairs to storm sewers with relatively small diameter pipes of short length, as well as some catch basins. In some cases, these repairs are in response to complaints. Occasionally, the annual authorization is combined with prior year appropriations and used for a major storm drainage project. 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 has begun a program of visual TV inspection of storm sewers that are suspected to be deficient in order to help identify problems and potential solutions to address them.

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**CAPITAL IMPROVEMENT  
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**NEIGHBORHOOD IMPROVEMENTS**

The Town provides funding for commercial center improvements, as needed. Currently, there is a project pending in the Elmwood neighborhood.

**Elmwood Center Improvements**

The Elmwood planning study and follow-up studies for traffic and public infrastructure improvements indicate there is a need for additional investment in street lighting, sidewalks and various other pedestrian improvements, as well as traffic flow improvements, for the Elmwood Center area. The goal of the improvements is to enhance pedestrian movements along New Britain Avenue, improve traffic flow and reduce congestion, and stimulate private investment by owners of existing businesses and buildings. The New Britain Avenue Reconstruction Project, scheduled to begin in 2011, is funded by a combination of Special Legislative Appropriation and the Town's portion of the Surface Transportation Program. In addition, the Town has requested the reallocation of funds from the Farmington Avenue project to the New Britain Avenue project to compensate for the State DOT's reduction of project funding.

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## CAPITAL IMPROVEMENT PROGRAM

### EDUCATION

Improvements to school buildings are driven by a growing school population and the fact that most of the public schools were built over fifty years ago. These are the primary reasons for a substantial need for reinvestment in school facilities. There has been significant investment in the public schools over the past decade, but buildings of this age require constant reinvestment to maintain their infrastructure and health.

Facility needs are divided into three components. Those components are: (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 would include enhancements to technology systems, accessibility improvements, furniture and equipment replacements and playscape improvements. Space needs would include school specific renovations and additions.

Recurring needs are driven by aging building systems that require annual investments. The Association of Educational Facilities Officers in a joint study with Coopers and Lybrand recommended an annual investment in the infrastructure of facilities of between \$2.00 and \$3.00 per square foot. Many other facilities-related associations have adopted this level of investment. In 1994 Facilities Resource Management (FRM), as part of the facilities assessment of all of the West Hartford schools, identified the annual investment rate to maintain the schools to be \$2.27 per square foot or \$3.6 million annually. This per square foot number is an average over time and not necessarily an annual investment. We have recently substantially renovated several schools. Those facilities are obviously not in need of significant new investment. While conditions change over time and we have to be aware of our facility needs, our present spending level for school building infrastructure is near the recommended levels.

Programmatic enhancements are driven by changing educational program needs and the goal to provide the best, most up to date, educational environment possible. Growing enrollments and changing space allocations at all levels primarily drive space needs.

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**CAPITAL IMPROVEMENT  
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**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. Although we consider available space at other schools as an option for over-crowding, in actuality, available space is minimal throughout the district at the elementary level.
3. Changing demographics will result in a greater need for intervention programs, which will increase our needs for space.
4. 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.
5. Class size is a significant variable in our planning.
6. We are committed to maintaining stability in the location of our Town-wide special education programs.
7. We are committed to supporting our middle school programs with adequate space.
8. There will be a dedicated space for music and art.
9. There will be adequate office and administrative space for each school.
10. There will be adequate space for specialty areas (QUEST, ESOL, Early Intervention, Parent Centers, Resource Rooms for At-Risk Learns.)
11. Computer Labs will be incorporated into our Media Centers.
12. We will advance the technology infrastructure program in each school.
13. Each school will have an adequate internal communications system.
14. Each school will be at least partially handicapped accessible.
15. Each cafeteria will hold one-third of the student body.
16. Each auditorium will hold one-half the student body.
17. Elementary outdoor play equipment will be adequate, safe and developmentally appropriate.
18. Secondary level athletic fields will be enhanced and maintained.
19. All schools will be upgraded for roofs, lighting, windows, flooring, heat and AC.
20. All schools will have safe roadways, walks and traffic patterns.

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**CAPITAL IMPROVEMENT  
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**BUILDING INVENTORY**

The eleven elementary schools, three middle schools, and two high schools comprise approximately 1.8 million 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		

**ENROLLMENT**

Enrollment growth has resulted in the need to develop additional space at existing schools. Wolcott, Aiken, Whiting Lane, Webster Hill, Braeburn and Smith Elementary Schools, Hall and Conard High Schools, and Sedgwick and King Philip Middle Schools have all been expanded or brought on line in the last ten years to address growing enrollment needs. A new middle school, Bristow, was brought online in 2005. Currently all high and elementary schools are operating at or near capacity.

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 2009 are included in Appendix I.

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**CAPITAL IMPROVEMENT  
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**I. SCHOOL RECURRING NEEDS – BUILDING INFRASTRUCTURE**

Investment in this category is undertaken to maintain the existing structures, address code compliance and safety issues and in many cases improve the performance of the facility.

**Summary of Recurring Needs**

**Project**

Asbestos Removal  
Boiler Replacement & HVAC  
Lockers  
Roofing and Masonry  
School Building Improvements  
Site and Athletic Field Improvements  
Stage and Auditorium Renovations  
Window Replacement

**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.

**Boiler Replacements and HVAC Improvements**

Over the past decade significant improvements have been made in school heating, ventilation and air-conditioning systems (HVAC). Many school primary heating systems (boilers) were approaching the end of their useful life and we began a systematic replacement program beginning in the late 1980's. The school system has both cast iron and steel tube boilers. The steel tube boilers have a limited life of approximately forty years and the cast iron boilers have a very long life but still require the replacement of systems ancillary to the boiler. In the past ten years, we have replaced boilers at Aiken, Braeburn, Bugbee, Duffy, Morley, Norfeldt, Webster Hill, Whiting Lane and Wolcott Elementary Schools and King Philip Middle School. Planned boiler replacements include Charter Oak School. Additional capacity was added to the Conard and Hall systems to meet the needs of the expansions. Planned air conditioning and ventilation replacements include Conard's chiller and Hall, King Phillip, and Bugbee's ventilation systems.

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. Whiting Lane, Charter Oak and Morley are partially air-conditioned. It is the administrative recommendation to have air-conditioned offices and library space in all the schools. Currently, this is accomplished primarily through 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.

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## CAPITAL IMPROVEMENT PROGRAM

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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. 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, 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. With these improvements there is generally an associated asbestos abatement project that costs between \$40,000 and \$50,000. 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 but do not add to the cost of maintenance.

### **Lockers**

The CIP allocates funding annually for locker replacement throughout the system. This project, first identified in fiscal year 1997, is an ongoing process to replace many worn lockers. There are an estimated 5,000 hallway lockers and 2,000 gym lockers in our schools. Some of the elementary schools do not have lockers for student use. The Fire Marshal has requested that coats, books and backpacks be removed from school hallways.

### **Roofing & Masonry**

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 \$16 and \$18 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 \$16 per square foot cost would be \$28,800,000. A roof should last twenty years and we average 22-25 years at replacement. Replacing the whole system every 25 years at \$16 a square foot, we should be spending \$1,150,000 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 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 reroofed in 2004. Conard was partially reroofed in 2005. Whiting Lane received a new roof in 2006, Wolcott School in 2007-2008 and Norfeldt in 2009-2010. Re-roofing projects often include, for an additional cost, the repair or replacement of parapet walls, hatches, skylights, roof drains and many times asbestos.

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## CAPITAL IMPROVEMENT PROGRAM

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### **School Building Improvements**

This large category is utilized to address code updates, security improvements, deferred maintenance and programmatic needs. Funding is primarily spent on code updates and lighting replacements. In the past, the work has concentrated on fire protection systems including alarms, detection, sprinklers and emergency lighting. Fire protection systems have been replaced at most school buildings. In addition, we have had an extensive lighting replacement program that is both energy conserving and facility enhancing. In recent years, we have been able to participate in a Northeast Utilities grant program that in some cases paid for one half of our investment in new lighting fixtures and energy conserving motors. These investments have been highly valuable to the Town in that we pay back the cost of the project with lower energy bills in a three to five year period. The new lighting gives twice the light for half the cost.

While several schools have seen significant reinvestment in the past few years, others have not and 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, sidewalks and drainage systems that are also in need of renovation. During the summer of 2007, the stadium fields at Hall and Conard was replaced with artificial turf.

### **Stage and Auditorium Renovations**

These improvements include enhancements, replacements and code work. Improvements have already been made to the high schools and the middle schools, as well as Bugbee, Charter Oak, Smith, Norfeldt and Aiken elementary schools. We are now working on the remaining elementary school auditoriums. Many of the auditoriums are in need of replacement seating as well as code and accessibility work over the twelve year CIP.

### **Window Replacement**

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 have been a problem for some time 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.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**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. The wiring framework for technology has been completed at all schools. Minor work on enhancements to the system is ongoing. The technology wiring costs of a school vary depending on the conditions found at the facility. These capital funds also pay for both instructional and administrative computers. In addition, hubs and servers are purchased to service the network. Technology is a relatively short-lived investment, requiring regular reinvestment.

**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 between \$2,500 to \$3,500 in new furniture.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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# Appendix I

## West Hartford Public School District

**Agenda Item:** Multi-Year Enrollment Projections

**Meeting Date:** November 17, 2009

**From:** Chip Ward, Director of Finance and Planning

**Through:** Karen List, 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 10/1/09, we had 9,996 K-12 students enrolled in West Hartford Public Schools. Next year, on 10/1/10, we are projecting a total of 9,964 students – a small decline of 32 students. Thereafter, the enrollment is expected to gradually decline to 9,400 students in 10 years' time. The trend comes from a decline in the number births in West Hartford since 2001, the relative stability in recent cohort survival ratios, and the declining trend statewide in K-12 enrollments. Most of the growth we will see next year will occur at the elementary level as a consequence of the continued attractiveness of the elementary schools. We have adequate space at most schools with the exception of Bugbee and Duffy.

### Multi-year Enrollment Projections:

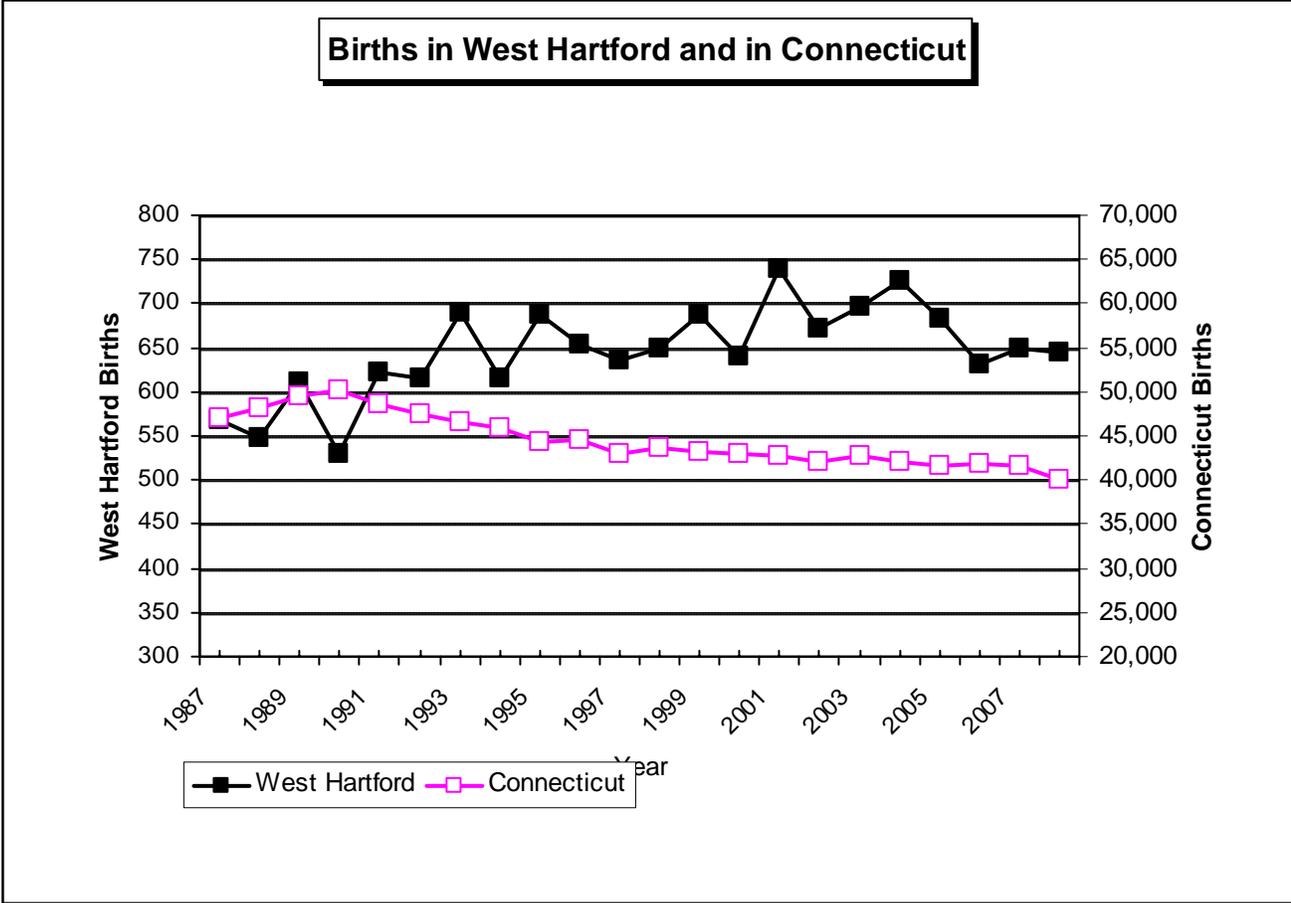
Enrollment projections serve as the guidepost for staffing and capital allocations in the school district. Long-term enrollment projections are made once a year, soon after the October 1 enrollments have been tallied. This section of the report will discuss the enrollment projections and methodology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

**AGENDA ITEM:  
IX.B.2**

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.



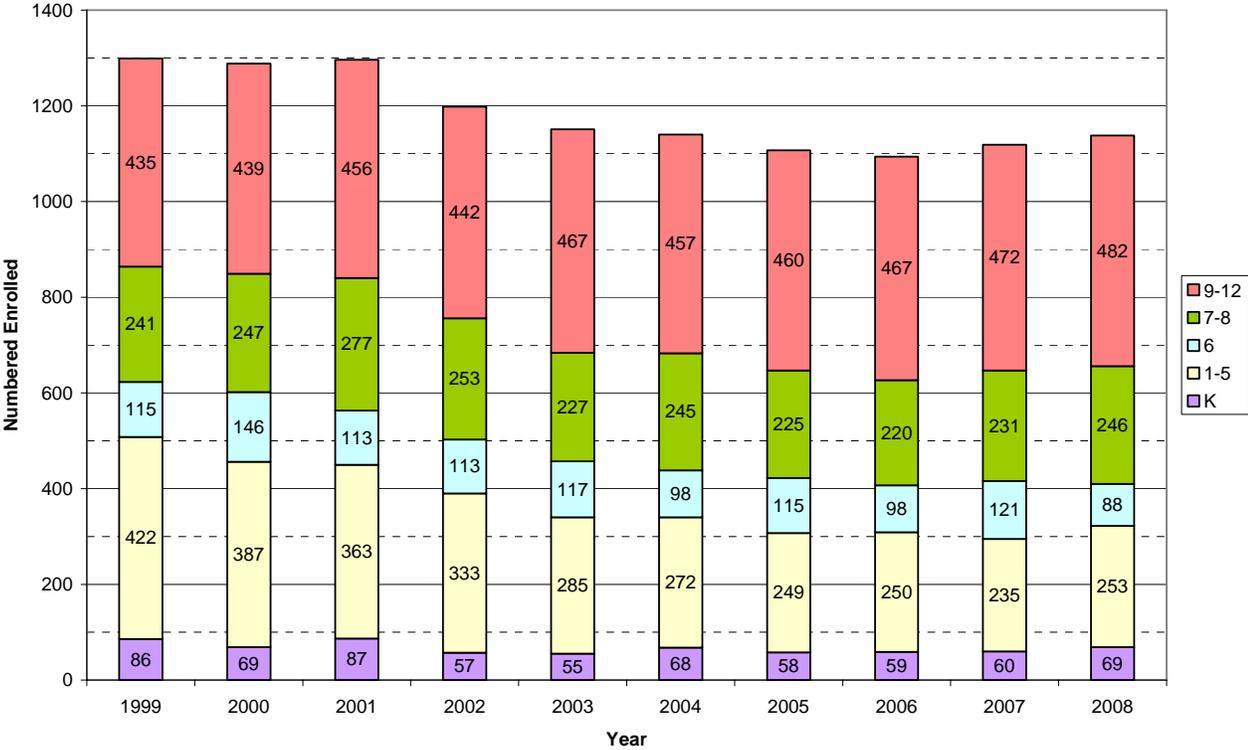
The chart above shows the trends over the last 20 years in the number of births in West Hartford and the number of births in the state of Connecticut. Total births in the state peaked at approximately 50,000 in 1990 and declined slowly and steadily over the last 17 years to just over 41,000 in 2008. 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 entering Kindergartners). The increase in births has been reflected in the steady enrollment growth in the district over the past years. 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. This year with 726

births in 2004 we had 787 students in Kindergarten. Next year with only 684 births in 2005, we are projecting a smaller class of 737 Kindergarten students. In the out years, the projected Kindergarten class sizes will decline to just under 700 students which is a major factor in the decline in the elementary enrollments in the out years.

With the birth rates established, the most critical assumptions in the enrollment projection are the assumed future cohort-survival ratios. Figure 1 shows the actual average of all the individual grade K to grade 12 cohort-survival ratios from 1995 to 2008 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 peaked in 2000 at 1.025 and has been slowly declining ever since. This year's figure of 1.009 was slightly higher than last year's overall average of 1.006. For the base enrollment projections we are assuming an overall CSR ratio of 1.0043.

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 from 1999 to 2001. From that peak through 2008 (the latest data available), private school enrollment declined by about 200 students (mostly at the elementary level). Over that same period public school enrollment grew by 1000 students. Our schools continue to remain an attractive option for all parents.

**Private School Enrollment**



CSR's have stabilized in recent years and we are using a CSR of just slightly over 1.0 that we are using for future projections. Each year we will have roughly the same number of students in each cohort. These factors - limited growth 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 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 is significantly above 1.00 reflecting the fact that West Hartford is a town where 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. The CSR observed in 2009 decreased slightly to 1.069. We will have to continue watching this CSR carefully over the next couple of years. For the enrollment projections we are using a three-year average of 1.073 meaning we are expecting 7.3% more Kindergartners than births five years ago.

The grade 1 to 5 CSR has remained consistently above 1.00 indicating that each cohort of students grows as they pass through the elementary years – again reflecting the trend of families with elementary aged children moving to West Hartford for the schools. The 2009 average CSR for this group of students was 1.013. 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 in the system (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. In 2009, the grade 6 CSR rose slightly to 0.949. The future CSR is simply the three year average of the most current CSR's (0.938)

The average grade 7 to 12 CSR has varied mostly between 0.99 and 1.01 for the last 5 years, and 2009 was a typical year with an average 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 decreased slightly to 0.999 in 2009 from 1.001 in 2008. The grade 9 CSR, which partly measures the net return of students to the high schools from private and parochial middle schools, remained high at 1.077 (though below last year's level of 1.094.) Grade 10 to 12 CSR's rose slightly to 0.986 in 2009 from 0.976 in 2008. Using a three-year average, the average projected CSR for grade 7 to 12 is exactly 1.00.

Figure 3 presents the 10-year enrollment projection for the elementary, middle and high schools. These projections show the elementary population has peaked at approximately 4,680 students. The elementary enrollment will stay at this level for one more year and then start a slow decline to just under 4,300 students in the out years of the forecast. The combined middle school enrollments will fluctuate between 2,200 and 2,300 students throughout the forecast period, until starting a slow decline near the end of the forecast period. The high school population will fluctuate between 3,000 and 3,200 students through out the forecast period.

Figure 4 presents a comparison of the projected 10-year district enrollments that have been made over the last 6 years. In the older forecasts, Nov 2004 to Nov 2005, the enrollment projections tended to clump in a very narrow range. These old forecasts projected total enrollment to reach 10,800 students by 2015-16 school year. They were based on historical CSR's applied to the large 2001 birth cohort slated to enter WHPS in the fall of 2006. Once the fall 2006 Kindergarten enrollments were known, and were lower than projected, the Nov 2006 forecast cut that long-term peak enrollment number by about 500 students. With the low set of CSR's observed in 2007, the peak enrollment figures dropped another 300 students last year to just under 10,000, but the enrollment was expected to remain stable at that level. Lower birth rates impacted the out years of the November 2008 projections and lowered out-year enrollments to 9,500 students. The November 2009 enrollment projections are very similar to the 2008 projections – forecasting a long term general decline in the overall enrollment to 9,400 students.

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.

Long term, the elementary enrollment is projected to decline as the lower birth rates (after 2004) result in fewer elementary students. With that longer term decline in elementary enrollments, space needs at the elementary school will ease. The space needs are still very tight over the next two years at certain elementary schools.

### **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 1/2 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 regular education space needs at King Philip and Sedgwick are based on a count of how many teams will be needed. King Philip this year has 8 teams and is expected to have 8 to 8.5 teams throughout most of the forecast period, growing to 9 teams at the end of the forecast period.

Sedgwick has 8 teams this year. The team requirements are expected to fluctuate between 8 and 8.5 teams next year over the forecast period.

With the completion and full operation at Bristow, there is adequate space at all middle schools throughout the forecast period.

### **High School Forecasts:**

The high school enrollment forecast shows Conard is now expected to range between 1,450 and 1,550 students throughout the forecast period – except in the last year where enrollments are projected to exceed 1,600. After a peak enrollment of 1556 students this year, Hall is expected to slowly drop to 1,444 students by 2014-15 and then grow to 1,487 students at the end of the forecast period.

Project 21 expanded both high schools to a capacity of 1,500 students. With the addition of the modular classrooms, Hall has the capacity for 1,600 students. Both schools have adequate space throughout the forecast period – though Conard will have to be closely watched.

### **Implications of Building Enrollment Forecasts on the Capital Budget:**

Based on this year's enrollment projections which now project a long term decline in the elementary enrollments, we have adequate space at the elementary school level in the long term. There are some specific short term school by school space issues detailed below.

#### ***KP/Hall Feeder elementary schools***

**Bugbee:** Bugbee has experienced some sharp swings in enrollment. Bugbee had 384 students in 2007-08. Bugbee dropped to 364 students in 2008-09 as they lost 18 students between Kindergarten and first grade. This year Bugbee's enrollment surged to 410 students as the incoming Kindergarten population ended up at 85 students – 22 higher than in 2008-09. Projecting enrollment trends in the future at Bugbee is difficult and highly dependent on incoming Kindergarten enrollments which are the most difficult to forecast.

The base enrollment projections show that Bugbee stays close to 400 students and that Bugbee is short two classrooms this year and is short one classroom throughout the forecast period. Using an alternative method for projecting Kindergarten enrollments results in Bugbee's enrollment growing to 480 students and Bugbee would need 4 additional classrooms under this scenario. The key difference between the two is how many Kindergarten students enter in the next 2-3 years – will the classes average

around 62 Kindergartener's per year or will the classes average 77 Kindergarten students per year?

Under either scenario, additional space will be needed at Bugbee to meet the projected enrollments.

**Aiken, Morley, Norfeldt, Smith, Whiting Lane:** Enrollment appears stable at these schools and space is adequate at the schools.

*Sedgwick/Conard Feeder elementary schools*

**Braeburn, Charter Oak, Webster Hill, Wolcott:** Enrollment appears stable at these schools and space is adequate at the schools.

**Duffy:** Duffy has plenty of instructional space in the long term as the enrollment declines. The phase out of the AC program will both reduce the student count and reduce the demand for special education classrooms at Duffy. In addition the general decline in elementary enrollments is reflected at Duffy as well.

In the short term, the space crunch will continue at Duffy. Duffy was short two classrooms this year and used small classrooms with smaller numbers of students to meet the space needs. Next year, the total space needs are projected to decline by 3 classrooms as two fewer classrooms will be needed for regular education and there will be one fewer classroom needed for the AC program. However, Duffy has two grade levels where 1 more student could trigger an additional section break and Duffy is critically short of smaller instructional spaces that the AC classroom provides. So Duffy is still under a severe short term space crunch.

We will be reviewing our space needs and options at Bugbee and Duffy in the coming months.

Figure 1:  
Average Cohort Survival Ratio  
History and Projections

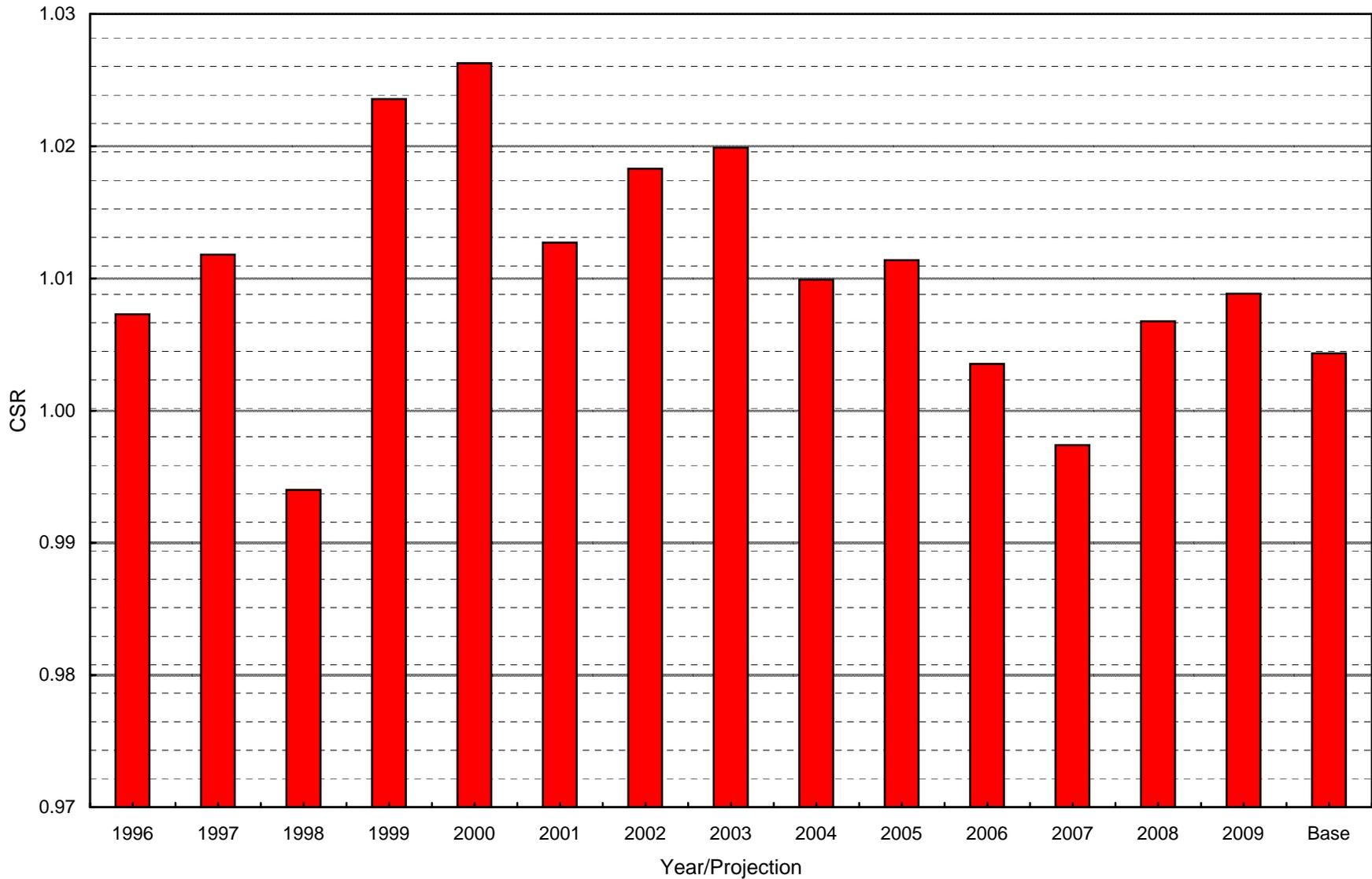


Figure 2:

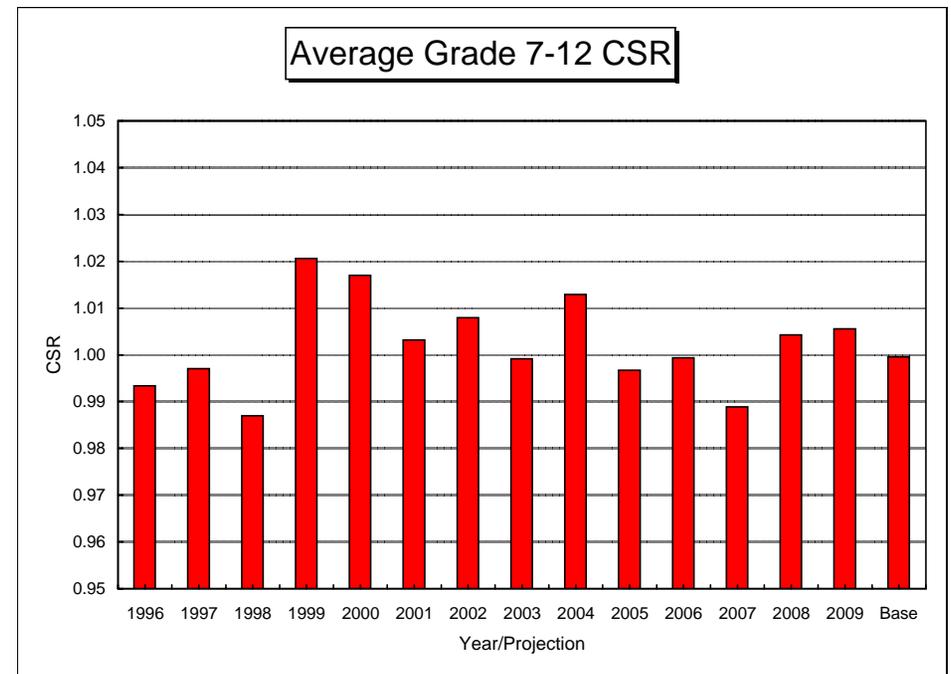
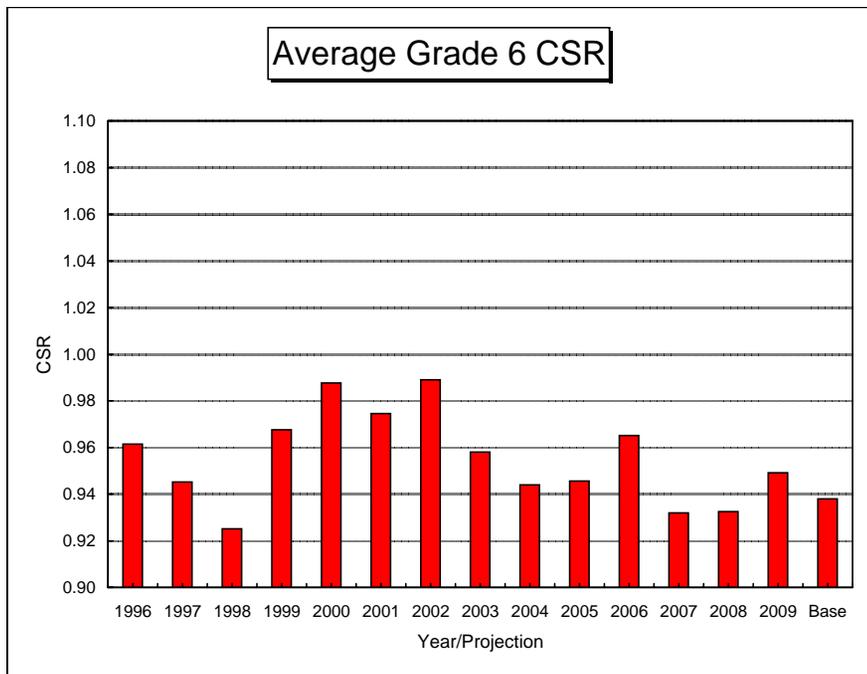
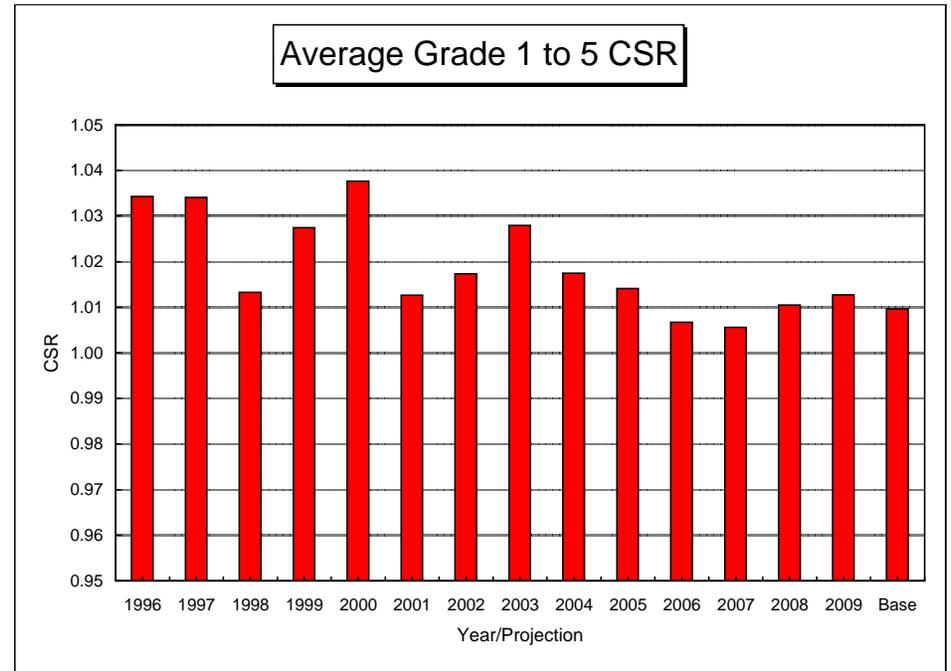
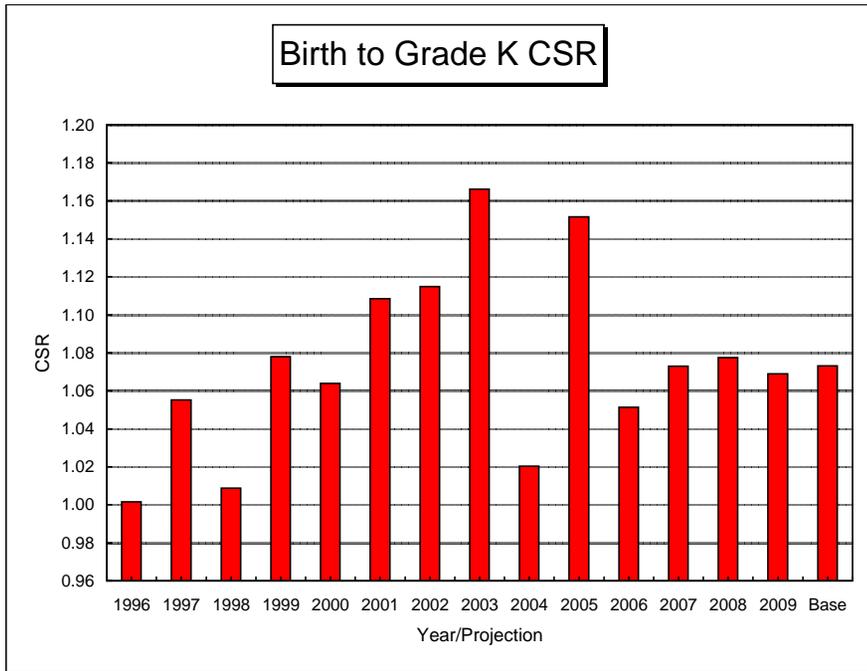


Figure 3  
Enrollment History and Projections

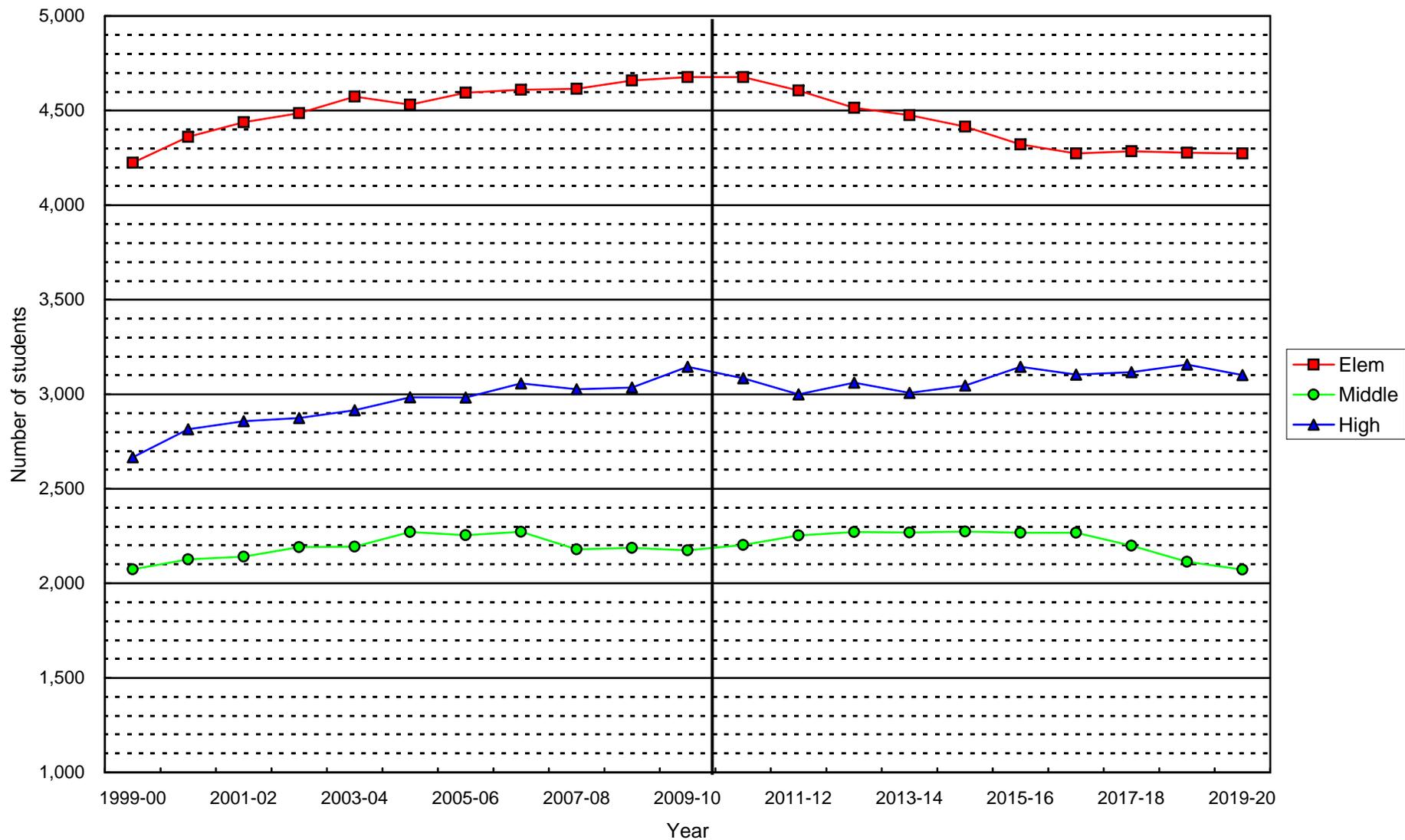
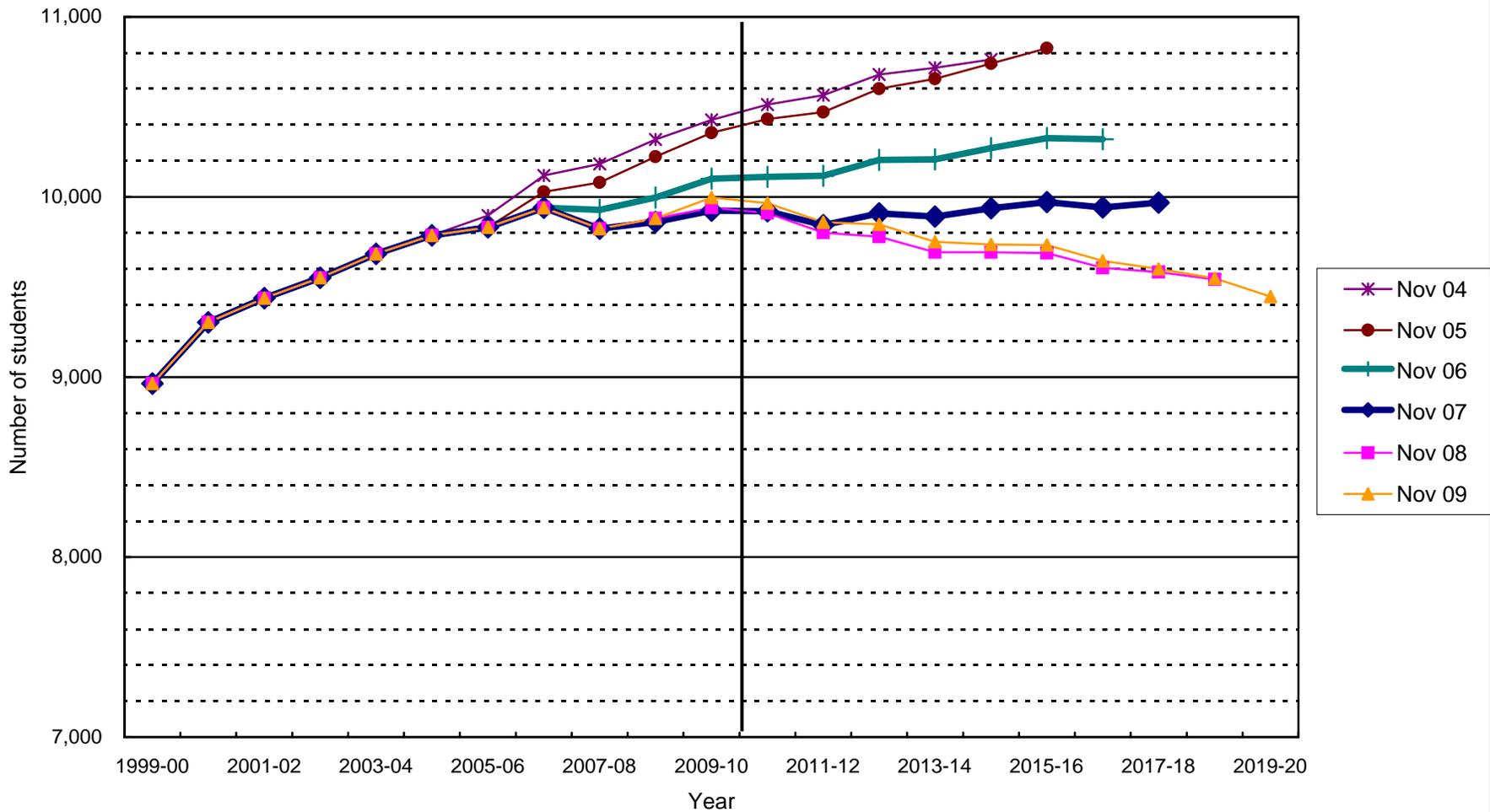


Figure 4  
Comparison of K-12 Enrollment Projections



## 6 Year Enrollment Summary and Capacity Summary - November 2009

### Elementary Schools

School	School Year	Projected Enrollment	Standard Classrooms				
			Needed for Reg. Ed.	Other Needs	Total Needs	Total Available	Surplus/(Deficit)
<b>Aiken (23/27)</b>	2009-10	430	21	4	25	25	0
	2010-11	415	20	4	24	25	1
	2011-12	416	20	4	24	25	1
	2012-13	410	19	4	23	25	2
	2013-14	404	18	4	22	25	3
	2014-15	387	18	4	22	25	3
	2015-16	373	18	4	22	25	3
<b>Braeburn (23/27)</b>	2009-10	438	21	3	24	25	1
	2010-11	425	19	3	22	25	3
	2011-12	418	20	3	23	25	2
	2012-13	405	20	3	23	25	2
	2013-14	391	18	3	21	25	4
	2014-15	391	18	3	21	25	4
	2015-16	383	18	3	21	25	4
<b>Bugbee (23/27)</b>	2009-10	410	20	0	20	18	-2
	2010-11	418	19	0	19	18	-1
	2011-12	415	19	0	19	18	-1
	2012-13	408	19	0	19	18	-1
	2013-14	416	19	0	19	18	-1
	2014-15	417	19	0	19	18	-1
	2015-16	394	18	0	18	18	0
<b>Charter Oak (22/23)</b>	2009-10	325	19	3	22	22	0
	2010-11	326	18	3	21	22	1
	2011-12	326	18	3	21	22	1
	2012-13	334	18	3	21	22	1
	2013-14	337	18	3	21	22	1
	2014-15	331	18	3	21	22	1
	2015-16	334	18	3	21	22	1
<b>Duffy (23/27)</b>	2009-10	582	28	5	33	31	-2
	2010-11	585	26	4	30	31	1
	2011-12	561	26	4	30	31	1
	2012-13	545	25	3	28	31	3
	2013-14	538	24	3	27	31	4
	2014-15	527	24	3	27	31	4
	2015-16	507	24	3	27	31	4
<b>Morley (23/27)</b>	2009-10	379	19	2	21	21	0
	2010-11	380	18	2	20	21	1
	2011-12	380	18	2	20	21	1
	2012-13	363	18	2	20	21	1
	2013-14	354	18	2	20	21	1
	2014-15	344	18	2	20	21	1
	2015-16	339	18	2	20	21	1

Description of needs for other standard classroom space

Aiken Art, Vocal Music, ELC (2)  
 Braeburn Art, Vocal Music, Special Education (1)  
 Bugbee Art, Vocal Music in basement classrooms  
 Charter Oak Art, Family Resource Center (1), Pre - K (1), Vocal Music in smaller space  
 Duffy Art, Vocal Music, Spec. Ed. (2/1/1/0 as AC prog phases out), Part time Art/Music  
 Morley Art, Vocal Music

## 6 Year Enrollment Summary and Capacity Summary - November 2009 Elementary Schools

School	School Year	Projected Enrollment	Standard Classrooms				
			Needed for Reg. Ed.	Other Needs	Total Needs	Total Available	Surplus/(Deficit)
<b>Norfeldt (23/27)</b>	2009-10	427	21	4	25	26	1
	2010-11	411	19	4	23	26	3
	2011-12	417	18	4	22	26	4
	2012-13	404	19	4	23	26	3
	2013-14	394	18	4	22	26	4
	2014-15	392	18	4	22	26	4
	2015-16	387	18	4	22	26	4
<b>Smith (22/23)</b>	2009-10	353	18	5	23	24	1
	2010-11	364	19	5	24	24	0
	2011-12	342	18	5	23	24	1
	2012-13	332	18	5	23	24	1
	2013-14	319	18	5	23	24	1
	2014-15	310	18	5	23	24	1
	2015-16	312	18	5	23	24	1
<b>Webster Hill (23/27)</b>	2009-10	431	20	2	22	25	3
	2010-11	422	20	2	22	25	3
	2011-12	409	19	2	21	25	4
	2012-13	397	19	2	21	25	4
	2013-14	393	18	2	20	25	5
	2014-15	394	18	2	20	25	5
	2015-16	380	18	2	20	25	5
<b>Whiting Lane (23/27)</b>	2009-10	405	21	10	31	31	0
	2010-11	408	20	10	30	31	1
	2011-12	402	18	10	28	31	3
	2012-13	393	19	10	29	31	2
	2013-14	381	18	10	28	31	3
	2014-15	384	18	10	28	31	3
	2015-16	374	18	10	28	31	3
<b>Wolcott (23/27)</b>	2009-10	497	23	3	26	30	4
	2010-11	523	24	3	27	30	3
	2011-12	522	24	3	27	30	3
	2012-13	524	24	3	27	30	3
	2013-14	548	25	3	28	30	2
	2014-15	538	24	3	27	30	3
	2015-16	537	24	3	27	30	3
<b>Elementary</b>	2009-10	4677	231	41	272	278	6
	2010-11	4677	222	40	262	278	16
	2011-12	4608	218	40	258	278	20
	2012-13	4515	218	39	257	278	21
	2013-14	4475	212	39	251	278	27
	2014-15	4415	211	39	250	278	28
	2015-16	4320	210	39	249	278	29

Description of needs for other standard classroom space

Norfeldt	Art, Vocal Music, Special Education (2)
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 (2), Early Learning Center (6)
Wolcott	Art, Vocal Music, Special Education (1)

# 6 Year Enrollment Summary and Capacity Summary - November 2009

## Middle Schools

School	School Year	Projected Enrollment	Standard Classrooms				Surplus/(Deficit)
			Needed for Reg. Ed.	Other Needs	Total Needs	Total Available	
<b>King Philip</b>	2009-10	868	40	20	60	74	14
	2010-11	876	40	20	60	74	14
	2011-12	866	40	20	60	74	14
	2012-13	921	42	20	62	74	12
	2013-14	927	42	20	62	74	12
	2014-15	943	45	20	65	74	9
	2015-16	929	45	20	65	74	9
<b>Sedgwick</b>	2009-10	872	40	21	61	67	6
	2010-11	894	40	21	61	67	6
	2011-12	953	42	21	63	67	4
	2012-13	916	42	21	63	67	4
	2013-14	906	42	21	63	67	4
	2014-15	896	42	21	63	67	4
	2015-16	903	42	21	63	67	4
<b>Bristow</b>	2009-10	420	22	5	27	27	0
	2010-11	420	22	5	27	27	0
	2011-12	420	22	5	27	27	0
	2012-13	420	22	5	27	27	0
	2013-14	420	22	5	27	27	0
	2014-15	420	22	5	27	27	0
	2015-16	420	22	5	27	27	0
<b>Middle Schools</b>	2009-10	2160	102	46	148	168	20
	2010-11	2190	102	46	148	168	20
	2011-12	2239	104	46	150	168	18
	2012-13	2257	106	46	152	168	16
	2013-14	2253	106	46	152	168	16
	2014-15	2259	109	46	155	168	13
	2015-16	2252	109	46	155	168	13

### Description of needs for other standard classroom space

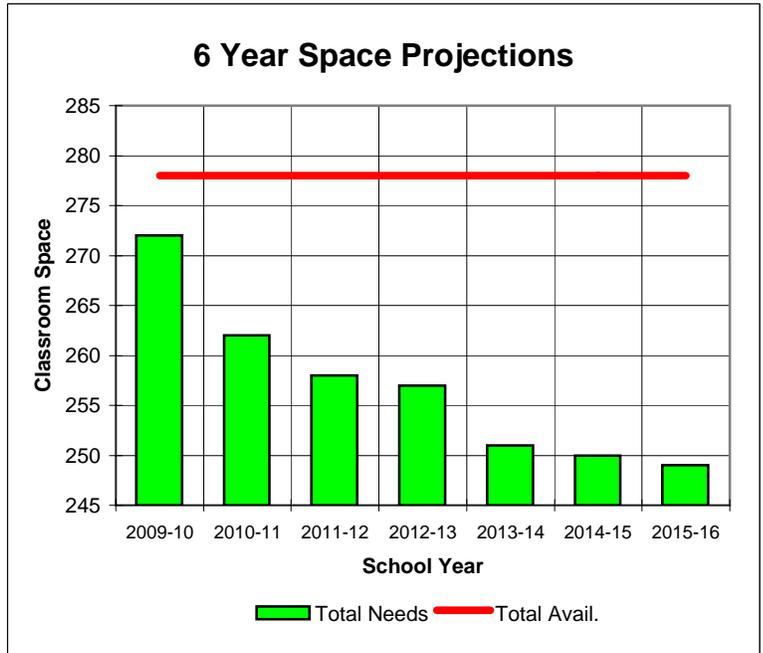
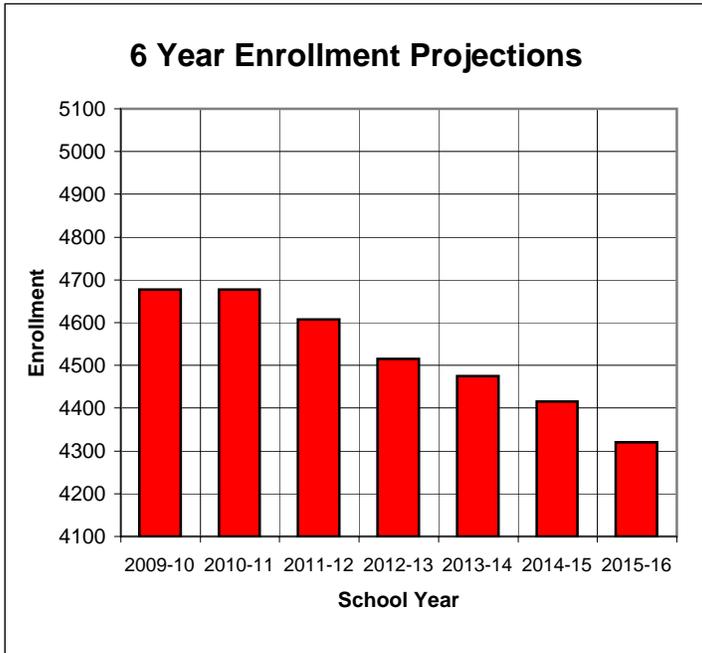
King Philip	Unified Arts (12), Special Ed (2), Computer Lab (2), 10th math teacher (1), Quest (1) Strive (1), Alternative Middle School (1)
Sedgwick	Unified Arts (12), Special Ed (4), ESOL (1), Computer Lab (1), 10th math teacher (1) Strive (1), Alternative Middle School (1)
Bristow	Unified Arts (4),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

## 6 Year Enrollment Summary and Capacity Summary - November 2009 High Schools

School	School Year	Projected Enrollment
<b>Conard</b>	2009-10	1536
	2010-11	1507
	2011-12	1450
	2012-13	1545
	2013-14	1496
	2014-15	1547
	2015-16	1603
<b>Hall</b>	2009-10	1556
	2010-11	1524
	2011-12	1494
	2012-13	1461
	2013-14	1456
	2014-15	1444
	2015-16	1487
<b>High Schools</b>	2009-10	3092
	2010-11	3031
	2011-12	2944
	2012-13	3006
	2013-14	2952
	2014-15	2991
	2015-16	3090

# Space Needs Analysis November 2009 Projections

## All Elementary Schools



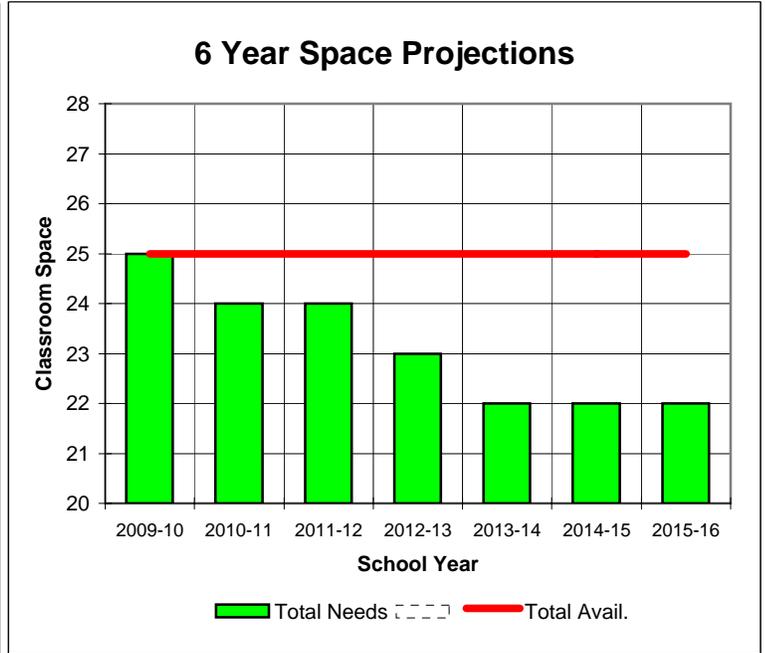
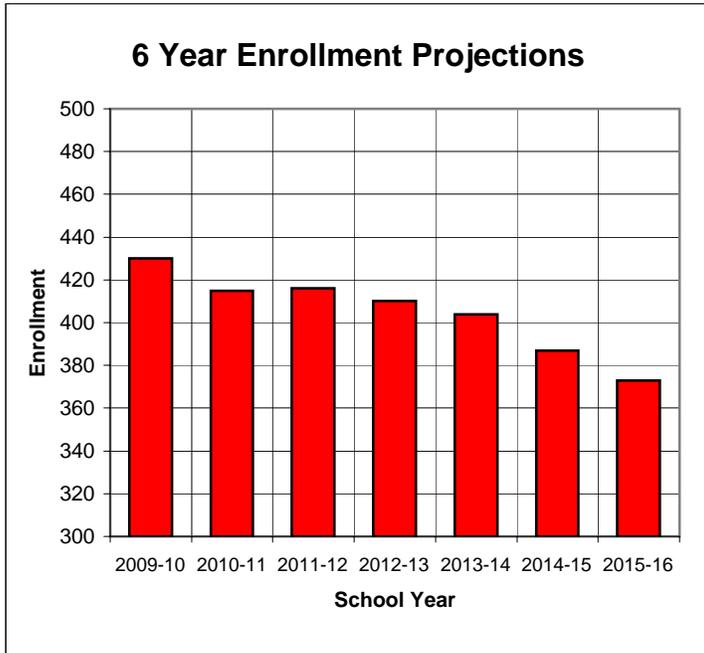
**Comments:**

**Average section size (K-5):**

Year	Average
2009-10	20.2
2010-11	21.1
2011-12	21.1
2012-13	20.7
2013-14	21.1
2014-15	20.9
2015-16	20.6

# Space Needs Analysis November 2009 Projections

## Aiken School



**Comments:**

Aiken shows a slowly decreasing population trend

Aiken looks to have adequate space throughout forecast period

**Average section size (K-5):**

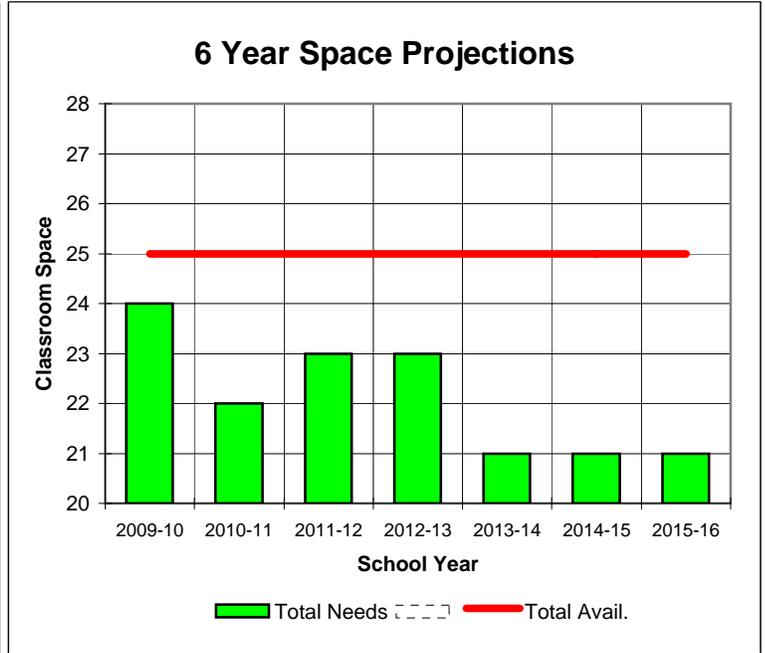
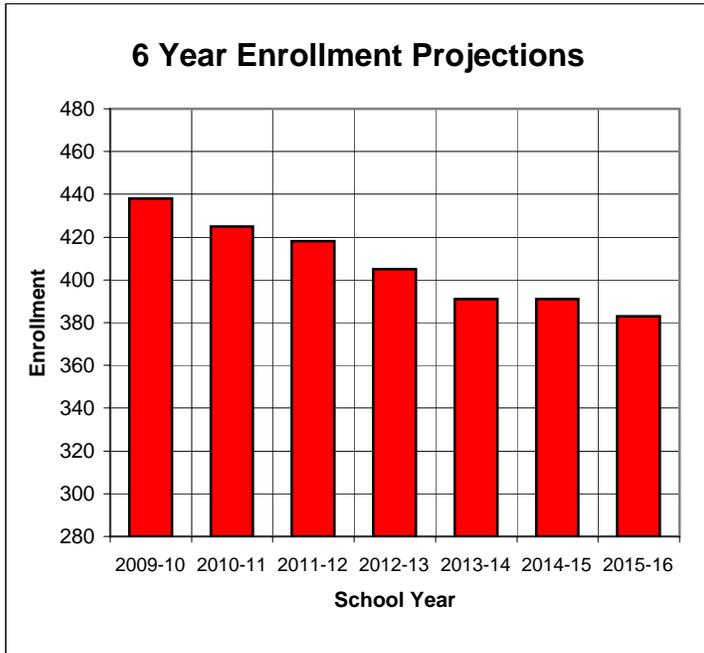
Year	Average
2009-10	20.5
2010-11	20.8
2011-12	20.8
2012-13	21.6
2013-14	22.4
2014-15	21.5
2015-16	20.7

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	2	-2
2011-12	1	-1
2012-13	2	0
2013-14	3	0
2014-15	1	0
2015-16	0	0

# Space Needs Analysis November 2009 Projections

## Braeburn School



**Comments:**

- Braeburn shows a slowly decreasing population trend
- Braeburn looks to have adequate space throughout forecast period
- The space available figure includes three modular classrooms

**Average section size (K-5):**

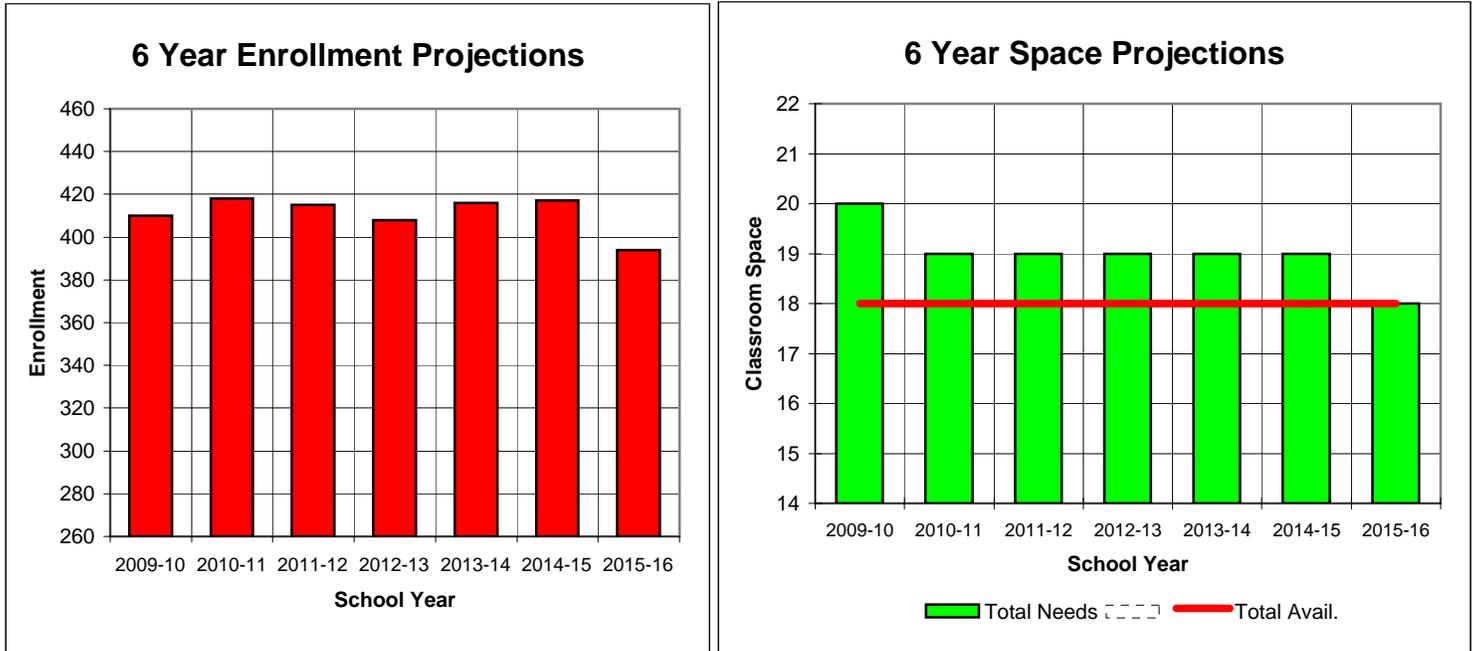
Year	Average
2009-10	20.9
2010-11	22.4
2011-12	20.9
2012-13	20.3
2013-14	21.7
2014-15	21.7
2015-16	21.3

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	3	0
2011-12	3	-2
2012-13	1	-2
2013-14	1	0
2014-15	1	0
2015-16	2	0

# Space Needs Analysis November 2009 Projections

## Bugbee School



**Comments:**

- Bugbee shows a stable population trend
- Space is not adequate throughout the forecast period
- Bugbee has 3 modular classrooms in use.
- We will need to watch Kindergarten enrollments carefully. If Kindergarten enrollments exceed projections - additional space will be needed at Bugbee.

**Average section size (K-5):**

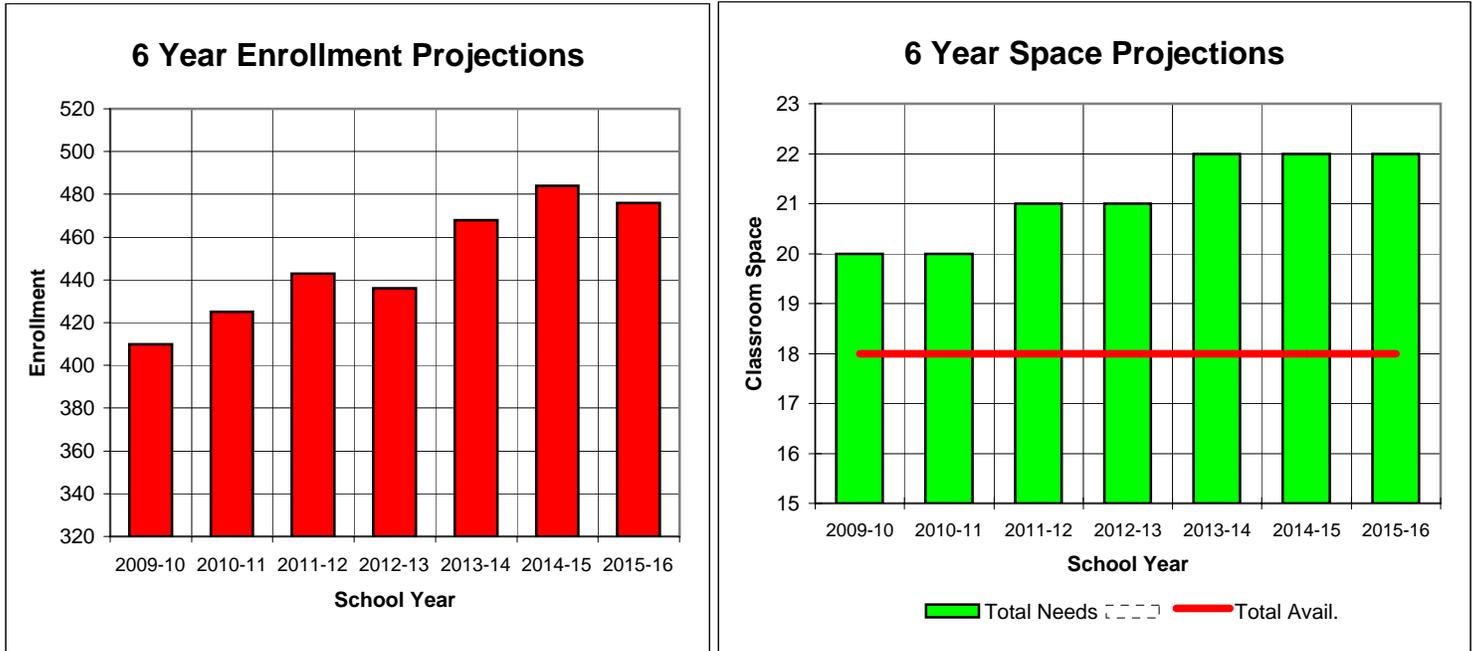
Year	Average
2009-10	20.5
2010-11	22.0
2011-12	21.8
2012-13	21.5
2013-14	21.9
2014-15	21.9
2015-16	21.9

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	3	0
2011-12	2	0
2012-13	3	-1
2013-14	3	0
2014-15	2	-1
2015-16	3	0

# Space Needs Analysis November 2009 Projections - ALTERNATE With K CSR Method

## Bugbee School



**Comments:**

Bugbee shows a significantly increasing population trend -moving to a 4 section per grade school

Space is not adequate throughout the forecast period

Bugbee has 3 modular classrooms in use.

**Average section size (K-5):**

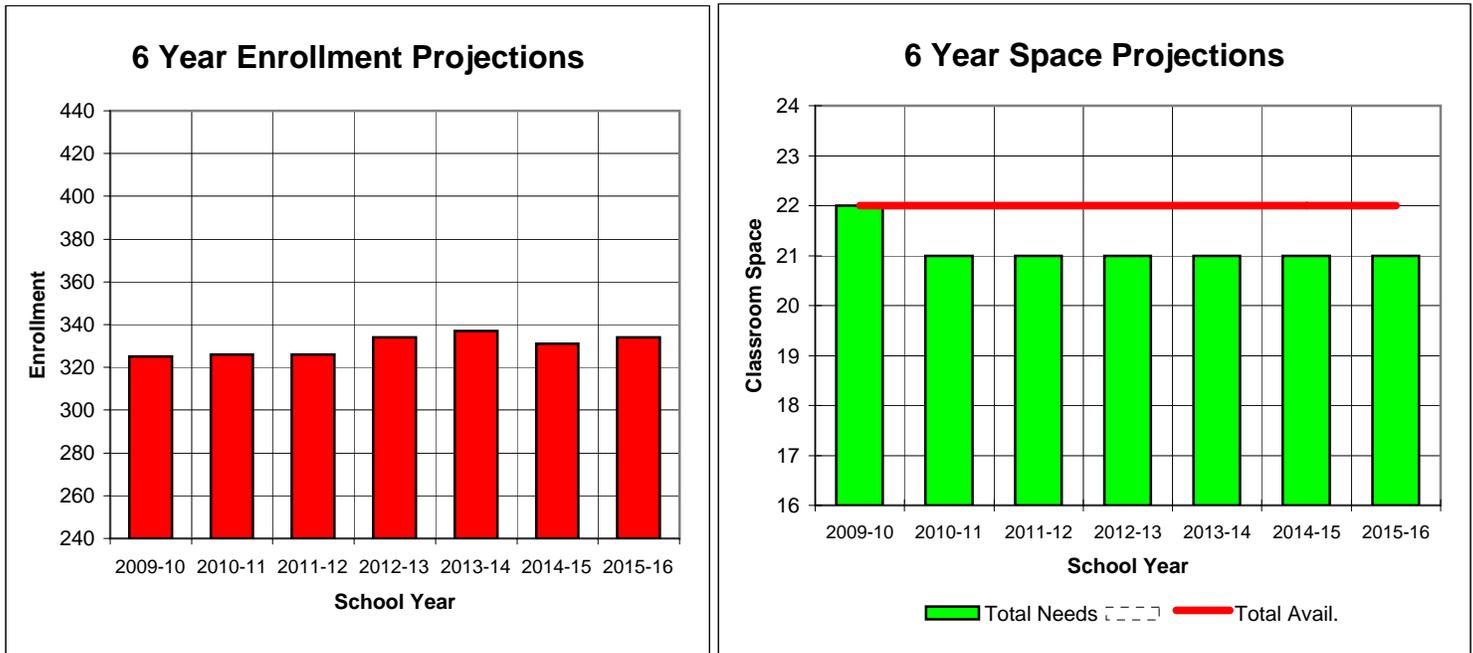
Year	Average
2009-10	20.5
2010-11	22.0
2011-12	21.8
2012-13	21.5
2013-14	21.9
2014-15	21.9
2015-16	21.9

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	2	-1
2011-12	1	0
2012-13	2	-1
2013-14	2	0
2014-15	3	-1
2015-16	3	-1

# Space Needs Analysis November 2009 Projections

## Charter Oak School



**Comments:**

Charter Oak's enrollment is steady throughout forecast period

Charter Oak has adequate space throughout the forecast period

Charter Oak averages 10 new magnet enrollments a year at the Kindergarten level and has room for 1

Charter Oak has 2 modular classrooms in use

**Average section size (K-5):**

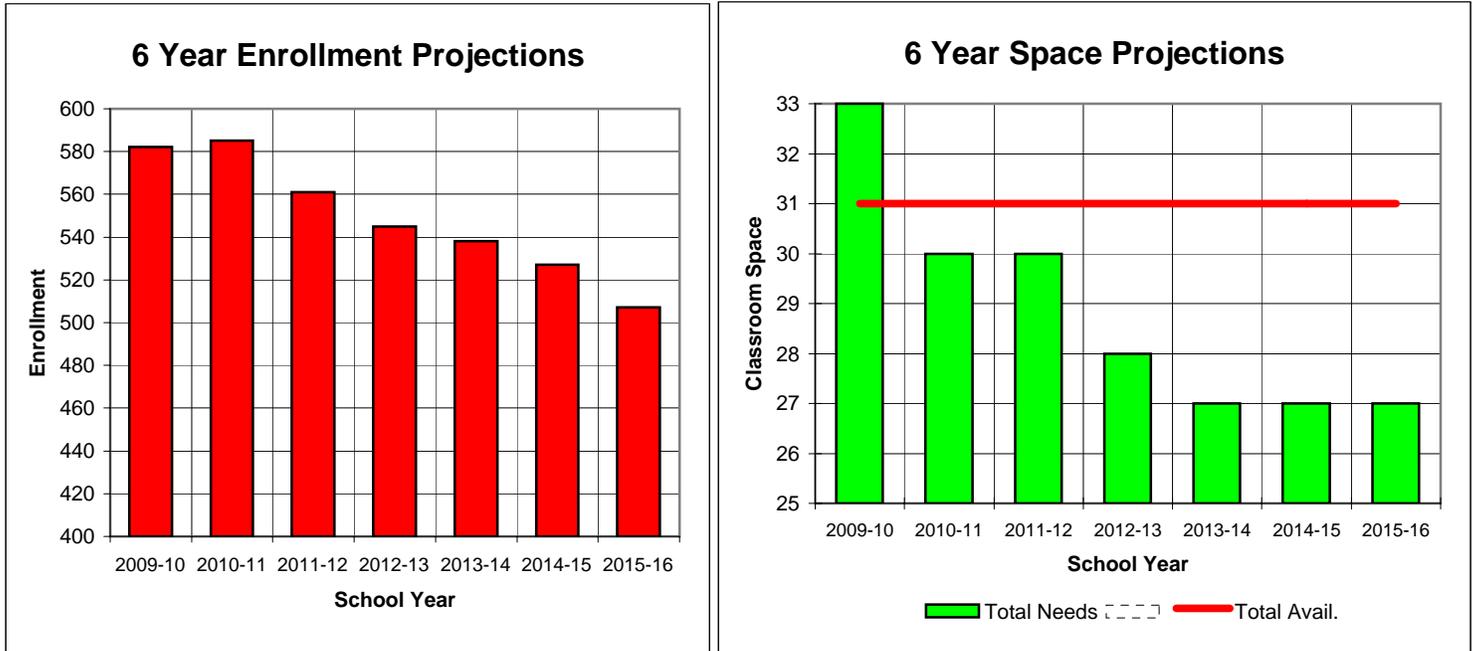
Year	Average
2009-10	17.1
2010-11	18.1
2011-12	18.1
2012-13	18.6
2013-14	18.7
2014-15	18.4
2015-16	18.6

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11		
2011-12	Can be handled through	
2012-13	controlling magnet admissions	
2013-14		
2014-15		
2015-16		

# Space Needs Analysis November 2009 Projections

## Duffy School



**Comments:**

Duffy shows a near term stable population and then a declining trend in enrollment

Duffy is short two classrooms this year and space is tight in the near term but adequate in long term

Duffy has 3 modular classrooms in use

**Average section size (K-5):**

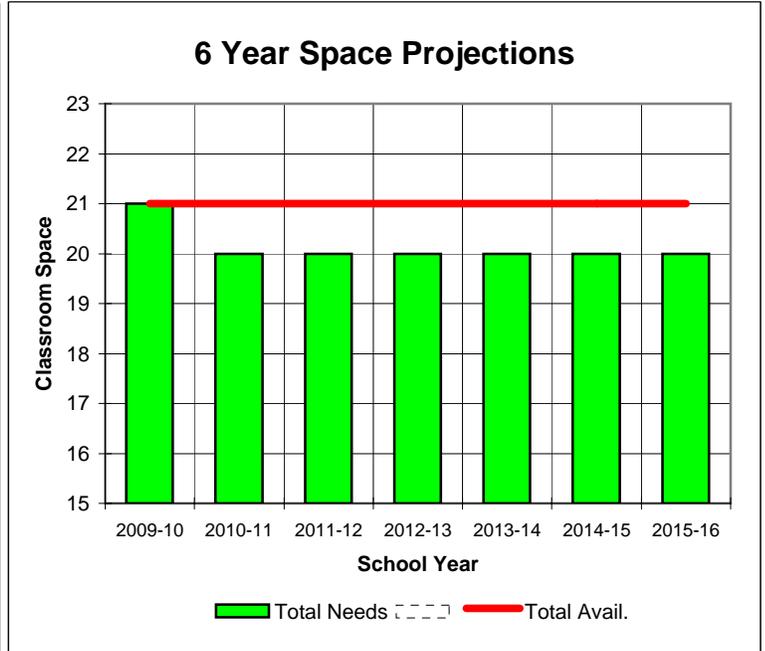
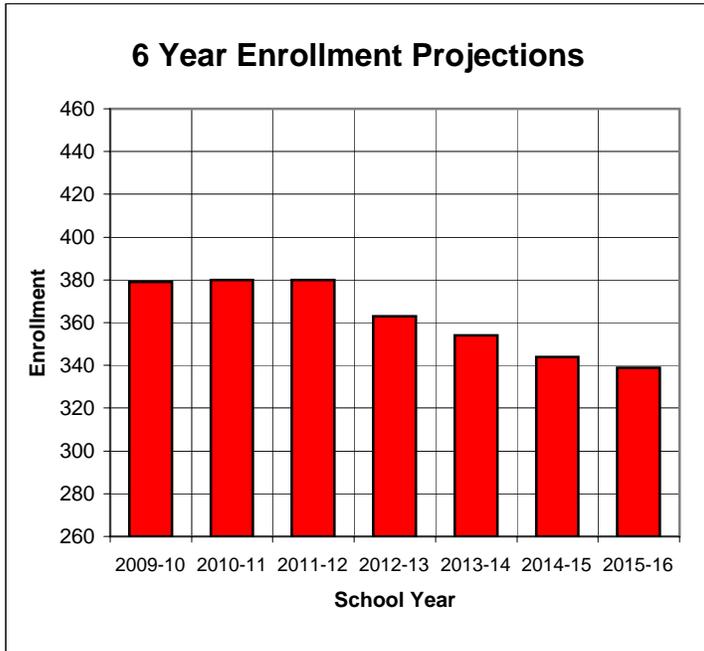
Year	Average
2009-10	20.8
2010-11	22.5
2011-12	21.6
2012-13	21.8
2013-14	22.4
2014-15	22.0
2015-16	21.1

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	2	-1
2011-12	1	-1
2012-13	1	0
2013-14	2	0
2014-15	1	-1
2015-16	1	-1

# Space Needs Analysis November 2009 Projections

## Morley School



**Comments:**

Morley's enrollment is stable/slightly decreasing over the forecast period

Space is tight but adequate at Morley

**Average section size (K-5):**

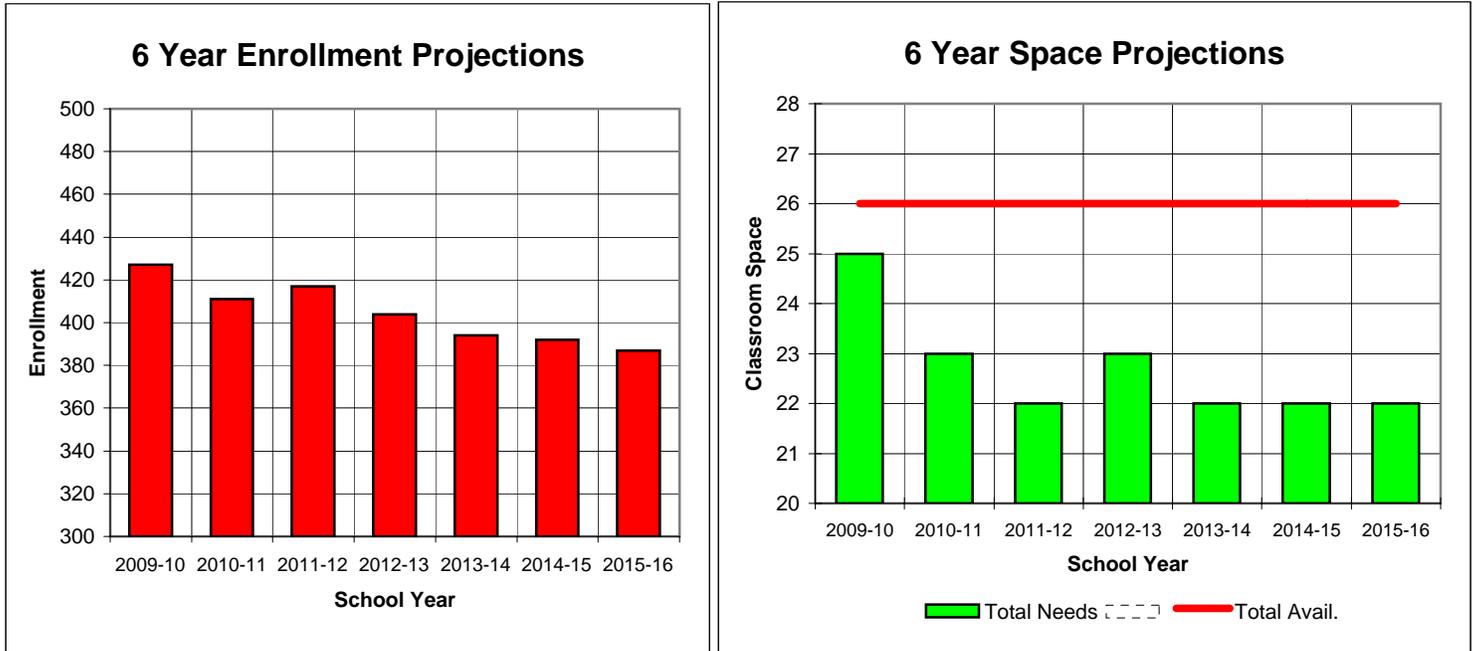
Year	Average
2009-10	19.9
2010-11	21.1
2011-12	21.1
2012-13	20.2
2013-14	19.7
2014-15	19.1
2015-16	18.8

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	2	-1
2011-12	1	0
2012-13	0	0
2013-14	0	0
2014-15	0	0
2015-16	0	-1

# Space Needs Analysis November 2009 Projections

## Norfeldt School



**Comments:**

Norfeldt shows a stable/slightly increasing enrollment trend.

Space is adequate across forecast period.

Norfeldt has 3 modular classrooms

**Average section size (K-5):**

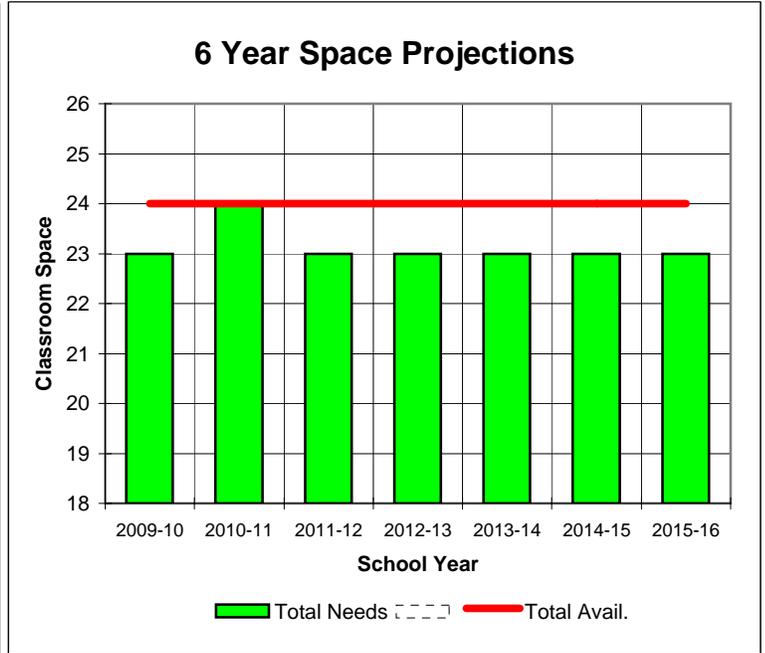
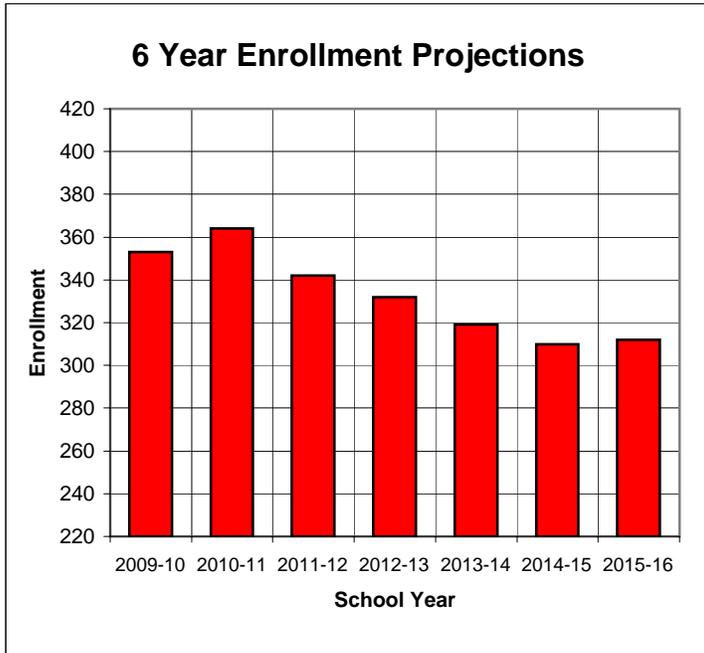
Year	Average
2009-10	20.3
2010-11	21.6
2011-12	23.2
2012-13	21.3
2013-14	21.9
2014-15	21.8
2015-16	21.5

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	4	-2
2011-12	2	-1
2012-13	2	-1
2013-14	1	0
2014-15	2	0
2015-16	1	0

# Space Needs Analysis November 2009 Projections

## Smith School



**Comments:**

Smith's enrollments are stable/declining slightly.

Smith has adequate space

Magnet admissions average 8 year at Kindergarten. There is space for more students

**Average section size (K-5):**

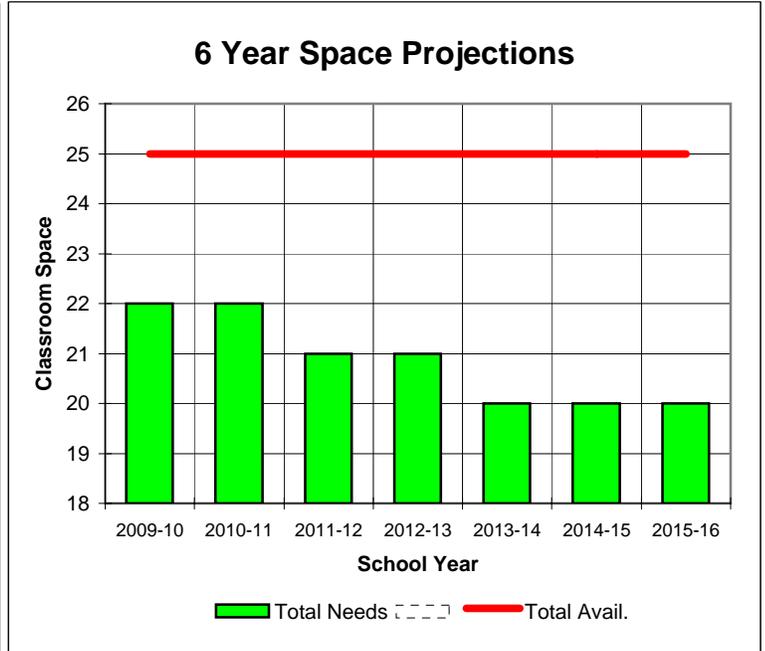
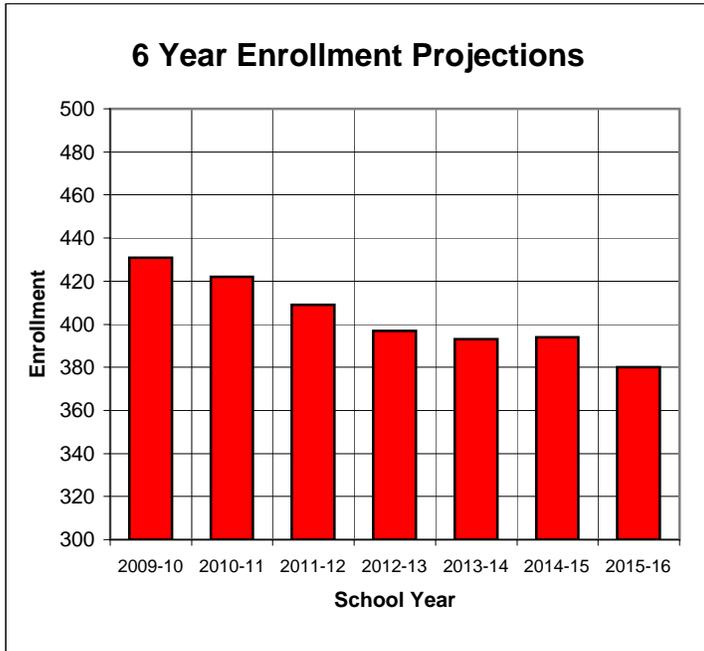
Year	Average
2009-10	19.6
2010-11	19.2
2011-12	19.0
2012-13	18.4
2013-14	17.7
2014-15	17.2
2015-16	17.3

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11		
2011-12	Can be handled through	
2012-13	controlling magnet admissions	
2013-14		
2014-15		
2015-16		

# Space Needs Analysis November 2009 Projections

## Webster Hill School



**Comments:**

Webster Hill shows a declining population trend.

Variability in Kindergarten enrollment increases the uncertainty in the forecast

We had 84 K students this year after two years of 60-70 K students

Webster Hill has adequate space

**Average section size (K-5):**

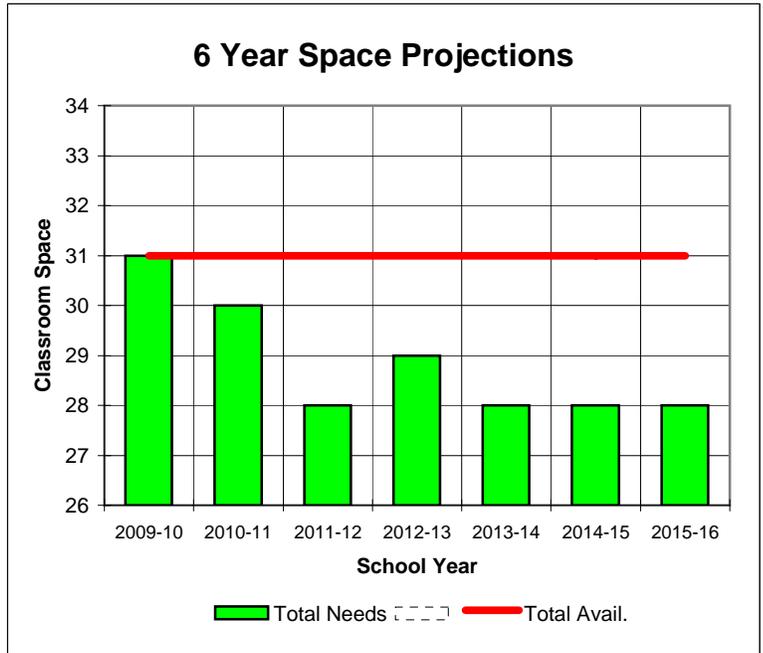
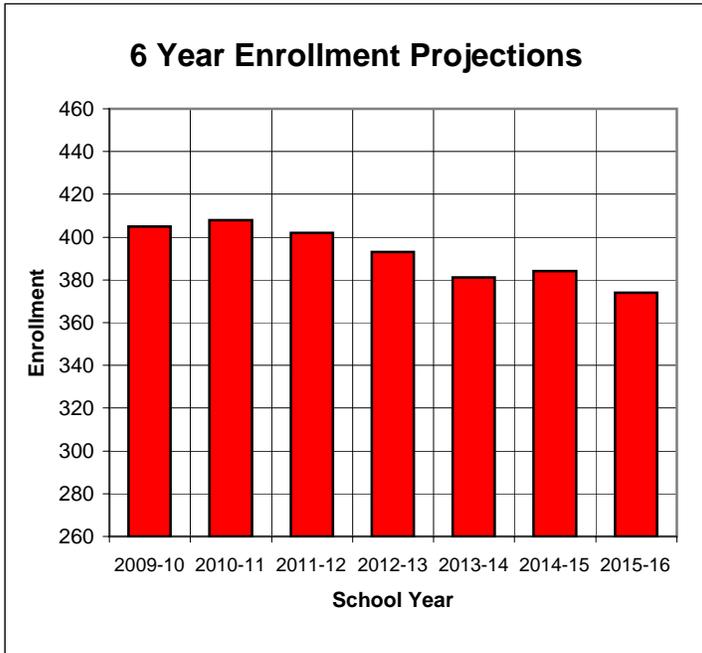
Year	Average
2009-10	21.6
2010-11	21.1
2011-12	21.5
2012-13	20.9
2013-14	21.8
2014-15	21.9
2015-16	21.1

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	1	-1
2011-12	2	-1
2012-13	2	0
2013-14	3	0
2014-15	2	0
2015-16	1	-1

# Space Needs Analysis November 2009 Projections

## Whiting Lane School



**Comments:**

Whiting Lane shows an stable/slightly increasing population trend.

Space is adequate over the forecast period

Whiting Lane has 2 modular classrooms

**Average section size (K-5):**

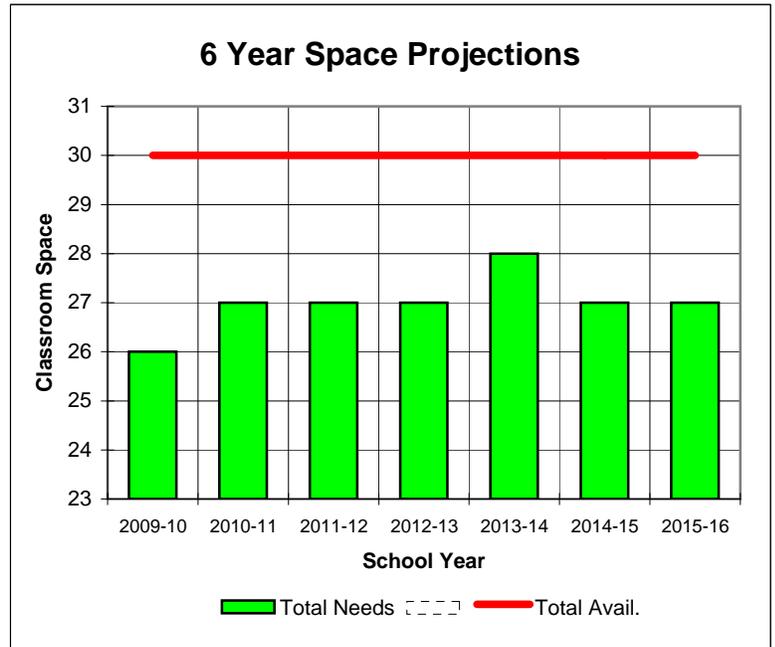
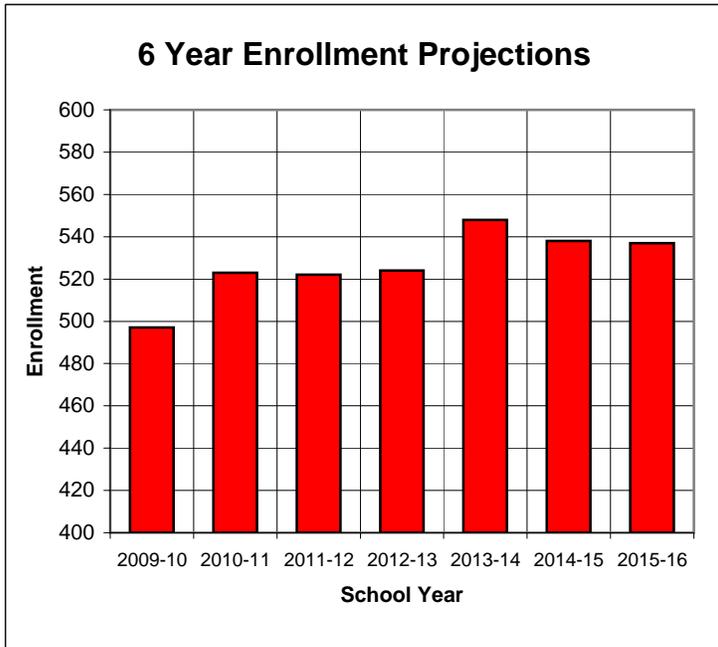
Year	Average
2009-10	19.3
2010-11	20.4
2011-12	22.3
2012-13	20.7
2013-14	21.2
2014-15	21.3
2015-16	20.8

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	1	-2
2011-12	3	0
2012-13	3	-2
2013-14	2	-1
2014-15	0	0
2015-16	1	0

# Space Needs Analysis November 2009 Projections

## Wolcott School



**Comments:**

Wolcott shows a stable/ increasing population trend.

Space is adequate

Wolcott has 4 modular classrooms

**Average section size (K-5):**

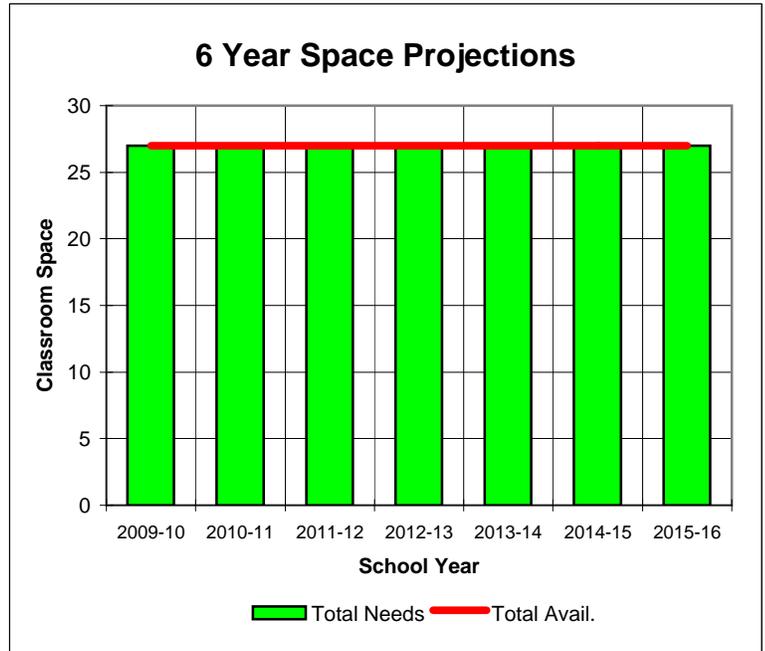
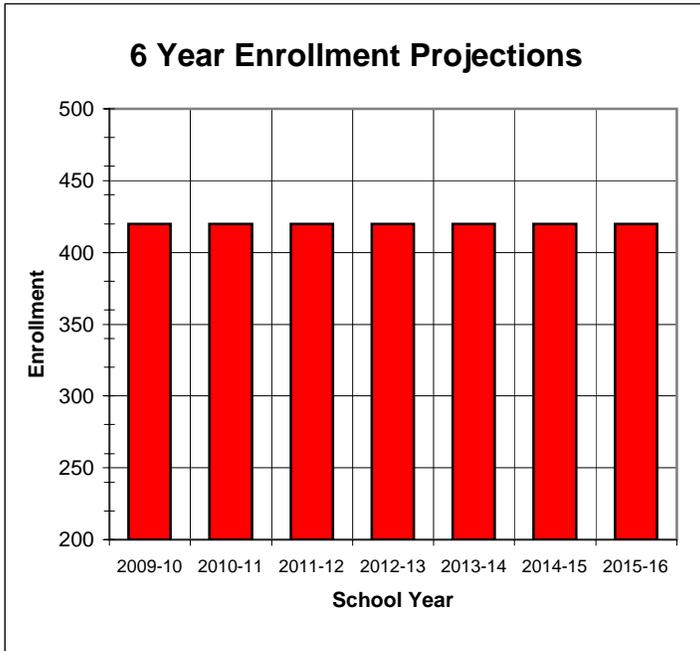
Year	Average
2009-10	21.6
2010-11	21.8
2011-12	21.8
2012-13	21.8
2013-14	21.9
2014-15	22.4
2015-16	22.4

**Effect of changes in enrollment  
on # of classrooms needed**

Year	+6 kids/gr	-6 kids/gr
2010-11	2	-1
2011-12	2	0
2012-13	1	-1
2013-14	1	-1
2014-15	2	0
2015-16	2	0

# Space Needs Analysis November 2009 Projections

## Bristow Middle School



**Comments:**

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

**Average section size (6-8):**

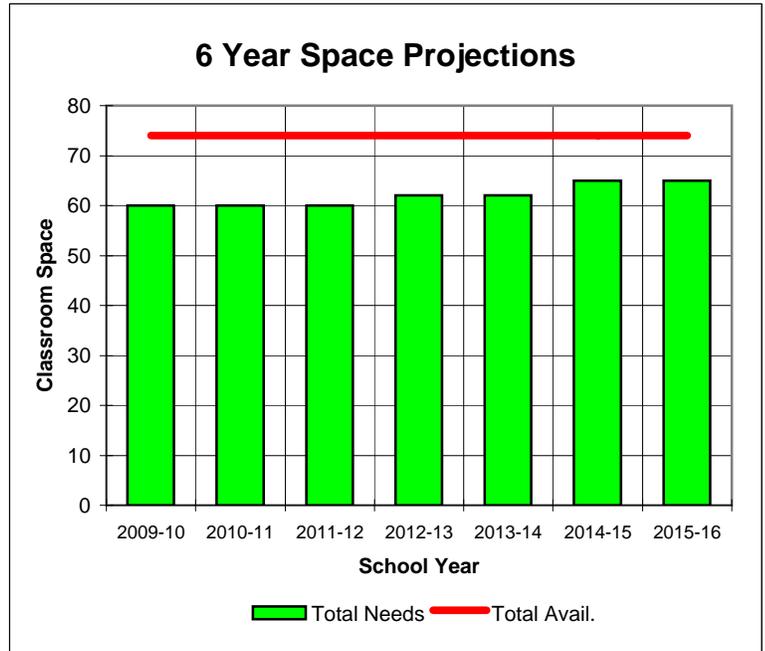
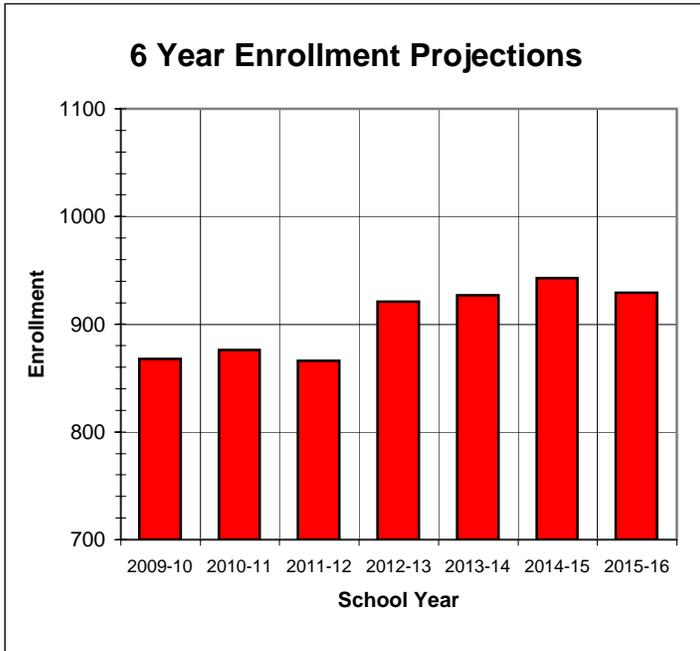
Year	Average
2009-10	23.3
2010-11	23.3
2011-12	23.3
2012-13	23.3
2013-14	23.3
2014-15	23.3
2015-16	23.3

**Enrollment by Grade Level**

Year	6	7	8
2009-10	142	140	138
2010-11	140	140	140
2011-12	140	140	140
2012-13	140	140	140
2013-14	140	140	140
2014-15	140	140	140
2015-16	140	140	140

# Space Needs Analysis November 2009 Projections

## King Philip Middle School



**Comments:**

KP's population is steady just above 900 and then grows to 950 near end of forecast period

The table below shows the enrollment by grade. Where the enrollment in the grade level is less than 300, we assume 2.5 teams at that grade level

KP has 8 teams at the start growing to 9 teams at the end of the forecast period

KP has 5 modular classrooms

**Average section size (6-8):**

Year	Average
2009-10	21.7
2010-11	21.9
2011-12	21.7
2012-13	21.9
2013-14	22.1
2014-15	21.0
2015-16	20.6

**Enrollment by Grade Level**

	6	7	8
2009-10	281	294	293
2010-11	309	281	290
2011-12	286	308	277
2012-13	338	284	305
2013-14	314	336	280
2014-15	303	312	332
2015-16	323	301	308

**Teams/Grade**

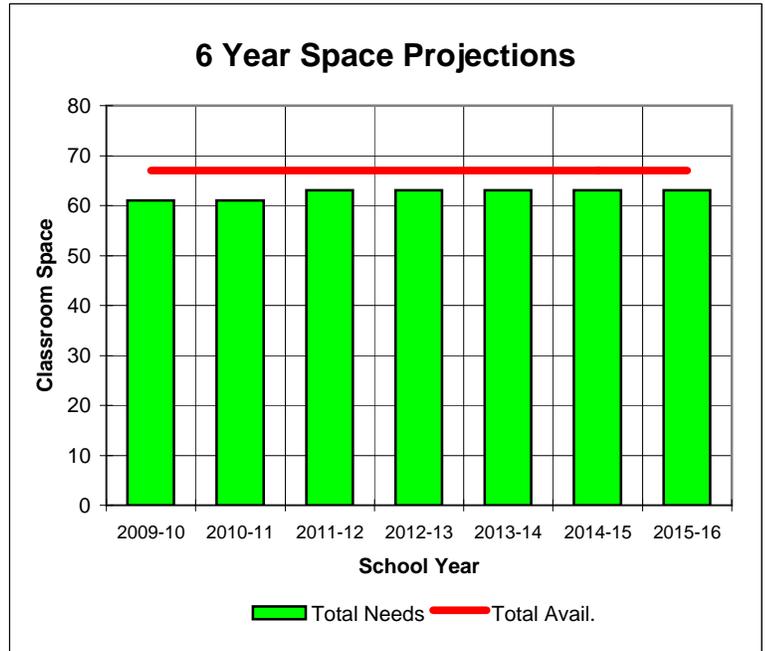
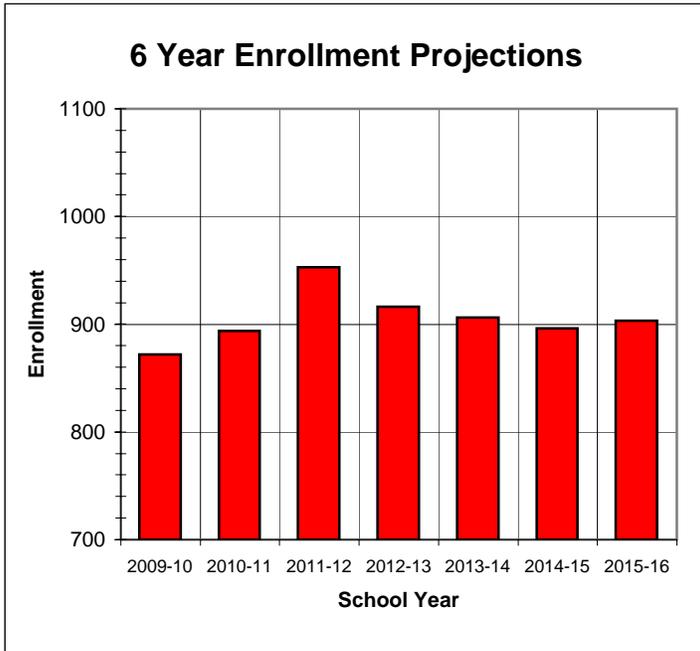
2.5 teams

**Total Teams**

8
8
8
8.5
8.5
9
9

# Space Needs Analysis November 2009 Projections

## Sedgwick Middle School



**Comments:**

Sedgwick's enrollment will remain around 900 for the next 6 years

The table below shows the enrollment by grade. Where the enrollment in the grade level is less than 300, we assume 2.5 teams at that grade level

Sedgwick has 8 or 8.5 teams throughout the forecast period

Sedgwick has adequate space throughout the forecast period.

**Average section size (6-8):**

Year	Average
2009-10	21.8
2010-11	22.4
2011-12	22.7
2012-13	21.8
2013-14	21.6
2014-15	21.3
2015-16	21.5

**Enrollment by Grade Level**

	6	7	8
2009-10	347	257	268
2010-11	289	351	257
2011-12	318	291	351
2012-13	312	320	292
2013-14	277	314	320
2014-15	306	279	314
2015-16	320	308	280

**Teams/Grade**

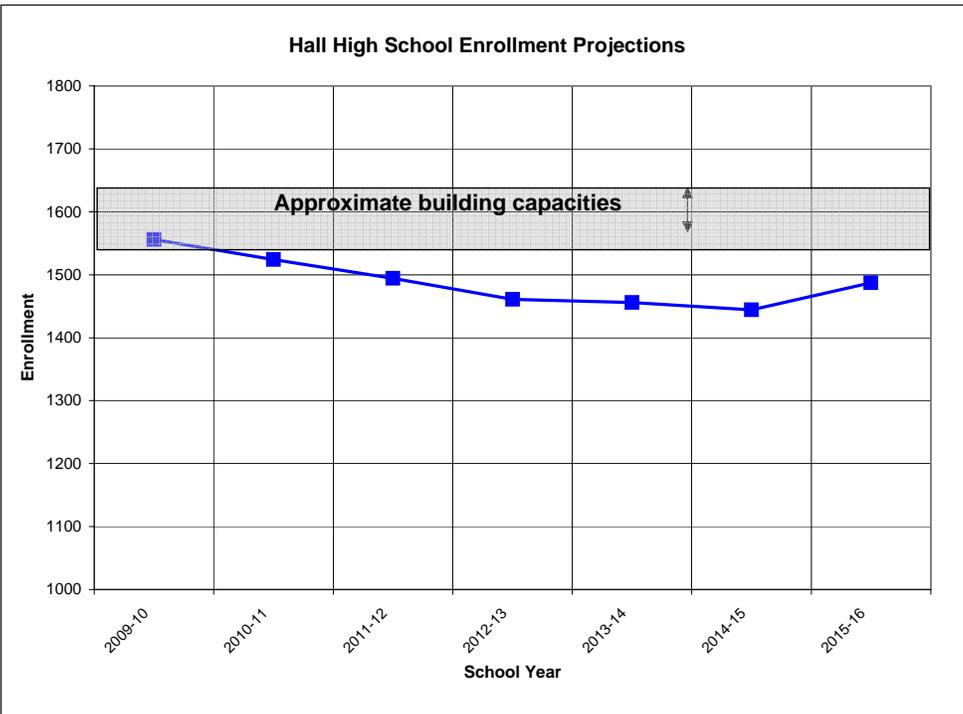
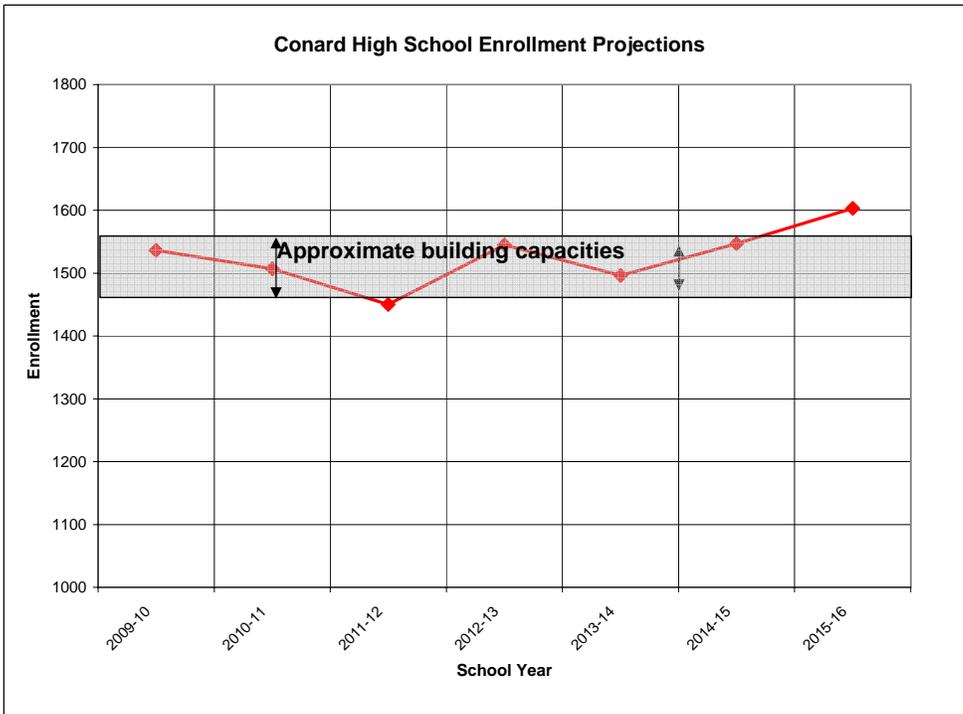
2.5 teams

**Total Teams**

8
8
8.5
8.5
8.5
8.5
8.5

## Space Needs Analysis November 2009 Projections

### Conard & Hall High Schools



**Comments:**

Conard's enrollment is projected to range between 1,447 and 1,604 students for the rest of the forecast period. Conard has adequate space throughout the forecast period though tight in the last year 2015-16

Hall's enrollment is projected to range between 1,441 and 1,522 students for the rest of the forecast period. With the completion of Project 21 and the addition of the modulars, Hall should be able to handle the projected enrollments.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**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. There are eleven (11) outdoor pools within these six neighborhood parks (5 full size, 1 teen slide, 2 wading and 2 spray decks), as well as nine (9) 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>
Fernridge Park	26.6
Kennedy Park	21.8
Eisenhower Park	15.0
Westmoor Park	52.0
Beachland Park	28.2
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 and exterior lighting and signage. A small amount is appropriated every two years 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 appearances 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 project 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.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**OUTDOOR POOL IMPROVEMENTS**

<u>Park</u>	<u>Inventory of Pools</u>		<u>Approximate Year Built</u>
	<u>Number of Main Pools</u>	<u>Number of Wading Pools/ Spray Decks</u>	
Fernridge	1	1	1933 & 1971
Eisenhower	1		1964
Wolcott		1	2002
Beachland	2	1	1936 & 1966
Kennedy	<u>2</u>	<u>1</u>	1964 & 2003
TOTAL	6	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 eleven outdoor pools by providing CIP funding for maintenance repairs at the pools. There is now a long-term pool replacement plan in the CIP. Changing State regulations on the disbursement of pool water may necessitate a greater reinvestment and modifications to the drainage systems at the outdoor pools in the future.

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. Due to the age of the pools, the CIP provides flexibility to respond to yearly repairs to the plumbing and filtration systems at the outdoor pools.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**ATHLETIC FIELD IMPROVEMENTS**

**Inventory of Athletic Fields**

<u>Athletic Fields Location</u>	<u>Field Acres</u>
Norfeldt Park	2.2
Beachland Park	4.4
Kennedy Park	12.0
Fernridge Park	4.4
Eisenhower Park	4.4
Wolcott Park	4.4
Solomon Schechter School	4.4
Whiting Lane School	6.6
Sterling Field	14.4
UConn Property	7.0
Goodrich Property	<u>4.4</u>
TOTAL	68.6

In addition, there are 124.6 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.

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**CAPITAL IMPROVEMENT  
PROGRAM**

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**PLAYGROUNDS & PLAYSCAPES**

**Inventory of Playscapes & Playgrounds**

<u>Playground Location</u>	<u>Handicapped Accessible</u>	<u>Condition</u>
Wolcott Park	Yes	Good
Vanderbilt Park	No	Fair
Fernridge Park	Yes	Good
Kennedy Park	Yes	Good
Eisenhower Park	Yes	Good
Beachland Park	Yes	Good
Goodrich Property	Yes	Good

**Capital Investment Strategy:**

Playscape and playground equipment periodically requires replacement of equipment for safety, maintenance and play value. A long-range plan for improvements to playgrounds and playscapes was developed between the Town and Schools. The CIP includes funding to maintain and upgrade where necessary as well as meeting handicapped accessible requirements. The project 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>
Rockledge	18	152
Buena Vista	9	<u>75</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, there are numerous watercourses that 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	-	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		<u>40,000</u>
<b>TOTAL</b>			<b>603,473</b>

**Capital Investment Strategy**

The CIP includes funding for the renovation of and additions to municipal buildings. There is a recurring Town building improvement project 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.

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**CAPITAL IMPROVEMENT  
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**CAPITAL IMPROVEMENT  
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**MISCELLANEOUS IMPROVEMENTS**

The Capital Improvement Program includes funding for miscellaneous equipment purchases and projects. These projects include the purchase of major rolling stock for the Fire Department and Public Works Department in excess of \$100,000 per piece of equipment. In addition, investments to the Town's communications infrastructure are also funded from the CIP.

**Capital Investment Strategy**

The CIP provides funding for projects and large equipment that are difficult to fund in the annual operating budget due to the size of the required financing. With the exception of the large rolling stock purchases, which are in excess of \$100,000 and have a ten-year life expectancy, 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, which includes 4 pumper trucks and three combination pumper and ladder trucks (quints). The life expectancy of these vehicles is 12 years for a pumper truck and 20 years for a quint, and the Town typically finances their purchase through long-term debt financing. Periodic replacement of fire apparatus is necessary to maintain the reliability and functionality of the vehicles and to incorporate the most recent technological improvements in the industry. Large public works equipment, which would include street sweepers and large dump trucks, is also financed periodically through the CIP. In addition, the CIP includes funding for the replacement of the town-wide radio communication system to a fully digital system (including hardware, operating software, and all field equipment).

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.

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**CAPITAL IMPROVEMENT  
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