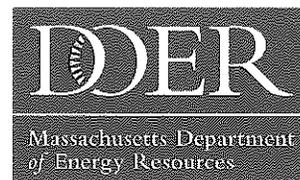




*Green
Community
Annual Report*



GREEN COMMUNITY ANNUAL REPORT

In order for a municipality to maintain its Green Community Designation and be eligible for future Green Communities funding opportunities, annual reports must be submitted by **September 30** for the preceding period July 1 – June 30. Please be certain to address all areas in full. If certain requested information does not apply, then please note it as "N/A".

If you have any questions on these reporting requirements, please contact your DOER Green Communities Regional Coordinator (RC). ***The objective is to have a dialogue with Green Communities staff before the report is due so that minimal follow-up with the municipality after the due date is required.***

Please submit a signed copy of the completed annual report via email to your Regional Coordinator and to Green.communities@state.ma.us

Date of Annual Report Submission: NOVEMBER 15, 2011 (REVISED*)

**(Revised to reflect change in #4 oil MMBTU conversion factor from .139 MMBTU/gal to .145 MMBTU/gal)*

Name, Title and Municipality of Preparer of Annual Report:

ALEXANDRA CORWIN, ENERGY EFFICIENCY & SUSTAINABILITY ANALYST, CITY OF CAMBRIDGE

I confirm that I have reviewed this report and verify all information is true.

Signature of Chief Administrative Officer: _____

CRITERION 1: As-of-Right Zoning and CRITERION 2: Expedited Permitting

Regulations (zoning & permitting):

- 1) Have any significant changes been made to the zoning district(s) for which the community received Green Communities designation? Significant changes would impact the ability to construct a qualifying clean energy use in the district such as the geographic extent of the district, allowed uses, and dimensional requirements. Overlay districts such as water protection districts that impose special permitting requirements count as significant changes.

If yes, attach a letter from municipal counsel that describes the changes, outlines any potential impact on the siting of clean energy projects, and affirms continued compliance with the Green Communities As-of-Right Zoning and Expedited Permitting criteria.

Circle Response: **NO** **YES (letter from municipal counsel attached)**

- 2) Have any significant changes been made to site plan, design, or other development review criteria or any permit review procedures that would impact the ability to permit qualifying clean energy uses as-of-right and in a timely manner? Significant changes would be anything that pertains to the “by-right” nature of the zoning or to the amount of time necessary to review required permits.

If yes, attach a letter from municipal counsel that describes the changes, illustrates any potential impact on the siting of clean energy projects, and affirms continued compliance with the Green Communities As-of-Right Zoning and Expedited Permitting criteria.

Circle Response: **NO** **YES (letter from municipal counsel attached)**

- 3) Does sufficient space remain for “As-of-right” development of a qualifying renewable energy facility or at least 50,000 square feet of research and development or manufacturing space in the district(s) for which the community received Green Community designation?

If not, ***explain*** what has happened since the community applied for and received Green Community designation and any plans the community may have to make such development feasible again. Please note, if 50,000 square feet of space does not remain, this will not jeopardize your designation, but we do want to know about it.

Circle Response: **YES** **NO (Please provide explanation in space below)**

Permitting:

Have any clean energy projects applied for approval under the zoning for which the community received Green Community Designation?

Circle Response:

NO

YES (please complete table below)

CRITERION 3: Energy Reduction Plan (ERP) Annual Report

ANNUAL ENERGY USE REPORTING REQUIREMENTS OVERVIEW

These reporting requirements have been designed to balance the level of effort with the amount of information needed to have assurance that a Green Community is on track to reach its goal of reducing its energy use by 20% in five years. To that end, Green Communities should notice that the reporting requirements for Criterion 3: Energy Reduction will vary by what year of their Energy Reduction Plan they have completed as follows:

Year 1 – Complete Section A: Provide energy use for the Baseline Year and Year 1.

Year 2 – Complete Section A: Provide energy use for the Baseline Year, Year 1 and Year 2.

Year 3 – Complete Section A and Section B, if required, as follows: Provide energy use for the Baseline Year, Year 1, Year 2 and Year 3 by completing Section A below. If a Green Community does not demonstrate a cumulative 12% reduction by the completion of Year 3 of its Energy Reduction Plan, it must provide more detailed information to demonstrate it is on track to reach its 20% reduction in 5 years by also completing Section B.

Year 4 – Complete Sections A and B: Provide energy use for the Baseline Year and Years 1-4 by completing Section A below and provide additional details as requested in Section B.

Year 5- Complete Sections A and B: Provide energy use for the Baseline Year and Years 1-5 by completing Section A below and provide additional details as requested in Section B.

SECTION A: COMPLETE FOR ALL YEARS

Please fill in the blank:

Baseline Year (include FY or CY): FY08

Energy Tracking Tool Used: MEI

% Energy Reduction to Date: 8 %

Reporting Energy Use

Provide separate tables of your municipal energy use, in both native units and in MMBtu, for each year that is the subject of this annual report, including the baseline year. You may use the sample Tables 1 and 2 provided below or may combine these tables if desired; an excel version of the combined table is also available separately for use. If using MassEnergyInsight, please note Table 1 is MassEnergyInsight Energy Reduction Plan Guidance Table 3 (Fuel Units) and Table 2 is MassEnergyInsight Energy Reduction Plan Guidance Table 3 (MMBtu).

***SEE ATTACHED “Cambridge GC Annual Report ERP Tables” for
“Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu” for
FY08, FY09, FY10 and FY11***

****Note:** Cambridge currently has 71 kW generating capacity of PV in five sites. The City installed 26.5 kW of PV on the City Hall Annex in 2004, and reported its electric generation through the online platform Soltrex to the Mass Clean Energy Center until January 2009 at which time Soltrex became inactive and generation tracking ceased. In FY10, 9.26 kW of PV was installed on The Russell Youth and Community Center in West Cambridge but generation has not been monitored as of this time. 2 kW and 3.26 kW of PV were also installed in FY10 on the Frazier Building and Frisoli Youth Center respectively. Daily electric generation from these two sites is tracked using the online platform Fat Spaniel, and the City is currently working with Fat Spaniel to provide access to historical generation. In FY11, the Cambridge School District installed 31.36 kW of PV on the newly renovated Cambridge

Rindge and Latin High School. This installation will come online in early FY12 and will be tracked via the Solectria Renewable's educational web-based PV monitoring system, Solren-View. The City is currently exploring options of using a single, centralized online platform to track all of its current and future PV site generation.

SECTION B: COMPLETE FOR YEAR 3 IF ENERGY REDUCTION <12%; COMPLETE FOR YEAR 4 AND YEAR 5

Table 3: Timeline of Annual Municipal Energy Use

Use Table 3 to provide a summary of municipal baseline energy use, annual energy use and energy savings to reach your goal of a 20% reduction in total municipal energy use within five years of your baseline year. Please note your actual years in the table and note whether or not it is FY or CY. For example, for a Baseline year of FY2010, please enter FY2010 above "Baseline MMBtu", FY2011 above "Year 1 MMBtu", FY2012 above "Year 2 MMBtu" and so on (as shown in *italics*).

	<i>FY2008</i> Baseline MMBtu	<i>FY2009</i> Year 1 MMBtu	<i>FY2010</i> Year 2 MMBtu	<i>FY2011</i> Year 3 MMBtu	<i>FY2012</i> Year 4 MMBtu	<i>FY2013</i> Year 5 MMBtu	Change from Baseline (%)
Buildings	193,935	185,672	156,736	172,375			
Water/Sewer & Pumping	41,572	38,546	37,605	40,331			
Open Space* (optional)	6,079	5,733	5,765	6,045			
Vehicles	37,758	37,196	34,845	35,865			
Street and Traffic Lights	22,947	22,558	22,165	21,996			
TOTAL ENERGY CONSUMPTION	302,291	289,705	257,116	276,612			20%

* A municipality can choose to attribute open space energy use to the other categories if desired. If open space is used as a category, please be sure to list exactly what is included as a footnote and that, if using MassEnergyInsight, it matches MassEnergyInsight Table 3.

*Included in Open Space: Parks, Athletic Fields, Parking Lots and Parking Garages. This category is assigned by MEI and matches MassEnergyInsight Table 3.

Explanation Required if Cumulative Energy Reduction is <12% After Year 3 or <16% after Year 4 of Energy Reduction Plan

If your community has not demonstrated a minimum of a 12% reduction in energy use after completion of Year 3 of the Energy Reduction Plan or a minimum of a 16% reduction in energy use after completion of Year 4, please provide an explanation here. For example, an efficiency measure with significant expected energy savings may be planned for Year 4. DOER wishes to confirm that every Green Community is on track to meet its commitment to reduce its energy use by 20% in five years and may follow up on this annual report by scheduling a phone meeting to discuss your community's progress.

Since submitting the Green Communities designation application in May 2010, MassEnergyInsight (MEI) reports that Cambridge has achieved an 8% energy use reduction from the FY08 baseline year. There are several explanations for the difference, which are described below.

- **Weather Effects**

The City's consumption listed above shows an increase of 8% from FY10 to FY11. Although MEI does not yet normalize for the effects of weather, we discovered that the Boston/Cambridge area experienced a 9% increase in heating degree days and 32% increase in cooling degree days from FY10 to FY11.¹ Once MEI provides weather normalization, actual FY11 consumption is expected to be lower than the currently reported 276,612 MMBTUs.

We project that once data are normalized for weather, the cumulative reduction in energy consumption from baseline year FY08 will be close to 12%.

- **Data and Account Issues**

From 2006 to April 2010, Cambridge tracked its consumption in the Energy Information System (EIS), an online database that uploaded utility information from NSTAR. This system served as the prototype for the Commonwealth's MassEnergyInsight (MEI) system. Cambridge prepared the application for Green Communities designation in May 2010 using EIS, as the conversion to MEI had not been completed.

Since that time, the existing data have been scrutinized extensively and inaccurate entries corrected, changing some account totals for each fiscal year. For example, in the original Green Communities report derived from EIS data, 70 electric accounts were found to contain duplicate readings for at least two months of FY08, while some other fuel accounts were missing usage data for specific months during the same fiscal year. In addition, 36 fuel or utility accounts were missing from the City's original catalogue of energy sources tracked in the EIS database, and have now been included in MEI back through FY08.

Please note that some data issues remain, which may change MEI totals retroactively.

The effect of ensuring our data are more accurate has been an increase in our reported energy use during the past three fiscal years, and has shown that we have made more modest progress in reaching our energy reduction goals than we had initially projected.

Changes in Energy Consumption Totals

	FY08	FY09	FY10	FY11
Green Communities Application Reported/Projected Use (MMBTU)	298,638	273,978	253,511	234,597
Current MEI Reported Use (MMBTU)	302,291	289,705	257,116	276,612

Moving Forward

The City still expects to meet its goal of reducing energy use by 20% from the FY08 baseline. We will accomplish this through energy efficiency improvements, an intensive green school building renovation program, renewable energy installations and continued energy awareness and education campaigns for employees.

Planned Energy Reduction Measures

The City has identified an ambitious list of planned or potential energy reduction and sustainability projects. As noted in Table 4 these projects, along with ones completed within the past year and assuming weather normalization of data, would reduce FY11 consumption by 39,209 MMBTU. This is equivalent to a 21% reduction over the current MEI FY08 baseline.

Total projected savings are expected to be higher, as many potential projects are in preliminary stages with no savings estimates. Projects in Table 4 with a funding status of "TBD" will be evaluated for funding in upcoming budget preparation periods.

¹ EnergyCAP, Inc. (www.energycap.com). EnergyCAP is a for-profit EnergyStar partner that publishes energy and greenhouse gas tracking software for both the private and public sectors. Their website www.weatherdatadepot.com provides free online heating and cooling degree day calculations for specific locations across the United States, including Cambridge, MA.

- *Walter J. Sullivan Water Purification Facility*

Potential Savings: 1,612,540 kWh/year and 5,800 therms/year.

In July 2011, the Cambridge Water Department (CWD) began an extensive “Energy Efficiency and Process Optimization Audit” (Camp Dresser & McKee, Process Energy Services, LLC, and Process Applications, Inc). The Audit has provided a complete review of energy use and treatment processes after the first ten years of the operation of the Walter J. Sullivan Water Purification Plant, encompassing all aspects of the facility: building envelope, HVAC, pumping, ozone system and the various treatment processes.

The Audit provided a detailed energy budget and a range of options for energy conservation measures. Some are operational changes that require no capital expenditure and others will need capital outlays and will be added to future budgets. Many of the suggestions are mutually exclusive and CWD will implement and track the changes as the various items are phased in and out.

The Department is currently reviewing the draft report. The next step will include implementing the no cost items as soon as feasibly possible and in parallel developing an implementation plan for the capital intensive projects.

- *DDC Integration for School District*

Potential Savings: 171,176 kWh/year.

The Cambridge School Department is finalizing the integration of direct digital control (DDC) systems of nine schools in the district. All systems will now be accessible from one website to allow a centralized and more efficient means of digitally controlling HVAC systems within the schools from remote locations.

- *Streetlight Conversion to LED*

Potential Savings: 1,151,976 kWh/year (upon full implementation).

In 2009, Cambridge initiated a pilot of LED street lighting on Inman Street, a residential street. In 2010, the City began another, longer term LED pilot test on a commercial street, and in 2011 pedestrian-scale lights were piloted. All pilots tested LED replacements of equivalent wattage to the existing luminaries for color, light levels, light trespass onto private property, dark sky issues, energy savings, maintenance and the perceptions of the abutters.

Based on the success of the pilot program the City is planning to install 1907 cobra head fixtures and acorn pedestrian scale fixtures with LED lighting as part of a large-scale sewer separation and street-level improvement project on Western Avenue². Bidding is scheduled for this fall and winter, followed by two years of construction beginning in the spring or summer of 2012.

Citywide, annual energy consumption for street lighting, including most main streets and all residential streets in Cambridge, is 4,607,906 kWh. Based on estimates from the City’s LED tests, full conversion to LED streetlights would save approximately 25%, or 1,151,976 kWh/year.

The remaining installations beyond Western Avenue will be completed in phases, and budget preparations will begin in the near future.

- *Energy Efficiency and Conservation Block Grant (EECBG) Projects*

Potential Savings: 695,865 kWh/year and 20,000 therms/year.

The City anticipates that energy efficiency projects completed in late FY11 using EECBG funds will continue to demonstrate their projected energy savings as FY12 progresses. These projects include replacing the heating system in three City buildings with high-efficiency gas boilers and installing energy efficient lighting upgrades in ten municipal buildings.

² In addition to LED streetlights, new sidewalks and pedestrian ramps, the Western Ave. project includes sewer separation to reduce CSO discharges, bicycle safety enhancements, a rain garden and other sustainable landscape features.

- *Green Communities Grant Projects*
Potential Savings: 612,762 kWh/year and 8,088 therms/year.
 Energy efficiency projects using Green Communities grant funds recently completed in early FY12, include lighting retrofits in six municipal buildings and HVAC upgrades in three additional City buildings.
- *Ryan Garage/Simard Building Roof Replacement*
Potential Savings: 30,785 therms/year.
 A FY12 bond appropriation will fund 55,000 square feet of new, Energy Star-rated membrane roofs with R-25 insulation on two buildings in the DPW complex. Design is in process, and installation will be completed by spring of 2012.
- *School Renovation Plan*
Potential Savings: TBD
 Following in the footsteps of the renovation of Cambridge Rindge and Latin High School, which utilized LEED standards for building construction, the Cambridge School Department launched an ambitious facility renovation program in May 2011. The plan includes major renovation or replacement of three schools: Martin Luther King, Jr. School, King Open School and Tobin School. The first building to be renovated will be the King School, which will be designed to a minimum **LEED Silver** standard. Responses to the King School Design RFP are being reviewed. The feasibility study and design will occur in 2011 and 2012, with construction expected to begin in 2013. Design for future phases will be staggered to occur during construction of the previous phase.
- *Additional Lighting Upgrades*
Potential Savings: 65,052 kWh/year.
 Completed energy audits have identified lighting efficiency upgrade projects in four municipal buildings, the Coffon Building, Engine 8, the Golf Course Clubhouse, and the Lombardi Building.
- *Lighting Upgrades – Smaller Buildings*
Potential Savings: 73,977 kWh/year.
 Lighting audits will be performed for remaining smaller buildings, including smaller fire stations, branch libraries, cemetery buildings and others.
- *Additional HVAC Upgrades*
Potential Savings: 188,382 kWh and 29,211 therms/year.
 Completed audits at the Baldwin and Peabody Schools, Engines 3 and 8, the Lombardi Building, and Senior Center have recommended HVAC improvements ranging from variable speed drives to retrocommissioning. Utility rebates will be appropriated for additional energy efficiency improvements
- *HVAC Upgrades – Smaller Buildings*
Potential Savings: TBD
 HVAC audits will be performed for remaining smaller buildings, including smaller fire stations, branch libraries, cemetery buildings and others.

Energy Use Awareness and Behavior Modification

- *Cambridge GreenSense*
Potential Savings: TBD
 In 2008, the City launched the Cambridge GreenSense municipal employee sustainability awareness program. GreenSense engages 75 municipal employees in more than 40 City buildings as “Energy Champions” to educate colleagues and promote energy-conserving practices in their departments. In its first year, the program helped reduce electricity consumption by 5% in participating buildings, a total of over 200,000 kWh. In FY12 and FY13 we plan to explore topics such as promoting indoor climate comfort awareness, piloting interior window treatments, and investigating PC power management options, as well as other sustainability initiatives.

- *PC Power Management*
Potential Savings: 255,000 kWh/year.
In 2008, the City Manager established a policy that all City employees power down computers and other peripheral equipment at the end of each work day. Off-hours audits and observations indicate that despite City policy and efforts to encourage this behavior, there remain employees who do not power down their computers before leaving. The GreenSense program, in collaboration with the IT Department, will be moving forward in the coming year to roll out a revised PC Power Management program that will combine technology improvements and improved behavioral practices so computers are not running when not in use.
- *Cambridge Green School Initiative*
Potential Savings: 468,368 kWh/year.
In September 2011, the School Department's new Sustainability Manager launched the Cambridge Green School Initiative (CGSI). The initiative will engage school building occupants, including students, teachers, families, staff, administrators, custodians, and visitors, in behavioral changes that support daily sustainable practices in all classroom and office spaces, overall School District operations and daily actions. The initiative is based upon the PFEWG™ model for sustainability that encompasses all operations in the categories of Products, Food, Energy, Waste and Greenspace.

The Cambridge Green Schools Initiative aims to reduce the district's energy usage by at least 3%, reduce carbon output, and save money through detailed data collection and measurement, quantitative analysis, and maintenance crew training. Key components of this initiative include program events, materials distribution, and tasks managed by the Sustainability Manager, such as gathering existing sustainability data from each school and working with principals to develop sustainability goals, communications with school building occupants through a weekly sustainability email, and publishing a district sustainability website to serve as a platform for district resources.

- *Renewables*
The City has set a goal of obtaining 20% of its energy consumption with renewables. Currently, the City meets this goal with a combination of the Renewable Portfolio Standard, renewable energy certificates, and onsite renewable energy systems. An interdepartmental committee will be established shortly to develop a pathway to attain the 20% renewable goal through onsite renewable systems. In addition to the City's current 71 KW generating capacity at five sites, two potential sites are being explored:

400 KW rooftop PV - DPW Ryan Garage and Simard Building
Potential energy generation: 448,000 kWh/year

100 KW rooftop PV - Sullivan Water Treatment Facility
Potential energy generation: 122,548 kWh/year

- *Vehicles*
Potential Savings: 2,224 gal gasoline/year.
As noted in Criterion 4, Fuel Efficient Vehicles, the City has replaced more than 22 vehicles to date with hybrid and/or higher efficiency vehicles. A number of the replacements are in a lower-use vehicle class than the originals. Replacements will occur each year through the annual budget process and the Green Fleet Policy.

Additional Projects

Water Use Audit

The Water Department is currently negotiating the scope for a "Water Audit" in FY12. This project will review all water use within City boundaries, water metering and non-metered use tracking. It will serve to verify water use, which is currently unaccounted for, and provide recommendations for improved accounting of the City's water use.

Municipal Energy Fund

To support these initiatives, Cambridge has committed funds designated specifically for energy efficiency improvements. Since at least 2005, the City has had a practice of replacing HVAC equipment with high-efficiency units. \$125,000 in utility rebates from these projects along with an additional \$100,000 in property tax revenue has been appropriated to capital accounts designated for energy efficiency upgrades.

In the 2010 Green Communities grant application, the City committed to creating a municipal energy fund that would designate a portion of energy savings from GCA grant-funded improvements and future upgrades for additional efficiency and renewable projects. The goal of this measure was to create a continuous stream of funding. While modeled savings would be reported to the fund, typical payments to the fund would be based on actual savings experienced in energy budgets. Savings derived from energy efficiency projects in school buildings would also be reinvested in the fund whenever positive balances in the school department's operating budget remain at the end of each fiscal year and the School Committee votes to approve the transfer.

The development of this fund would require reviews of modeled savings from projects, end-of-year balances in energy budgets and an agreement on amounts to be transferred from the operating budget. Mindful of the impact of property tax increases on residents as well as other demands on the operating budget the City has decided to adopt an alternative funding stream that would not rely on property tax revenues.

In October 2010, the City adopted a \$12 increase (from \$8 to \$20; to \$25 in 2013) in Resident Parking Sticker fees. The FY12 capital budget appropriated \$780,000 of additional FY11 and FY12 revenues from the increase for environmental and transportation programs to reduce greenhouse gases and combat climate change:

- **\$250,000** for energy efficiency improvements to municipal buildings and schools
- **\$150,000** for school buildings, specifically a new boiler for the building housing the automotive technology garage, City Cable Channel 8 and Facilities department
- **\$100,000** for climate change communication and engagement campaign
- **\$280,000** for a community bicycle sharing program

As noted in the attached FY12 adopted budget (see attached "FY12-Adopted-Budget - Energy-Transportation"), subject to City Council approval the City will continue to appropriate \$500,000 annually from FY13 - FY16 from parking sticker revenues for these sustainability programs.

The use of resident sticker fee revenue will provide a more predictable and larger funding stream for municipal building sustainability projects and will be less complicated to administer. The City will continue to report on modeled and actual energy savings and will appropriate amounts that are at least equal to or greater than the projected savings. Water Department expenditures are funded through the water enterprise fund. The treatment plant upgrades described in this report will be phased and operating budget savings will increase the reserve for later phases.

Meeting the Goal

The City expects to meet its 20% energy reduction commitment from the planned/potential energy reduction projects described above along with weather-normalization of MEI data. The City's commitment to funding energy efficiency improvements as well as its extensive commitments to green construction during major capital renovations will continue to build on this work for many years to come.

Table 4 (in excel) OR Table 5 (in word): Individual Energy Conservation Measure Data

Please provide detailed data on individual energy conservation measures that have been completed or are planned. **Use Table 4, (for Excel), OR use Table 5 (for Word).**

List completed and planned energy conservation measures, including vehicular efficiency measures. For each measure, provide:

- its status
- the projected energy savings in native units (kWh, gallons, therms, etc.); provide the reference source for the projected savings.
- the projected cost savings
- the total cost
- any Green Community grant funds and utility incentives received
- For measures requiring additional funding, please list the funding source: capital budget, operating budget, debt and type, or other grants.

Why Does DOER Want This Level of Detail?

This information will be used by DOER to:

- Provide information to the legislature and general public on the total and average projected energy savings, projected energy cost savings, greenhouse gas reductions, total capital costs, simple payback time, and financial support from the electric and gas utilities for the Green Communities program as a whole.
- Confirm that energy use reduction is from energy efficiency projects and initiatives. Because reporting of a building's total energy usage reflects both efficiency and renewable energy projects, a municipality needs to demonstrate that it has implemented enough energy efficiency to account for 20% of the total energy reduction in year 5.
- Analyze the relative effectiveness of project measures (i.e., heating upgrades, VFDs on pump stations, LED streetlights, use of biodiesel) to provide informed recommendations to additional municipalities.

Table 4: Energy Conservation Measures Data (Excel)

Please note that Table 4 below is an embedded excel file; it will only work for Microsoft Office 2007. **IF YOU WISH TO USE AN EXCEL TABLE BUT HAVE AN OLDER VERSION OF MICROSOFT OFFICE, PLEASE USE THE EXCEL 97-2003 FILE PROVIDED SEPARATELY. Be sure to add the municipality's name to the file name.**

To use the embedded Table 4 below, double-click in the table. Make your changes, save and click back into the main document. The table will automatically sum and format the data.

This table has been altered from Tables 4 - 6 in the Fall 2010 Energy Reduction Plan guidance to combine those energy, financial and schedule tables. Add additional columns for other fuel types as needed. Lighting and/or lighting sensors can be grouped for an individual building, but please list buildings separately. Please subtotal projected annual energy savings for each category: buildings, vehicles, street and traffic lights, water and sewer, and open space, as well as a municipal total.

Please note any added or deleted measures from the previous annual report or, from the Energy Reduction Plan if this is the first annual report, by **bolding text**. Sample data is provided *in italics*; for more complete sample data, please refer to Table 5.

SEE ATTACHED “Cambridge GC Annual Report ERP Tables” for “Table 4 Energy Conservation Measures Data”

CRITERION 4: Fuel-Efficient Vehicles

- Is the fuel efficient vehicle policy in effect for the municipality in accordance with the latest mpg criterion and guidance contained in the Green Communities Division's most recent guidance for Criterion 4? (Guidance can be found at <http://tiny.cc/GreenCToolkit>.) **Please note that in order to maintain your Green Communities status a municipality's Policy must reflect the most recent Green Communities Division's guidance**

Circle: YES or NO

- **Attach the most current vehicle inventory.** Include ALL vehicles, including exempt vehicles, for both the municipality and the schools. Please **bold** any newly acquired vehicles since a) designation, or b) last annual report. Use the table below for the inventory. See *example* below for guidance.

SEE ATTACHED "Cambridge Vehicle Inventory"

- **Attach the most current vehicle replacement plan.** Highlight any planned replacement of exempt vehicles with more fuel efficient models, including hybrid vehicles or down-sizing of vehicles with more appropriately sized vehicles.

SEE ATTACHED "Green Fleet Policy"

Over the past year the city has made several changes to the fleet. Below is a list of significant changes to the fleet:

- ❖ 2011 Ford Escape Hybrid was added to the fleet, replacing a 1998 Chevrolet Lumina
- ❖ 2011 Ford Fusion Hybrid was added to the fleet, replacing a 2001 4x4 Chevrolet S10 truck
- ❖ 2011 Toyota Prius was added to the fleet, replacing a 2002 Chevrolet S10 truck
- ❖ 1998 full sized Ford F350 truck was down-sized to a Chevrolet Colorado 4x4 truck
- ❖ 1998 Ford Explorer 4x4 was down-sized to a Ford Transit Connect Van
- ❖ 1998 Chevrolet Lumina was removed from the fleet.

In 2006 the City Manager instituted a "Green Fleet Committee" and vehicle review procedure. This procedure requires all departments requesting to purchase new vehicles to do a comparison of vehicles and select the greenest option based on fuel efficiency and greenhouse gas emissions that would still meet operational and safety needs. On an annual basis, as City Departments request new and replacement vehicles through the City's capital Budget process, it is the intention of the City to continue to utilize this policy when procuring new vehicles. The City Manager also personally reviews all vehicle requests with an eye toward the justification of any additions of vehicles to the municipal fleet.

- **Attach any new vehicle policies and technologies adopted by the municipality,** e.g. electric vehicle charging stations, anti-idling technology and/or campaigns, driving monitoring system recording miles driven and/or fuel consumption, fuel use reporting systems for operators on fuel efficiency. Please estimate annual fuel savings from each new technology or policy.

ELECTRIC VEHICLE CHARGING STATIONS

The City of Cambridge, with grant support from the Massachusetts Department of Energy Resources, is installing up to 12 electric vehicle charging stations throughout the city to begin establishing an EV recharging network. The stations will be installed primarily at parking facilities to serve retail customers and corporate employees. All of the locations will be open to the general public. In some cases the facilities will charge for general parking and may charge for use of the EV charging station. The stations will be installed by November 2011. The City is currently researching electric vehicle models with a plan to purchase an EV for municipal use within the very near future.

GPS

In 2009/2010 the Water Department piloted 24 vehicle global positioning system (GPS) units and found that this can be very helpful in reducing fuel usage. It has been found that that fuel usage can be significantly reduced by reducing vehicle trips and idle times. In the first year of this program, alongside other green fleet practices, the Water Department saw a 10% decrease in vehicle fuel use, equal to 2,000 gallons of gasoline (248 MMBTU). This past summer the Public Works Department added two additional solid waste vehicles to the GPS tracking system, and is looking into the feasibility of additional vehicles in the future.

- **For communities that met Criterion 4 through alternative compliance**, provide a narrative in the space below of the policies and program that have been adopted to reduce fuel consumption as well as a status regarding the success of these programs and policies.

N/A

CRITERION 5: Stretch Code Adoption

Please note below the dates when the Stretch Code concurrency period begins/began and when the Stretch Code becomes/became the sole energy building code in the municipality. Please list in Table below all residential and commercial projects for which building permits have been issued since the Stretch Code became the sole energy code along with accompanying information noted below.

DATE STRETCH CODE CONCURRENCY PERIOD BEGINS: 1/1/2010

DATE STRETCH CODE BECOMES SOLE ENERGY CODE: 7/1/2010

Stretch Code Table – SEE ATTACHED “Construction Energy Code FY11”

Please note in space below any additional information/anecdotes about the stretch code that your municipality has experienced (e.g. local banks loaning more to people purchasing stretch code homes, satisfied homeowners, frustrated builders, etc.)

An issue came up regarding the application of the Stretch Energy Code to commercial projects planning to use on-site co-generation systems. The code requires projects to be assessed in terms of site energy use, which under some interpretations appears to discourage co-generation. However, the code and Appendix G of ASHRAE 90.1 are silent on these kinds of projects. While it has not been an issue yet, the City is concerned that the Stretch Energy Code could be a barrier to new construction projects that might connect to district steam systems, such as the one located in East Cambridge.

BIG BELLY Report

Per your Big Belly User Agreement with DOER, please report in the space below on the results of the Compactor(s) being in your community and any lessons learned or resulting changes in public trash collection during the year after placement of the Compactor(s). This report can be mostly narrative but might involve some quantification of changes in public trash receptacle collection changes related to the units. The units might have been moved from their original location(s) to one or more locations for various reasons and DOER would like to also hear about the reasons and results of moving the units as well.

Cambridge Public Works received seven new BigBelly solar compactors as part of a Massachusetts Department of Energy Resources (DOER) grant in 2010. All of these units were installed in the November 2010, enabling us to service Central Square exclusively with BigBelly units – no more open litter barrels. There are now 45 BigBelly solar compactors in Central Square.

Central Square is a bustling urban center, with heavy pedestrian traffic all hours of the day and night. Transitioning from open litter barrels to solar powered compactors has allowed us to significantly reduce collection frequency – from up to three times per day to a maximum of once per day in the heaviest use areas, and as little as once per week service in lesser use areas.

Use of BigBelly compactors results in the square being consistently cleaner, as refuse is enclosed and protected from the wind and weather. The visual pollution and odors associated with open litter barrels are gone. The compactors are rodent proof and fly proof, and fit nicely with the city's rodent control programs.

BigBelly compactors do require periodic maintenance, but have been proven very dependable in all weather conditions. The compactors will jam when users force oversize items such as pizza boxes into the hopper, requiring a worker to open the unit and manually remove the blockage.

The City has not relocated any BigBelly compactors.

Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Baseline Year
FY08
REVISED 11-2-11

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
The Shop - Electrical Department	33,985	116	1,742	174	10	1	0	0	0	0	0	0	0	0	0	0	0	0	292
Engine 2	74,162	253	9,722	972		0	0	0	0	0	0	0	0	0	0	0	0	0	1,225
Engine 3	136,320	465	11,065	1,107		0	0	0	0	0	0	0	0	0	0	0	0	0	1,572
Engine 4	45,680	156	8,936	894		0	0	0	0	0	0	0	0	0	0	0	0	0	1,049
Engine 5	48,061	164	9,218	922		0	0	0	0	0	0	0	0	0	0	0	0	0	1,086
Engine 6	34,142	116	5,110	511		0	0	0	0	0	0	0	0	0	0	0	0	0	627
Engine 8	95,800	327	21,609	2,161		0	0	0	0	0	0	0	0	0	0	0	0	0	2,488
Engine 9	24,884	85	5,830	583		0	0	0	0	0	0	0	0	0	0	0	0	0	668
Fire Headquarters	389,139	1,328	11,009	1,101		0	0	0	0	0	0	0	0	0	0	0	0	0	2,429
Golf Course Clubhouse	125,387	428	5,133	513		0	0	0	0	0	0	0	0	0	0	0	0	0	941
Golf Course Maintenance Building	34,007	116	691	69		0	0	0	0	0	0	0	0	0	0	0	0	0	185
North Cambridge Senior Center (Electric only)	16,138	55		0		0	0	0	0	0	0	0	0	0	0	0	0	0	55
Central Square Branch	70,320	240	3,826	383		0	0	0	0	0	0	0	0	0	0	0	0	0	623
O'Connell Branch	18,818	64	4,695	470		0	0	0	0	0	0	0	0	0	0	0	0	0	534
Collins Branch	13,557	46	2,881	288		0	0	0	0	0	0	0	0	0	0	0	0	0	334
O'Neill Branch	37,975	130	1,272	127		0	0	0	0	0	0	0	0	0	0	0	0	0	257
Boudreau Branch	20,816	71	298	30		0	0	0	0	0	0	0	0	0	0	0	0	0	101
Valente Branch	40,033	137	3,417	342		0	0	0	0	0	0	0	0	0	0	0	0	0	478
Police Maintenance Garage	23,128	79	5,433	543		0	0	0	0	0	0	0	0	0	0	0	0	0	622
North Cambridge Crime Task Force Trailer (Electric only)	12,390	42		0		0	0	0	0	0	0	0	0	0	0	0	0	0	42
Cemetery Complex (3 Buildings) (Electric only)	78,349	267		0		0	0	0	0	0	0	0	0	0	0	0	0	0	267
DPW Complex (3 Buildings) (Electric only)	409,548	1,397		0		0	0	1,397	0	0	0	0	0	0	0	0	0	0	1,397
City Hall Building	788,724	2,691	25,971	2,597		0	0	0	0	0	0	0	0	0	0	0	0	0	5,288
City Hall Annex (Electric only)	605,440	2,066		0		0	0	0	0	0	0	0	0	0	0	0	0	0	2,066
Coffon Building	315,920	1,078	15,075	1,508		0	0	0	0	0	0	0	0	0	0	0	0	0	2,585
Danehy Park Comfort Station (Electric only)	69,664	238		0		0	0	0	0	0	0	0	0	0	0	0	0	0	238
Lombardi Building	326,040	1,112	11,990	1,199		0	0	0	0	0	0	0	0	0	0	0	0	0	2,311
First Street Traffic Meter and Maintenance Shop (Electric only)	39,534	135		0		0	0	0	0	0	0	0	0	0	0	0	0	0	135
Area IV Youth Center	248,720	849	15,624	1,562		0	0	0	0	0	0	0	0	0	0	0	0	0	2,411
Frisoli Youth Center	274,720	937	7,102	710		0	0	0	0	0	0	0	0	0	0	0	0	0	1,648
Gately Youth Center (Electric only)	83,598	285		0		0	0	0	0	0	0	0	0	0	0	0	0	0	285
Gold Star Pool (Electric only)	23,852	81		0		0	0	0	0	0	0	0	0	0	0	0	0	0	81
Moore Youth Center	56,332	192	6,570	657		0	0	0	0	0	0	0	0	0	0	0	0	0	849
Senior Center	587,112	2,003	16,219	1,622		0	0	0	0	0	0	0	0	0	0	0	0	0	3,625
First Street VFW Post 3273 (Electric only)	19,157	65		0		0	0	0	0	0	0	0	0	0	0	0	0	0	65
Corporal Burns Building (Electric only)	40,159	137		0		0	0	0	0	0	0	0	0	0	0	0	0	0	137
School Administration Building	201,449	687		0	20,145	2,800		0	0	0	0	0	0	0	0	0	0	0	3,487
Russell Field Field House	124,600	425	4,195	420		0	0	0	0	0	0	0	0	0	0	0	0	0	845
Baldwin School	639,984	2,184	37,449	3,745		0	0	0	0	0	0	0	0	0	0	0	0	0	5,929
Cambridge Rindge & Latin School	4,690,156	16,003	3,276	328		0	209,911	30,437		0	0	0	0	0	0	0	0	0	46,768
Cambridgeport School	466,740	1,593	34,883	3,488		0	0	0	0	0	0	0	0	0	0	0	0	0	5,081
Fletcher-Maynard Academy	433,920	1,481	1,216	122		0	19,757	2,865		0	0	0	0	0	0	0	0	0	4,467
Graham & Parks School	348,660	1,190	2,295	230	21,110	2,934		0	0	0	0	0	0	0	0	0	0	0	4,353
Haggerty School	739,968	2,525	32,833	3,283		0	0	0	0	0	0	0	0	0	0	0	0	0	5,808
Kennedy/Longfellow School	1,291,234	4,406	66,640	6,664		0	0	0	0	0	0	0	0	0	0	0	0	0	11,070
King Open School	506,052	1,727	3,694	369		0	45,453	6,591		0	0	0	0	0	0	0	0	0	8,687
King/Amigos School	861,480	2,939	2,743	274		0	49,470	7,173		0	0	0	0	0	0	0	0	0	10,387
Longfellow Building	369,720	1,261	1,044	104		0	23,902	3,466		0	0	0	0	0	0	0	0	0	4,832
Morse School	662,316	2,260	51,794	5,179		0	0	0	0	0	0	0	0	0	0	0	0	0	7,439
15 Upton Street	53,816	184	14	1		0	14,832	2,151		0	0	0	0	0	0	0	0	0	2,336
Peabody School	1,188,512	4,055	26,104	2,610		0	0	0	0	0	0	0	0	0	0	0	0	0	6,666
Solomon Garage	166,560	568	3,746	375	15,595	2,168		0	0	0	0	0	0	0	0	0	0	0	3,111

**Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Baseline Year
FY08
REVISED 11-2-11**

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
Tobin School	2,459,580	8,392	51	5		0		0		0		0		0		0		0	8,397
Cemetery Administrative Building (Gas only)		0	1,264	126		0		0		0		0		0		0		0	126
Cemetery Garage (Gas only)		0	7,372	737		0		0		0		0		0		0		0	737
DPW Administrative Building (Gas only)		0	7,176	718		0		0		0		0		0		0		0	718
DPW Garage (Gas only)		0	55,414	5,541		0		0		0		0		0		0		0	5,541
DPW Simard Building (Gas only)		0	5,950	595		0		0		0		0		0		0		0	595
First Street Parking Garage Offices (Gas only)		0	8,790	879		0		0		0		0		0		0		0	879
5 Western Ave (Old Police Station)	490,720	1,674	3,386	339	27,988	3,890		0		0		0		0		0		0	5,903
Vehicle Storage Building - Water Department (Gas only)		0	7,767	777		0		0		0		0		0		0		0	777
SUBTOTAL FOR BUILDINGS	20,957,078	71,506	579,534	57,953	84,848	11,794	363,325	52,682	0	0	0	0	0	0	0	0	0	0	193,935
Drinking Water/Wastewater Treatment Plant	9,103,200	31,060	96,721	9,672		0		0		0		0		0		0		0	40,732
Pumping in Aggregate	212,668	726	689	69		0		0	500	46		0		0		0		0	840
Open Space*	1,781,515	6,079		0		0		0		0		0		0		0		0	6,079
Vehicles in Aggregate		0		0		0		0		0	225,985	28,022	70,075	9,740		0		0	37,763
Street and Traffic Lights in Aggregate	6,713,027	22,905	421	42		0		0		0		0		0		0		0	22,947
TOTAL ENERGY CONSUMPTION	38,767,488	132,275	677,365	67,737	84,848	11,794	363,325	52,682	500	46	225,985	28,022	70,075	9,740	0	0	0	0	302,295

* Included in Open Space: Parks, Athletic Fields, Parking Lots and Parking Garages. This category is assigned by MEI and matches MassEnergyInsight Table 3.

** Please see Note regarding data reporting issues with existing PV systems on page 4 of the Green Community Annual Report

**Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Year 1
FY09
REVISED 11-2-11**

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
The Shop - Electrical Department	31,856	109	2,929	293		0		0		0		0		0		0		0	402
Engine 2	65,187	222	10,253	1,025		0		0		0		0		0		0		0	1,248
Engine 3	133,840	457	10,057	1,006		0		0		0		0		0		0		0	1,462
Engine 4	38,520	131	8,125	813		0		0		0		0		0		0		0	944
Engine 5	52,232	178	8,354	835		0		0		0		0		0		0		0	1,014
Engine 6	28,408	97	5,205	521		0		0		0		0		0		0		0	617
Engine 8	84,920	290	22,831	2,283		0		0		0		0		0		0		0	2,573
Engine 9	23,041	79	5,660	566		0		0		0		0		0		0		0	645
Fire Headquarters	323,421	1,104	11,003	1,100		0		0		0		0		0		0		0	2,204
Golf Course Clubhouse	129,577	442	4,029	403		0		0		0		0		0		0		0	845
Golf Course Maintenance Building	36,741	125	932	93		0		0		0		0		0		0		0	219
North Cambridge Senior Center (Electric only)	16,177	55		0		0		0		0		0		0		0		0	55
Central Square Branch	75,960	259	6,355	636		0		0		0		0		0		0		0	895
O'Connell Branch	17,977	61	4,014	401		0		0		0		0		0		0		0	463
Collins Branch	12,737	43	2,734	273		0		0		0		0		0		0		0	317
O'Neill Branch	35,845	122	929	93		0		0		0		0		0		0		0	215
Boudreau Branch	19,664	67	274	27		0		0		0		0		0		0		0	94
Valente Branch	36,647	125	3,366	337		0		0		0		0		0		0		0	462
Police Maintenance Garage	23,390	80	3,959	396		0		0		0		0		0		0		0	476
North Cambridge Crime Task Force Trailer (Electric only)	11,952	41		0		0		0		0		0		0		0		0	41
Cemetery Complex (3 Buildings) (Electric only)	84,880	290		0		0		0		0		0		0		0		0	290
DPW Complex (3 Buildings) (Electric only)	383,774	1,309		0		0		0		0		0		0		0		0	1,309
City Hall Building	716,340	2,444	18,208	1,821		0		0		0		0		0		0		0	4,265
City Hall Annex (Electric only)	620,100	2,116		0		0		0		0		0		0		0		0	2,116
Coffon Building	276,800	944	10,839	1,084		0		0		0		0		0		0		0	2,028
Danehy Park Comfort Station (Electric only)	59,704	204		0		0		0		0		0		0		0		0	204
Lombardi Building	333,120	1,137	9,406	941		0		0		0		0		0		0		0	2,077
First Street Traffic Meter and Maintenance Shop (Electric only)	28,559	97		0		0		0		0		0		0		0		0	97
Area IV Youth Center	196,480	670	14,021	1,402		0		0		0		0		0		0		0	2,072
Frisoli Youth Center	261,280	891	8,911	891		0		0		0		0		0		0		0	1,783
Gately Youth Center (Electric only)	81,359	278		0		0		0		0		0		0		0		0	278
Gold Star Pool (Electric only)	21,223	72		0		0		0		0		0		0		0		0	72
Moore Youth Center	56,926	194	6,669	667		0		0		0		0		0		0		0	861
Senior Center	551,448	1,882	16,540	1,654		0		0		0		0		0		0		0	3,536
First Street VFW Post 3273 (Electric only)	20,464	70		0		0		0		0		0		0		0		0	70
Corporal Burns Building (Electric only)	34,723	118		0		0		0		0		0		0		0		0	118
School Administration Building	179,769	613		0	22,757	3,163		0		0		0		0		0		0	3,777
Russell Field Field House	135,000	461	4,745	475		0		0		0		0		0		0		0	935
Baldwin School	627,872	2,142	31,789	3,179		0		0		0		0		0		0		0	5,321
Cambridge Rindge & Latin School	4,457,156	15,208	3,248	325		0	172,904	25,071		0		0		0		0		0	40,604
Cambridgeport School	456,468	1,557	24,671	2,467		0		0		0		0		0		0		0	4,025
Fletcher-Maynard Academy	410,160	1,399	1,272	127		0	22,979	3,332		0		0		0		0		0	4,859
Graham & Parks School	327,948	1,119	2,266	227	29,208	4,060		0		0		30	4		0		0	0	5,410
Haggerty School	704,712	2,404	31,561	3,156		0		0		0		0		0		0		0	5,561
Kennedy/Longfellow School	1,340,238	4,573	56,919	5,692		0		0		0		0		0		0		0	10,265
King Open School	484,368	1,653	3,370	337		0	54,344	7,880		0		0		0		0		0	9,870
King/Amigos School	960,840	3,278	2,955	296		0	51,291	7,437		0		0		0		0		0	11,011
Longfellow Building	268,680	917	827	83		0	21,158	3,068		0		0		0		0		0	4,067
Morse School	659,832	2,251	51,334	5,133		0		0		0		0		0		0		0	7,385
15 Upton Street	205,256	700	335	34		0	21,096	3,059		0		0		0		0		0	3,793
Peabody School	1,108,504	3,782	28,342	2,834		0		0		0		0		0		0		0	6,616
Solomon Garage	161,440	551	3,965	397	14,974	2,081		0		0		0		0		0		0	3,029

**Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Year 1
FY09
REVISED 11-2-11**

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
Tobin School	2,741,430	9,354	66	7		0		0		0		0		0		0		0	9,360
Cemetery Administrative Building (Gas only)		0	1,262	126		0		0		0		0		0		0		0	126
Cemetery Garage (Gas only)		0	4,706	471		0		0		0		0		0		0		0	471
DPW Administrative Building (Gas only)		0	5,062	506		0		0		0		0		0		0		0	506
DPW Garage (Gas only)		0	57,113	5,711		0		0		0		0		0		0		0	5,711
DPW Simard Building (Gas only)		0	6,317	632		0		0		0		0		0		0		0	632
First Street Parking Garage Offices (Gas only)		0	8,847	885		0		0		0		0		0		0		0	885
5 Western Ave (Old Police Station)	302,960	1,034	1,766	177	21,489	2,987		0		0		0		0		0		0	4,197
Vehicle Storage Building - Water Department (Gas only)		0	8,927	893		0		0		0		0		0		0		0	893
SUBTOTAL FOR BUILDINGS	20,457,905	69,802	537,268	53,727	88,428	12,291	343,772	49,847	0	0	0	0	30	4	0	0	0	0	185,672
Drinking Water/Wastewater Treatment Plant	8,734,080	29,801	78,965	7,897		0		0		0		0		0		0		0	37,697
Pumping in Aggregate	206,543	705	865	87		0		0	637	58		0		0		0		0	849
Open Space*	1,680,308	5,733		0		0		0		0		0		0		0		0	5,733
Vehicles in Aggregate		0		0		0		0		0	220,631	27,358	70,775	9,838		0		0	37,196
Street and Traffic Lights in Aggregate	6,609,384	22,551	70	7		0		0		0		0		0		0		0	22,558
TOTAL ENERGY CONSUMPTION	37,688,220	128,592	617,168	61,717	88,428	12,291	343,772	49,847	637	58	220,631	27,358	70,805	9,842	0	0	0	0	289,706

* Included in Open Space: Parks, Athletic Fields, Parking Lots and Parking Garages. This category is assigned by MEI and matches MassEnergyInsight Table 3.

** Please see Note regarding data reporting issues with existing PV systems on page 4 of the Green Community Annual Report

**Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Year 2
FY10
REVISED 11-2-11**

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
The Shop - Electrical Department	28,135	96	2,071	207		0		0		0		0		0		0		0	303
Engine 2	64,665	221	9,177	918		0		0		0		0		0		0		0	1,138
Engine 3	133,680	456	8,843	884		0		0		0		0		0		0		0	1,340
Engine 4	39,640	135	7,127	713		0		0		0		0		0		0		0	848
Engine 5	45,382	155	7,543	754		0		0		0		0		0		0		0	909
Engine 6	27,822	95	4,667	467		0		0		0		0		0		0		0	562
Engine 8	83,520	285	22,096	2,210		0		0		0		0		0		0		0	2,495
Engine 9	21,221	72	5,125	513		0		0		0		0		0		0		0	585
Fire Headquarters	225,366	769	10,908	1,091		0		0		0		0		0		0		0	1,860
Golf Course Clubhouse	99,259	339	3,055	306		0		0		0		0		0		0		0	644
Golf Course Maintenance Building	29,120	99	676	68		0		0		0		0		0		0		0	167
North Cambridge Senior Center (Electric only)	13,216	45		0		0		0		0		0		0		0		0	45
Central Square Branch	75,120	256	6,565	657		0		0		0		0		0		0		0	913
O'Connell Branch	16,162	55	3,689	369		0		0		0		0		0		0		0	424
Collins Branch	10,836	37	2,204	220		0		0		0		0		0		0		0	257
O'Neill Branch	34,702	118	1,219	122		0		0		0		0		0		0		0	240
Boudreau Branch	14,701	50	345	35		0		0		0		0		0		0		0	85
Valente Branch	35,917	123	3,213	321		0		0		0		0		0		0		0	444
Police Maintenance Garage	22,598	77	2,590	259		0		0		0		0		0		0		0	336
North Cambridge Crime Task Force Trailer (Electric only)	10,248	35		0		0		0		0		0		0		0		0	35
Cemetery Complex (3 Buildings) (Electric only)	64,202	219		0		0		0		0		0		0		0		0	219
DPW Complex (3 Buildings) (Electric only)	367,461	1,254		0		0		0		0		0		0		0		0	1,254
City Hall Building	730,032	2,491	15,311	1,531		0		0		0		0		0		0		0	4,022
City Hall Annex (Electric only)	602,200	2,055		0		0		0		0		0		0		0		0	2,055
Coffon Building	264,960	904	10,819	1,082		0		0		0		0		0		0		0	1,986
Danehy Park Comfort Station (Electric only)	63,871	218		0		0		0		0		0		0		0		0	218
Lombardi Building	382,080	1,304	8,233	823		0		0		0		0		0		0		0	2,127
First Street Traffic Meter and Maintenance Shop (Electric only)	30,178	103		0		0		0		0		0		0		0		0	103
Area IV Youth Center	212,000	723	14,325	1,433		0		0		0		0		0		0		0	2,156
Frisoli Youth Center	249,360	851	7,823	782		0		0		0		0		0		0		0	1,633
Gately Youth Center (Electric only)	75,470	258		0		0		0		0		0		0		0		0	258
Gold Star Pool (Electric only)	20,747	71		0		0		0		0		0		0		0		0	71
Moore Youth Center	46,295	158	5,981	598		0		0		0		0		0		0		0	756
Senior Center	587,472	2,004	17,739	1,774		0		0		0		0		0		0		0	3,778
First Street VFW Post 3273 (Electric only)	19,408	66		0		0		0		0		0		0		0		0	66
Corporal Burns Building (Electric only)	39,167	134		0		0		0		0		0		0		0		0	134
School Administration Building	166,409	568		0	21,227	2,951		0		0		0		0		0		0	3,518
Russell Field Field House	148,640	507	3,727	373		0		0		0		0		0		0		0	880
Baldwin School	669,616	2,285	34,390	3,439		0		0		0		0		0		0		0	5,724
Cambridge Rindge & Latin School	2,810,456	9,589	40,738	4,074		0	70,711	10,253		0		0		0		0		0	23,916
Cambridgeport School	437,292	1,492	23,364	2,336		0		0		0		0		0		0		0	3,828
Fletcher-Maynard Academy	418,800	1,429	1,434	143		0	14,818	2,149		0		0		0		0		0	3,721
Graham & Parks School	312,168	1,065	2,345	235	19,281	2,680		0		0		0		0		0		0	3,980
Haggerty School	702,924	2,398	36,279	3,628		0		0		0		0		0		0		0	6,026
Kennedy/Longfellow School	1,310,366	4,471	55,001	5,500		0		0		0		0		0		0		0	9,971
King Open School	476,076	1,624	3,235	324		0	49,400	7,163		0		0		0		0		0	9,111
King/Amigos School	755,400	2,577	3,858	386		0	43,987	6,378		0		0		0		0		0	9,341
Longfellow Building	344,040	1,174	1,336	134		0	29,642	4,298		0		0		0		0		0	5,606
Morse School	618,792	2,111	46,870	4,687		0		0		0		0		0		0		0	6,798
15 Upton Street	223,616	763	480	48		0	17,777	2,578		0		0		0		0		0	3,389
Peabody School	1,034,256	3,529	24,926	2,493		0		0		0		0		0		0		0	6,021
Solomon Garage	165,040	563	3,459	346	13,783	1,916		0		0		0		0		0		0	2,825

Tobin School	2,434,005	8,305	69	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,312
Cemetery Administrative Building (Gas only)		0	485	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
Cemetery Garage (Gas only)		0	3,722	372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	372
DPW Administrative Building (Gas only)		0	4,330	433	0	0	0	0	0	0	0	0	0	0	0	0	0	0	433
DPW Garage (Gas only)		0	53,155	5,316	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,316
DPW Simard Building (Gas only)		0	5,708	571	0	0	0	0	0	0	0	0	0	0	0	0	0	0	571
First Street Parking Garage Offices (Gas only)		0	7,658	766	0	0	0	0	0	0	0	0	0	0	0	0	0	0	766
5 Western Ave (Old Police Station)	62,640	214	0	0	4,662	648	0	0	0	0	0	0	0	0	0	0	0	0	862
Vehicle Storage Building - Water Department (Gas only)		0	9,366	937	0	0	0	0	0	0	0	0	0	0	0	0	0	0	937
City Hall Fire Pump	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL FOR BUILDINGS	17,876,749	60,995	547,279	54,728	58,953	8,194	226,335	32,819	0	0	0	0	0	0	0	0	0	0	156,736
Drinking Water/Wastewater Treatment Plant	8,366,400	28,546	81,665	8,167	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36,713
Pumping in Aggregate	243,122	830	73	7	0	0	0	607	55	0	0	0	0	0	0	0	0	0	892
Open Space*	1,689,585	5,765	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,765
Vehicles in Aggregate		0	0	0	0	0	0	0	0	208,820	25,894	64,396	8,951	0	0	0	0	0	34,845
Street and Traffic Lights in Aggregate	6,494,622	22,160	52	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,165
TOTAL ENERGY CONSUMPTION	34,670,478	118,296	629,069	62,907	58,953	8,194	226,335	32,819	607	55	208,820	25,894	64,396	8,951	0	0	0	0	257,116

* Included in Open Space: Parks, Athletic Fields, Parking Lots and Parking Garages. This category is assigned by MEI and matches MassEnergyInsight Table 3.

** Please see Note regarding data reporting issues with existing PV systems on page 4 of the Green Community Annual Report

**Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Year 3
FY11
REVISED 11-2-11**

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
The Shop - Electrical Department	34,143	116	3,056	306		0		0		0		0		0		0		0	422
Engine 2	67,905	232	9,893	989		0		0		0		0		0		0		0	1,221
Engine 3	132,640	453	9,220	922		0		0		0		0		0		0		0	1,375
Engine 4	44,520	152	7,395	740		0		0		0		0		0		0		0	891
Engine 5	50,849	173	8,611	861		0		0		0		0		0		0		0	1,035
Engine 6	30,741	105	5,405	541		0		0		0		0		0		0		0	645
Engine 8	82,640	282	22,628	2,263		0		0		0		0		0		0		0	2,545
Engine 9	21,080	72	5,449	545		0		0		0		0		0		0		0	617
Fire Headquarters	285,151	973	11,804	1,180		0		0		0		0		0		0		0	2,153
Golf Course Clubhouse	109,611	374	3,936	394		0		0		0		0		0		0		0	768
Golf Course Maintenance Building	31,219	107	952	95		0		0		0		0		0		0		0	202
North Cambridge Senior Center (Electric only)	10,277	35		0		0		0		0		0		0		0		0	35
Central Square Branch	70,440	240	1,575	158		0		0		0		0		0		0		0	398
O'Connell Branch	16,154	55	4,300	430		0		0		0		0		0		0		0	485
Collins Branch	9,846	34	2,172	217		0		0		0		0		0		0		0	251
O'Neill Branch	39,068	133	1,903	190		0		0		0		0		0		0		0	324
Boudreau Branch	12,948	44	360	36		0		0		0		0		0		0		0	80
Valente Branch	35,640	122	3,221	322		0		0		0		0		0		0		0	444
Police Maintenance Garage	14,188	48	2,370	237		0		0		0		0		0		0		0	285
North Cambridge Crime Task Force Trailer (Electric only)	729	2		0		0		0		0		0		0		0		0	2
Cemetery Complex (3 Buildings) (Electric only)	56,772	194		0		0		0		0		0		0		0		0	194
DPW Complex (3 Buildings) (Electric only)	390,676	1,333		0		0		0		0		0		0		0		0	1,333
City Hall Building	723,228	2,468	18,993	1,899		0		0		0		0		0		0		0	4,367
City Hall Annex (Electric only)	692,520	2,363		0		0		0		0		0		0		0		0	2,363
Coffon Building	279,200	953	12,397	1,240		0		0		0		0		0		0		0	2,192
Danehy Park Comfort Station (Electric only)	69,839	238		0		0		0		0		0		0		0		0	238
Lombardi Building	391,920	1,337	8,811	881		0		0		0		0		0		0		0	2,218
First Street Traffic Meter and Maintenance Shop (Electric only)	31,658	108		0		0		0		0		0		0		0		0	108
Area IV Youth Center	190,400	650	14,978	1,498		0		0		0		0		0		0		0	2,147
Frisoli Youth Center	259,600	886	8,513	851		0		0		0		0		0		0		0	1,737
Gately Youth Center (Electric only)	79,668	272		0		0		0		0		0		0		0		0	272
Gold Star Pool (Electric only)	21,293	73		0		0		0		0		0		0		0		0	73
Moore Youth Center	58,001	198	7,333	733		0		0		0		0		0		0		0	931
Senior Center	558,648	1,906	19,507	1,951		0		0		0		0		0		0		0	3,857
First Street VFW Post 3273 (Electric only)	16,024	55		0		0		0		0		0		0		0		0	55
Corporal Burns Building (Electric only)	47,906	163		0		0		0		0		0		0		0		0	163
School Administration Building	173,529	592		0	22,232	3,090		0		0		0		0		0		0	3,682
Russell Field Field House	140,840	481	4,373	437		0		0		0		0		0		0		0	918
Baldwin School	640,728	2,186	34,948	3,495		0		0		0		0		0		0		0	5,681
Cambridge Rindge & Latin School	3,596,906	12,273	178,700	17,870		0	0		0		0		0		0		0	0	30,143
Cambridgeport School	427,020	1,457	24,889	2,489		0		0		0		0		0		0		0	3,946
Fletcher-Maynard Academy	416,400	1,421	1,448	145		0	26,663	3,866		0		0		0		0		0	5,432
Graham & Parks School	308,488	1,053	2,270	227	25,451	3,538		0		0		0		0		0		0	4,817
Haggerty School	642,504	2,192	29,857	2,986		0		0		0		0		0		0		0	5,178
Kennedy/Longfellow School	1,427,122	4,869	65,100	6,510		0		0		0		0		0		0		0	11,379
King Open School	456,168	1,556	3,281	328		0	57,556	8,346		0		0		0		0		0	10,230
King/Amigos School	874,080	2,982	3,494	349		0	57,285	8,306		0		0		0		0		0	11,638
Longfellow Building	350,280	1,195	26,366	2,637		0		0		0		0		0		0		0	3,832
Morse School	632,712	2,159	51,227	5,123		0		0		0		0		0		0		0	7,282
15 Upton Street	218,696	746	406	41		0	23,569	3,418		0		0		0		0		0	4,204
Peabody School	1,072,968	3,661	27,388	2,739		0		0		0		0		0		0		0	6,400
Solomon Garage	181,920	621	3,850	385	16,180	2,249		0		0		0		0		0		0	3,255

**Combined Table 1 and 2: Annual Municipal Energy Use in Native Units and MMBtu
Year 3
FY11
REVISED 11-2-11**

	Electricity		Natural Gas		#2 Distillate Fuel Oil		#4 Distillate Fuel Oil		Propane		Gasoline		Diesel		Electric Renewable Energy**		Thermal Renewable Energy		Total MMBtu
	kWh	MMBtu	Therms	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	Gallons	MMBtu	kWh	MMBtu	Therms	MMBtu	
Tobin School	2,517,705	8,590	61	6		0		0		0		0		0		0		0	8,597
Cemetery Administrative Building (Gas only)		0	1,292	129		0		0		0		0		0		0		0	129
Cemetery Garage (Gas only)		0	3,321	332		0		0		0		0		0		0		0	332
DPW Administrative Building (Gas only)		0	3,612	361		0		0		0		0		0		0		0	361
DPW Garage (Gas only)		0	52,439	5,244		0		0		0		0		0		0		0	5,244
DPW Simard Building (Gas only)		0	6,581	658		0		0		0		0		0		0		0	658
First Street Parking Garage Offices (Gas only)		0	8,413	841		0		0		0		0		0		0		0	841
5 Western Ave (Old Police Station)	53,200	182	0	0	4,509	627		0		0		0		0		0		0	808
Vehicle Storage Building - Water Department (Gas only)		0	9,618	962		0		0		0		0		0		0		0	962
City Hall Fire Pump		0		0		0		0		0		0		0		0		0	0
SUBTOTAL FOR BUILDINGS	19,098,408	65,164	737,716	73,772	68,372	9,504	165,073	23,936	0	0	0	0	0	0	0	0	0	0	172,375
Drinking Water/Wastewater Treatment Plant	8,567,520	29,232	102,687	10,269		0		0		0		0		0		0		0	39,501
Pumping in Aggregate	224,576	766	66	7		0		0	631	57		0		0		0		0	830
Open Space*	1,771,648	6,045		0		0		0		0		0		0		0		0	6,045
Vehicles in Aggregate		0		0		0		0		0	220,085	27,291	61,690	8,575		0		0	35,865
Street and Traffic Lights in Aggregate	6,443,991	21,987	92	9		0		0		0		0		0		0		0	21,996
TOTAL ENERGY CONSUMPTION	36,106,143	123,194	840,561	84,056	68,372	9,504	165,073	23,936	631	57	220,085	27,291	61,690	8,575	0	0	0	0	276,612

* Included in Open Space: Parks, Athletic Fields, Parking Lots and Parking Garages. This category is assigned by MEI and matches MassEnergyInsight Table 3.

** Please see Note regarding data reporting issues with existing PV systems on page 4 of the Green Community Annual Report

**Table 4
Energy Conservation Measures Data**

Measure		Status	Energy Data						Financial Data					Reference Data	
Category/Building	Energy Conservation Measure	Status (Completed with month/year or planned Qtr/year)	Projected Annual Electricity Savings (kWh)	Projected Annual Natural Gas Savings	Projected Annual Heating Oil Savings (gallons)	Projected Annual Propane Savings (gallons)	Projected Annual Gasoline Savings	Projected Annual Diesel Savings (gallons)	Projected Annual Cost Savings (\$)	Total Installed Cost (\$)**	Green Community Grant (\$)	Utility Incentives (\$)	Net Cost (\$)	Funding Source(s) for Net Costs	Source for Projected Savings
Area IV Youth Center	Lighting Retrofit	Completed 2/2011	17,791	0	0	0	0	0	\$2,669	\$8,330	\$0	\$3,672	\$4,658	EECBG and City Capital Funds	Prism Energy Services "As Built" Report 4/2011
Area IV Youth Center	Variable Frequency Drives and Direct Digital Control System	Completed 7/2011	27,661	3,756	0	0	0	0	\$9,408	\$59,589	\$46,357	\$9,753	\$3,479	City Capital Funds - Appropriated Utility Rebates	Prism Energy Services Proposal 4/2011
Baldwin School	Lighting Retrofit	Completed 2/2011	80,554	0	0	0	0	0	\$12,083	\$59,170	\$0	\$20,139	\$39,032	EECBG and FY10 Bond	Prism Energy Services "As Built" Report 4/2011
Baldwin School	HVAC Upgrade	Planned FY12 or FY13	40,228	3,954	0	0	0	0	\$12,163	TBD	\$0	TBD	TBD	TBD	Prism Energy Services Audit 5/2010
Cambridge Rindge and Latin High School	Major Renovations - Designed to LEED Silver	Completed 9/2011			0	0	0	0			\$0	\$0		City Bonds	Silver LEED features are part of \$112 Million Renovation Project
Cambridge Rindge and Latin High School PV System	31 KW Rooftop PV	In Progress	30,000	0	0	0	0	0	\$4,500		\$0	\$0		Mass. Renewable Energy Trust Grant	HMFH Architects, Inc. Additional Scope Feasibility Study 9/2007
Cambridgeport School	Lighting Upgrade	Planned FY12 or FY13	56,009	0	0	0	0	0	\$8,401	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Completed Projects
Cemetery Garage & Administration Building	Insulated Attic	Completed 12/2009	250	3,300	0	0	0	0	\$5,153	\$16,000	\$0	\$0	\$16,000	City Capital Funds	Kilojols Consulting Group Energy Assessment Cemetery Buildings 1/2007
City Hall	Lighting Retrofit	Completed 2/2011	98,823	0	0	0	0	0	\$14,823	\$57,159	\$0	\$26,986	\$30,173	EECBG	Bluestone Energy Services Proposal 6/2010
City Hall	Air seal and insulate attic	Planned FY12 or FY13	16,500	5,500	0	0	0	0	\$11,000	TBD	\$0	TBD	TBD	TBD	kilojols consulting group Energy Assessment City Hall 12/2006
City Hall Annex	Recommission	Completed 2/2009	-	-	-	-	-	-	-	\$25,858	\$0	\$0	\$25,858	Operating Budget FY09	
Coffon Building	Replace Boiler and Install Direct Digital Control System and Programmable Thermostats	Completed 5/2009	15,748	3,267	0	0	0	0	\$7,426	Included with Frazier - See Line 28	\$0	\$0	Included with Frazier - See Line 28	City Capital Funds	City Engineering Estimate
Coffon Building	Lighting Upgrade	Planned FY12 or FY13	31,592	0	0	0	0	0	\$4,739	TBD	\$0	TBD	TBD	TBD	kilojols consulting group Energy Assessment Coffon Building 1/2007
DPW Complex (three buildings)	Lighting Retrofit	Completed 9/2011	86,075	0	0	0	0	0	\$12,911	\$75,835	\$26,260	\$21,519	\$28,056	City Capital Funds - Appropriated Utility Rebates	Prism Energy Services Proposal 9/2011
DPW Complex (three buildings)	HVAC Upgrade Phases 1 & 2	Potential FY13	7,800	27,191	0	0	0	0	\$43,900	\$435,000	\$0	TBD	\$435,000	TBD	ICF International Energy Efficiency Opportunity Assessment Report - DPW Complex 12/2010
DPW Ryan Garage and Simard Building	Energy Star reflective roofs, 55,000 sf, high R-value insulation	Design in process. Construction FY12	0	30,785	0	0	0	0	\$36,942	\$1,405,705	\$0	\$0	\$1,405,705	FY12 Bond	Preliminary Design Report, Russo Barr Associates 12/2010
DPW Ryan Garage and Simard Building	400 KW Rooftop PV	Evaluating FY12	448,000	0	0	0	0	0	\$67,200	\$2,300,000	\$0	\$0	\$2,300,000	TBD	Preliminary Design Report, Russo Barr Associates 12/2010
Engine 3	Lighting Retrofit	Completed 2/2011	22,620	0	0	0	0	0	\$3,393	\$26,313	\$0	\$5,404	\$20,909	EECBG and City Capital Funds	Prism Energy Services "As Built" Report 4/2011
Engine 3	HVAC Upgrade	Planned FY12 or FY13	605	2,626	0	0	0	0	\$4,161	TBD	\$0	TBD	TBD	TBD	Prism Energy Services Non-Lighting Audit 5/2010
Engine 8	HVAC Upgrade	Planned FY12 or FY13	0	2,339	0	0	0	0	\$3,625	TBD	\$0	TBD	TBD	TBD	ICF International Energy Efficiency Opportunity Assessment Report - Engine 8 12/2010
Engine 8	Lighting Upgrade	Planned FY12 or FY13	8,356	0	0	0	0	0	\$1,039	TBD	\$0	TBD	TBD	TBD	ICF International Energy Efficiency Opportunity Assessment Report - Engine 8 12/2010
Fire Headquarters	Lighting Upgrade	Planned FY12 or FY13	9,845	0	0	0	0	0	TBD	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Completed Projects
Fletcher-Maynard Academy	Lighting Upgrade	Planned FY12 or FY13	43,392	0	0	0	0	0	TBD	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Completed Projects

Measure		Status	Energy Data						Financial Data					Reference Data	
Category/Building	Energy Conservation Measure	Status (Completed with month/year or planned Qtr/year)	Projected Annual Electricity Savings (kWh)	Projected Annual Natural Gas Savings	Projected Annual Heating Oil Savings (gallons)	Projected Annual Propane Savings (gallons)	Projected Annual Gasoline Savings	Projected Annual Diesel Savings (gallons)	Projected Annual Cost Savings (\$)	Total Installed Cost (\$)**	Green Community Grant (\$)	Utility Incentives (\$)	Net Cost (\$)	Funding Source(s) for Net Costs	Source for Projected Savings
Frazier Building (DPW)	New Rooftop Air Conditioning Unit and Install Direct Digital Controls and Programmable Thermostats	Completed 5/2009	21,778	4,555	0	0	0	0	\$10,327	\$454,866	\$0	\$0	\$454,866	City Capital Funds	City Engineering Estimate
Frazier Building (DPW)	Replaced Boiler and Installed Direct Digital Control System	Completed 11/2010	0	1,895	0	0	0	0	\$6,000	\$138,716	\$0	\$7,500	\$131,216	EECBG and City Capital Funds	City Engineering Estimate
Frisoli Youth Center	Lighting Retrofit	Completed 2/2011	32,947	0	0	0	0	0	\$4,942	\$24,940	\$0	\$8,430	\$16,510	EECBG and City Capital Funds	Prism Energy Services "As Built" Report 4/2011
Frisoli Youth Center	Variable Frequency Drives and Direct Digital Control System	Completed 7/2011	122,665	4,332	0	0	0	0	\$26,079	\$153,436	\$119,266	\$34,170	\$0	N/A	Prism Energy Services Proposal 4/2011
Gately Youth Center	Lighting Retrofit	Completed 2/2011	48,792	0	0	0	0	0	\$7,319	\$18,798	\$0	\$12,198	\$6,600	EECBG and City Capital Funds	Prism Energy Services "As Built" Report 4/2011
Golf Course Clubhouse	Lighting Upgrade	Planned FY12 or FY13	12,539	0	0	0	0	0	\$1,881	TBD	\$0	TBD	TBD	TBD	kilojolts consulting group Energy Assessment Fresh Pond Golf Course Clubhouse 2/2007
Haggerty School	Lighting Retrofit	Completed 2/2011	84,425	0	0	0	0	0	\$12,664	\$50,864	\$0	\$19,494	\$31,370	EECBG and FY10 Bond	Prism Energy Services "As Built" Report 4/2011
Haggerty School	Variable Frequency Drives	Completed 7/2011	41,963	0	0	0	0	0	\$6,294	\$25,929	\$15,438	\$10,491	\$0	N/A	Prism Energy Services Proposal 4/2011
Haggerty School	DDC Upgrade	Planned FY12 or FY13	176,889	8,272	0	0	0	0	\$36,460	\$293,000	\$0	TBD	\$293,000	TBD	Prism Energy Services Audit 5/2010
High School Field House	Lighting Retrofit	Completed 9/2011	185,000	0	0	0	0	0	\$27,750	\$59,018	\$12,768	\$46,250	\$0	N/A	Prism Energy Services Proposal 8/2011
Kennedy/Longfellow School	Lighting Retrofit	Completed 2/2011	170,090	0	0	0	0	0	\$25,514	\$90,711	\$0	\$42,522	\$48,189	EECBG and FY10 Bond	Prism Energy Services "As Built" Report 4/2011
Lombardi Building	HVAC Upgrade	Planned FY12 or FY13	7,800	1,395	0	0	0	0	\$3,332	TBD	\$0	TBD	TBD	TBD	ICF International Energy Efficiency Opportunity Assessment Report - Lombardi Building 12/2010
Lombardi Building	Lighting Upgrade	Planned FY12 or FY13	13,993	0	0	0	0	0	\$4,261	TBD	\$0	TBD	TBD	TBD	ICF International Energy Efficiency Opportunity Assessment Report - Lombardi Building 12/2010
Longfellow School	Replaced Boiler (converted from oil to natural gas) and Installed Direct Digital Control System	Completed 11/2010	0	16,490	0	0	0	0	\$18,000	\$414,212	\$0	\$30,000	\$384,212	EECBG and City Capital Funds	City Engineering Estimate
Longfellow School	Commission New HVAC	In Progress	TBD	TBD	0	0	0	0	TBD	\$11,250	\$0	\$0	\$11,250	Energy Fund - Appropriated Utility Rebates	
Martin Luther King, Jr. School	Demolition or Major Renovation - Silver	Design FY12 Construction FY13	TBD	0	0	0	0	0	TBD	TBD	\$0	TBD	TBD	City Bond	Responses to Design RFP - Under Review
Moore Youth Center	Replaced Boiler and Installed Direct Digital Control System	Completed 11/2010	0	1,873	0	0	0	0	\$6,000	\$138,716	\$0	\$7,500	\$131,216	EECBG and City Capital Funds	City Engineering Estimate
Morse School	Lighting Retrofit	Completed 9/2011	117,840	0	0	0	0	0	\$17,676	\$83,139	\$53,679	\$29,460	\$0	N/A	Prism Energy Services Proposal 8/2011
Peabody School	Lighting Retrofit	Completed 2/2011	206,244	0	0	0	0	0	\$30,937	\$116,885	\$0	\$51,611	\$65,275	EECBG and FY10 Bond	Prism Energy Services "As Built" Report 4/2011
Peabody School	HVAC Upgrade	Planned FY12 or FY13	95,169	16,599	0	0	0	0	\$40,004	TBD	\$0	TBD	TBD	TBD	Prism Energy Services Audit 5/2010
School District - nine schools	DDC System Integration	In Progress	171,176	0	0	0	0	0	\$51,292	\$162,864	\$0	\$40,644	\$122,220	FY10 Bond	Prism Energy Services Proposal 5/2011
Senior Center	Lighting Retrofit	Completed 2/2011	10,277	0	0	0	0	0	\$1,542	\$14,273	\$0	\$3,125	\$11,148	EECBG and City Capital Funds	Prism Energy Services "As Built" Report 4/2011
Senior Center	Retrocommissioning	Planned FY12 or FY13	39,130	1,260	0	0	0	0	\$7,823	TBD	\$0	TBD	TBD	TBD	Prism Energy Services Non-Lighting Audit 5/2010
Solomon Garage	Lighting Retrofit	Completed 9/2011	11,054	0	0	0	0	0	\$1,658	\$12,767	\$10,004	\$2,764	\$0	N/A	Prism Energy Services Proposal 8/2011

Measure		Status	Energy Data						Financial Data					Reference Data	
Category/Building	Energy Conservation Measure	Status (Completed with month/year or planned Qtr/year)	Projected Annual Electricity Savings (kWh)	Projected Annual Natural Gas Savings	Projected Annual Heating Oil Savings (gallons)	Projected Annual Propane Savings (gallons)	Projected Annual Gasoline Savings	Projected Annual Diesel Savings (gallons)	Projected Annual Cost Savings (\$)	Total Installed Cost (\$)**	Green Community Grant (\$)	Utility Incentives (\$)	Net Cost (\$)	Funding Source(s) for Net Costs	Source for Projected Savings
Solomon Garage	New High-efficiency Boiler	Planned FY12	5,450	1,038	0	0	0	0	\$2,426	\$150,000	\$0	TBD	\$150,000	FY12 City Capital Funds - Residential Parking	DPW Estimates Based off Completed Projects
Various City Facilities	PC Power Management	Planned FY12 or FY13	255,000	0	0	0	0	0	TBD	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Inhouse Audits and Kill-a-Watt Measurements 2010
Various Schools	Cambridge Green Schools Initiative	Planned FY12-FY13	468,368	0	0	0	0	0	\$70,255	\$0	\$0	\$0	\$0	Operating Budget	School Department Estimates Based off Previous Initiatives and Completed Projects
Various Smaller Municipal Buildings (fire stations, libraries, others)	Lighting Upgrade	Planned FY13-FY14	73,977	0	0	0	0	0	\$11,097	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Completed Projects
Various Smaller Municipal Buildings (fire stations, libraries, others)	HVAC Upgrade	Planned FY13-FY14	TBD	TBD	0	0	0	0	TBD	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Completed Projects
BUILDINGS SUBTOTAL			3,414,415	140,427	0	0	0	0	\$697,068	\$6,883,341	\$283,772	\$433,631	\$6,165,939		
OPEN SPACE* SUBTOTAL			0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0		
Walter Sullivan Water Purification Facility	Phase I HVAC Upgrade	Completed FY09	67,133	0	0	0	0	0	\$16,548	\$20,000	\$0	\$0	\$20,000	Water Enterprise Fund	Engineered Solutions, Inc. HVAC Study 9/2007
Walter Sullivan Water Purification Facility	Lighting Retrofit	Completed FY09	483,774	0	0	0	0	0	\$72,566	\$89,802	\$0	\$30,270	\$59,532	Water Enterprise Fund	Energy Masters Technical Study, 2010
Walter Sullivan Water Purification Facility	Energy Efficiency and Process Optimization Audit	In Progress	0	0	0	0	0	0	TBD	\$120,000	\$0	\$0	\$120,000	Water Enterprise Fund	
Walter Sullivan Water Purification Facility	100 KW Rooftop PV	Evaluating FY12	122,548	0	0	0	0	0	\$14,093	\$627,000	\$0	\$0	\$627,000	TBD	Feasibility Study, Camp Dresser McKee, 2010.
Walter Sullivan Water Purification Facility	Comprehensive Energy Reduction Measures	Planned FY12-FY13	1,612,540	5,800	0	0	0	0	\$248,261	\$802,000	\$0	TBD	\$802,000	TBD	Draft Report, "Energy Efficiency and Process Optimization Audit" 7/2011
WATER/SEWER/PUMPING SUBTOTAL			2,285,995	5,800	0	0	0	0	\$351,468	\$1,658,802	\$0	\$30,270	\$1,628,532		
Traffic Walk Signals	Converted to LED as part of larger general walk signal improvement project	Completed 4/2009	199,883	0	0	0	0	0	\$142,565		\$0				Traffic Estimates as Part of Larger General Walk Signal Improvement Project
Streetlights	Convert to LED	Planned Phase I FY13; Future Phases TBD	1,151,976	0	0	0	0	0	TBD	TBD	\$0	TBD	TBD	TBD	DPW Estimates Based off Completed Pilots
STREET AND TRAFFIC LIGHTS SUBTOTAL			1,351,859	0	0	0	0	0	\$142,565	\$0	\$0	\$0	\$0		
Water Department Vehicles	Incorporation of Global Positioning System (GPS)	Completed FY10	0	0	0	0	2,000	0			\$0				DPW Estimates Based off Completed Pilots
Various Departments	Green Fleet Vehicle Replacements	Completed/Planned FY12	0	0	0	0	2,224	0	\$6,650		\$0				DPW Estimates Based off www.fueleconomy.gov
VEHICLES SUBTOTAL			0	0	0	0	4,224	0	\$6,650	\$0	\$0	\$0	\$0		
TOTAL			7,052,268	146,227	0	0	4,224	0	\$1,197,750	\$8,542,143	\$283,772	\$463,901	\$7,794,471		
TOTAL MMBtu SAVINGS			39,209	24,062	14,623	0	0	524	0						

* Included in Open Space: Parks, Athletic Fields, Parking Lots and Parking Garages.

** Please note that totals for Installed Cost include retrofit projects as well as capital replacement and renovation projects

FY12 Adopted Budget

**COMMUNITY MAINTENANCE & DEV.
- Energy/Transportation Improvements**

PUBLIC INVESTMENT FUND	BUDGET
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FY12	\$780,000
FY13	\$500,000
FY14	\$500,000
FY15	\$500,000
FY16	<u>\$500,000</u>
	\$2,780,000

STATUS OF PRIOR YEARS PROJECTS. In May 2010 the City was designated as a Massachusetts Green Community by meeting five criteria, among them a 20% reduction in energy consumption over a 2008 baseline by 2013. In FY11 the City took steps to meet this goal by replacing failing or outdated boilers at the Longfellow School building, Moore Youth Center and the Public Works Frazier Administration building, and by installing energy-efficient lighting and occupancy sensors at five municipal buildings (Area IV, Frisoli and Gately Youth

Centers, Engine 3, Senior Center) and four schools (Baldwin, Haggerty, Kennedy-Longfellow and Peabody). This work was performed using \$759,600 in Federal Energy Efficiency and Conservation Block Grant (EECBG) stimulus funds and \$131,000 of the FY11 School Department public investment allocation. NStar subsidized the project costs with more than \$160,000 in utility rebates. In addition, \$283,770 in state Green Communities grant funds is being used to design and install heating, ventilating and air conditioning (HVAC) improvements at Area IV Youth Center, Frisoli Youth Center and the Haggerty School.

FY12 FUNDING. An allocation of \$780,000 from additional revenues from FY11 and FY12, due to a rate increase in resident parking stickers adopted in FY11, will be used to further the City’s work in reducing energy consumption. \$180,000 will be used for municipal buildings and \$220,000 for school buildings. These projects will consist of lighting upgrades and installation of occupancy sensors where appropriate and improvements to HVAC systems, such as installation of variable speed drives and direct digital controls. The City will also apply for NStar rebates to increase the total project value. \$280,000 will be allocated toward the bike share program, with \$100,000 to be used toward branding and continued outreach activities aimed at reducing energy consumption.

IMPACT ON OPERATING BUDGET. There is a projected \$45,000 savings in annual energy costs in FY12 (\$19,000 from lighting, \$26,000 from insulation and HVAC projects.) Reductions in maintenance costs are expected as well.

FY13-16 FUNDING. Resident Parking Sticker revenue is anticipated to fund \$500,000 toward the bike share program along with the continuation of outreach activities and energy efficiency improvements to City facilities.

Cambridge Vehicle Inventory

Status	Department	Description	Model	Make	Model Year	Year Purchased	Drive System	GVWR	MPG	Annual Miles Driven	Total Fuel Consumption	Usage/Function
EXEMPT	Animal Commission	Van	E250	Ford	2007	2007	4x2 Automatic - 4 speed - Ford	9000	N/A			24 Hours
EXEMPT	Animal Commission	Van	E150	FORD	1998	1998	4x2 Automatic - 4 speed - Ford	8600	13			24 Hours
EXEMPT	Cable	Van	E350	Ford	NULL	NULL	NULL NULL	9500	N/A			24 Hours
EXEMPT	Cambridge Police	Med.Duty Trk	F250	Ford	2010	2010	4X4 4 SPEED AUTO	9800	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2009	2009	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2009	2009	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2009	2009	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2009	2009	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2009	2009	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2009	2009	RWD 4 SPEED AUTO	N/A	19			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2008	2008	RWD 4 SPEED AUTO	N/A	18			24 HRS
EXEMPT	Cambridge Police	Van	E350	Ford	2006	2006	4X2 4 SPEED AUTO	9500	N/A			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2006	2006	RWD 4 SPEED AUTO	N/A	17			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2006	2006	RWD 4 SPEED AUTO	N/A	17			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2006	2006	RWD 4 SPEED AUTO	N/A	17			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2006	2006	RWD 4 SPEED AUTO	N/A	17			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2006	2006	RWD 4 SPEED AUTO	N/A	17			24 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2005	2005	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2005	2005	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2005	2005	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2005	2005	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2005	2005	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Motorcycle	RT1150RT	BMW	2005	2005	6 speed clutch	N/A	N/A			16 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2005	2005	RWD 4 SPEED AUTO	N/A	16			24 HRS
EXEMPT	Cambridge Police	Van	E350	Ford	2004	2004	4X2 4 SPEED AUTO	9500	N/A			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2004	2004	RWD 4 SPEED AUTO	N/A	16			8 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2004	2004	RWD 4 SPEED AUTO	N/A	16			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2004	2004	RWD 4 SPEED AUTO	N/A	16			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2004	2004	RWD 4 SPEED AUTO	N/A	16			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2004	2004	RWD 4 SPEED AUTO	N/A	16			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2004	2004	RWD 4 SPEED AUTO	N/A	16			24 HRS
EXEMPT	Cambridge Police	Heavy Duty Trk	E450	Ford	2003	2003	4X2 4 SPEED AUTO	13050	N/A			24 HRS

Cambridge Vehicle Inventory

Status	Department	Description	Model	Make	Model Year	Year Purchased	Drive System	GVWR	MPG	Annual Miles Driven	Total Fuel Consumption	Usage/Function
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2003	2003	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2003	2003	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2003	2003	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2003	2003	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2003	2003	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Med.Duty Trk	F250	Ford	2001	2001	4X2 4 SPEED AUTO	9800	N/A			24 HRS
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2000	2000	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2000	2000	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2000	2000	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Sedan	Crown Vic	Ford	2000	2000	RWD 4 SPEED AUTO	N/A	16			
EXEMPT	Cambridge Police	Van	E250	Ford	1991	1991	RWD 4 SPEED AUTO	9000	N/A			
	Cambridge Police	Sedan	Fusion	Ford	2010	2010	FWD 4 SPEED AUTO	N/A	25			24 HRS
	Cambridge Police	Hybrid	Fusion	Ford	2010	2010	AWD 4 SPEED AUTO	N/A	25			24 HRS
	Cambridge Police	Sedan	Fusion	Ford	2010	2010	AWD 4 SPEED AUTO	N/A	25			24 HRS
	Cambridge Police	Sedan	Fusion	Ford	2010	2010	FWD 4 SPEED AUTO	N/A	25			24 HRS
	Cambridge Police	SUV	Expedition	Ford	2010	2010	4X4 4 SPEED AUTO	N/A	14			24 HRS
	Cambridge Police	SUV	Pilot	Honda	2010	2010	AWD 4 SPEED AUTO	N/A	18			
	Cambridge Police	Hybrid	Camry	Toyota	2009	2009	4x2 4 SPEED AUTO	N/A	33			24 HRS
	Cambridge Police	Hybrid	Camry	Toyota	2009	2009	4x2 4 SPEED AUTO	N/A	33			24 HRS
	Cambridge Police	Hybrid	Camry	Toyota	2009	2009	4x2 4 SPEED AUTO	N/A	33			
	Cambridge Police	SUV	Highlander	Toyota	2008	2008	4x4 Automatic - 4 speed	6150	26			24 Hours
	Cambridge Police	Sedan	Camry	Toyota	2008	2008	4x2 Automatic - 4 speed	N/A	22			24 Hours
	Cambridge Police	Hybrid	Camry	Toyota	2008	2008	4x2 4 SPEED AUTO	N/A	33			24 HRS
	Cambridge Police	Hybrid	Camry	Toyota	2008	2008	4x2 4 SPEED AUTO	N/A	33			24 HRS
	Cambridge Police	Hybrid	Camry	Toyota	2008	2008	4x2 4 SPEED AUTO	N/A	33			24 HRS
	Cambridge Police	Hybrid	Camry	Toyota	2008	2008	4x2 4 SPEED AUTO	N/A	33			24 HRS
	Cambridge Police	Sedan	Camry	Toyota	2007	2007	4x2 4 SPEED AUTO	N/A	23			
	Cambridge Police	SUV	Expedition	Ford	2007	2007	4X4 4 SPEED AUTO	N/A	13			24 HRS
	Cambridge Police	SUV	Expedition	Ford	2007	2007	4X4 4 SPEED AUTO	N/A	13			24 HRS
	Cambridge Police	SUV	Explorer	Ford	2007	2007	4X4 4 SPEED AUTO	N/A	15			24 HRS
	Cambridge Police	Van	Sienna	Toyota	2007	2007	FWD 4 SPEED AUTO	N/A	18			
	Cambridge Police	Sedan	Ford 500	Ford	2006	2006	AWD 4 SPEED AUTO	N/A	21			24 HRS
	Cambridge Police	Sedan	Ford 500	Ford	2006	2006	AWD 4 SPEED AUTO	N/A	21			24 HRS
	Cambridge Police	Sedan	Ford 500	Ford	2006	2006	AWD 4 SPEED AUTO	N/A	21			24 HRS
	Cambridge Police	Sedan	Altima	Nissan	2005	2005	4x2 4 SPEED AUTO	N/A	28			
	Cambridge Police	SUV	EXPEDITION	Ford	2004	2004	4X4 4 SPEED AUTO	N/A	13			
	Cambridge Police	Sedan	Taurus	Ford	2000	2000	4x2 4 SPEED AUTO	N/A	20			
	Cambridge Police	SUV	EXPLORER	Ford	2000	2000	4x4 4 SPEED AUTO	N/A	15			
	Cambridge Police	Sedan	Sable	Mercury	1999	1999	FWD 4 SPEED AUTO	N/A	20			
	Cambridge Police	Van	Odyssey	Honda	1999	1999	FWD 4 SPEED AUTO	N/A	19			
	Cambridge Police	Sedan	Taurus	Ford	1998	1998	4x2 4 SPEED AUTO	N/A	19			
	City Manager	Hybrid	Escape	Ford	2011	2011	FWD Automatic -5 speed	N/A	32			24 Hours
	City Manager	Hybrid	Fusion Hybrid	Ford	2010	2010	FWD Automatic -4 speed	N/A	39			24 HRS
	Clerk	Passenger Vehicle	Crown Vic	FORD	1997	1997	4x2 Automatic - 4 speed - Ford	N/A	17			24 Hours
EXEMPT	Electrical	Heavy Duty Truck	4400	International Harvester	2006	2006	4x2 Automatic - 5 speed	30,000	N/A			
EXEMPT	Electrical	Heavy Duty Truck	4400	International Harvester	2005	2005	4x2 Automatic - 5 speed	30,000	N/A			
EXEMPT	Electrical	Light Duty Truck	F550	FORD	2004	2004	Automatic - 4 speed	19500	N/A			
EXEMPT	Electrical	Light Duty Truck	F550	Ford	2004	2004	Automatic - 4 speed	19500	N/A			
EXEMPT	Electrical	Heavy Duty Truck	4400	International Harvester	2003	2004	4x2 Automatic - 5 speed	30,000	N/A			
	Electrical	Light Duty Truck	Colorado	Chevrolet	2011	2011	4x4 Automatic - 4 speed	N/A	18			
	Electrical	Van	Transit Connect	Ford	2010	2010	4x2 Automatic - 4 speed	N/A	23			
	Electrical	Light Duty Truck	Escape	Ford	2009	2009	Automatic - 4 speed	N/A	21			
	Electrical	Light Duty Truck	Colorado	Chevrolet	2008	2008	Automatic - 4 speed	5150	18			
	Electrical	Van	Uplander	Chevrolet	2008	2007	4x2 Automatic - 4 speed	N/A	19			
	Electrical	Van	Astro	Chevrolet	2002	2002	4x2 Automatic - 4 speed	N/A	14			
	Electrical	Light Duty Truck	Ranger 4WD	FORD	2000	2000	4x4 Automatic - 4 speed	4200	15			

Cambridge Vehicle Inventory

Status	Department	Description	Model	Make	Model Year	Year Purchased	Drive System	GVWR	MPG	Annual Miles Driven	Total Fuel Consumption	Usage/Function
EXEMPT	Fire	mid duty truck	F-350	Ford	2010	2010	4X4 Auto	10,000	N/A			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2010	2010	4X2 Auto	N/A	16			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	2010	2010	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Dash	Pierce	2009	2009	4X2 Auto	60,000	N/A			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2008	2008	4X2 Auto	N/A	18			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	2007	2007	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	2007	2007	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	mid duty truck	E-350	Ford	2007	2007	4X2 Auto	10,000	N/A			8 hours
EXEMPT	Fire	Passenger	Crown Vic	Ford	2007	2007	4X2 Auto	N/A	18			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2006	2006	4X2 Auto	N/A	18			24 hour
EXEMPT	Fire	mid duty truck	E-350	Ford	2005	2005	4X2 Auto	10,000	N/A			24 hour
EXEMPT	Fire	mid duty truck	E-350	Ford	2005	2005	4X2 Auto	10,000	N/A			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2005	2005	4X2 Auto	N/A	16			8 hours
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	2004	2004	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Passenger	Tahoe/Rescue	Chevy	2004	2004	4X4 Auto	7300	14			24 hour
EXEMPT	Fire	Passenger	Tahoe/Rescue	Chevy	2004	2004	4X4 Auto	7300	14			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2004	2004	4X2 Auto	N/A	16			24 hour
EXEMPT	Fire	Heavy Duty Truck	Rescue	Spartan	2003	2003	4X2 Auto	26,400	N/A			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2003	2003	4X2 Auto	N/A	16			24 hour
EXEMPT	Fire	Passenger	Crown Vic	Ford	2003	2003	4X2 Auto	N/A	16			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	2002	2002	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	2002	2002	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	mid duty truck	Sprinter	M-B	2002	2002	4X2 Auto	9900	N/A			8 hours
EXEMPT	Fire	Passenger	Crown Vic	Ford	2002	2002	4X2 Auto	N/A	16			24 hour
EXEMPT	Fire	Heavy Duty Truck	Dash	Pierce	2001	2001	4X2 Auto	70,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Dash	Pierce	2001	2001	4X2 Auto	60,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	1999	1999	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Tactical Rescue	International	1999	1999	4X2 Auto	33,000	N/A			24 hour
EXEMPT	Fire	mid duty truck	F-350	Ford	1999	1999	4X4 Auto	10,000	N/A			24 hour
EXEMPT	Fire	Passenger	Tahoe/Rescue	Chevy	1999	1999	4X4 Auto	7300	13			8 hours
EXEMPT	Fire	Passenger	Crown Vic	Ford	1999	1999	4X2 Auto	N/A	16			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	1998	1998	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Rescue	Freightliner	1996	1996	4X2 Auto	20,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	1996	1996	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Rescue	Freightliner	1995	1995	4X2 Auto	20,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	1995	1995	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Dash	Pierce	1994	1994	4X2 Auto	60,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Haz-Mat	Ford	1994	1994	4X2 Auto	33,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Dash	Pierce	1992	1992	4X2 Auto	60,000	N/A			24 hour
EXEMPT	Fire	Heavy Duty Truck	Saber	Pierce	1971	1971	4X2 Auto	40,000	N/A			24 hour
EXEMPT	Human Services	Light Duty Van	2500 Express	Chevrolet	2009	2009	4x2 NULL	8600	14			NULL
EXEMPT	Human Services	Light Duty Truck	CK3500	Chevrolet	2006	2006	4x4 Automatic - 4 speed - Ford	9900	N/A			8 Hours
EXEMPT	Human Services	Van	G2500 (CG23405)	Chevrolet	2006	2006	4x2 Automatic - 4 speed	8600	N/A			8 Hours
EXEMPT	Human Services	Van	E3500	Chevrolet	2003	2003	4x2 Automatic - 4 speed	9600	N/A			8 Hours
EXEMPT	Human Services	Van	E3500	Chevrolet	2003	2003	4x2 Automatic - 4 speed	9600	N/A			8 Hours
EXEMPT	Human Services	Light Duty Truck	CK3500	Chevrolet	1998	1998	4x4 Automatic - 4 speed	11400	N/A			8 Hours
EXEMPT	Human Services	Van	E350	Ford	1993	1993	4x2 Automatic - 4 speed - Ford	9500	N/A			8 Hours
EXEMPT	Human Services	Light Duty Truck	CT2500	GMC	1991	1991	4x4 Automatic - 4 speed	8600	N/A			8 Hours
	Libraries	Van	Transit Connect	Ford	2010	2010	4x2 Automatic - 4 speed		23			
	Mayor	Hybrid	Fusion Hybrid	Ford	2010	2010	AWD 6 SPEED AUTO	N/A	39			24 HRS
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	M2106V	Freightliner	2012	2011	4x2 Automatic - 4 speed	40,000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	F350	Ford	2011	2011	4x4 Automatic - 5 speed - Ford	10400	N/A			8 Hours

Cambridge Vehicle Inventory

Status	Department	Description	Model	Make	Model Year	Year Purchased	Drive System	GVWR	MPG	Annual Miles Driven	Total Fuel Consumption	Usage/Function
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	M2-106	Freightliner	2011	2011	4x4 Automatic - 4 speed	35000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	F350	Ford	2010	2010	4x4 Automatic - 5 speed - Ford	13000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	7400SFA	International Harvester	2010	2010	4x2 Automatic - 5 speed	35,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	7400SFA	International Harvester	2010	2010	4x2 Automatic - 5 speed	35000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Mid Duty Truck	F550	Ford	2010	2010	4x4 Automatic - 5 speed - Ford	19500	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	M2-106V	Freightliner	2010	2010	4x4 Automatic - 4 speed	37600	N/A			8 Hours
EXEMPT	Public Works - Building Maint	Light Duty Truck	F350XL	Ford	2009	2009	4x4 Automatic - 5 speed - Ford	10,400	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Mid Duty Truck	F350	Ford	2009	2009	4x4 Automatic - 5 speed - Ford	13,000	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	7400	International Harvester	2009	2009	4x2 Automatic - 5 speed	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	700SER	International Harvester	2009	2009	4x2 Automatic - 5 speed	35000	N/A			8 Hours
EXEMPT	Public Works - Cemetery	Mid Duty Truck	F350	Ford	2008	2008	4x4 Automatic - 4 speed - Ford	13000	N/A			8 Hours
EXEMPT	Public Works - Off Hours	Heavy Duty Truck	4300	International Harvester	2008	2008	4x2 Automatic - 5 speed	33000	N/A			24 Hours
EXEMPT	Public Works - Park Maint	Heavy Duty Truck	700SER	International Harvester	2008	2008	4x2 Automatic - 5 speed	35000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Mid Duty Truck	F350 Super Duty	Ford	2008	2008	4x4 Automatic - 4 speed - Ford	12,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Mid Duty Truck	F350	Ford	2008	2008	4x4 Automatic - 5 speed - Ford	10,100	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2007	2007	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	4300	International Harvester	2007	2007	4x2 Automatic - 5 speed	33,000	N/A			24 Hours
EXEMPT	Public Works - Sewer Maint	Heavy Duty Truck	7300	International Harvester	2007	2007	4x2 Automatic - 5 speed	35,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2007	2007	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Building Maint	Van	E3500	Chevrolet	2006	2006	4x2 Automatic - 4 speed - Ford	9,600	N/A			8 Hours
EXEMPT	Public Works - Building Ops	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2006	2006	4x4 Automatic - 4 speed - Ford	9200	N/A			8 Hours
EXEMPT	Public Works - Cemetery	Light Duty Truck	Dump	Chevrolet	2006	2006	4x4 Automatic - 4 speed	12,000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2006	2006	4x4 Automatic - 4 speed - Ford	9200	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	7400	International Harvester	2006	2006	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Light Duty Truck	CK3500	Chevrolet	2006	2006	4x4 Automatic - 4 speed - Ford	9200	N/A			8 Hours
EXEMPT	Public Works - Off Hours	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2005	2005	4x2 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Heavy Duty Truck	7400	International Harvester	2005	2005	4x2 Automatic - 5 speed - Ford	40000	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	7400	International Harvester	2005	2005	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Mid Duty Truck	K3500	Chevrolet	2005	2005	4x4 Automatic - 4 speed	12000	N/A			8 Hours
EXEMPT	Public Works - Building Ops	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2004	2004	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Off Hours	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2004	2004	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	CK3500 SILVERADO	Chevrolet	2004	2004	4x4 Automatic - 4 speed	11400	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	7400	International Harvester	2004	2004	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Sewer Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2004	2004	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Sewer Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2004	2004	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	7400	International Harvester	2004	2004	4x2 Automatic - 5 speed	29,500	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2004	2004	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Building Maint	Van	E3500	Chevrolet	2003	2003	4x2 Automatic - 3 speed	9600	N/A			8 Hours
EXEMPT	Public Works - Cemetery	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2003	2003	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Off Hours	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2003	2003	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Heavy Duty Truck	4400	International Harvester	2003	2003	4x2 Automatic - 5 speed - Ford	30,000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2003	2003	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2003	2003	4x4 Auto	9200	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	7400	International Harvester	2003	2003	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Heavy Duty Truck	7400	International Harvester	2003	2003	4x2 Automatic - 5 speed	40000	N/A			8 Hours
EXEMPT	Public Works - Building Ops	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2002	2002	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2002	2002	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	4900	International Harvester	2002	2002	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Heavy Duty Truck	4900	International Harvester	2002	2002	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	4900	International Harvester	2002	2002	4x2 Automatic - 5 speed	35,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2002	2002	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Building Maint	Van	E3500	Chevrolet	2001	2001	4x2 Automatic - 3 speed	9600	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2001	2001	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2001	2001	4x4 Automatic - 4 speed	9200	N/A			24 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Sewer Maint	Heavy Duty Truck	2654	International Harvester	2001	2001	4x2 Automatic - 5 speed	50,000	N/A			8 Hours
EXEMPT	Public Works - Sewer Maint	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed	35,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2001	2001	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Mid Duty Truck	CK3500 4WD	Chevrolet	2001	2001	4x4 Automatic - 4 speed	12000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed - Ford	35000	N/A			8 Hours

Cambridge Vehicle Inventory

Status	Department	Description	Model	Make	Model Year	Year Purchased	Drive System	GVWR	MPG	Annual Miles Driven	Total Fuel Consumption	Usage/Function
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed - Ford	35000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	4900	International Harvester	2001	2001	4x2 Automatic - 5 speed - Ford	35,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2001	2001	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Cemetery	Mid Duty Truck	CK3500 4WD	Chevrolet	1997	1997	4x4 Automatic - 4 speed - Ford	10001	N/A			8 Hours
EXEMPT	Public Works - Sewer Maint	Light Duty Truck	CK3500 4WD	Chevrolet	1997	1997	4x4 Automatic - 4 speed	9200	N/A			8 Hours
EXEMPT	Public Works - Sewer Maint	Heavy Duty Truck	F800	FORD	1996	1996	4x2 Automatic - 4 speed - Ford	28,000	N/A			8 Hours
EXEMPT	Public Works - Vehicle Maint	Light Duty Truck	CK3500 4WD	Chevrolet	1996	1996	4x4 Automatic - 4 speed	11400	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Mid Duty Truck	CK3500 4WD	Chevrolet	1994	1994	4x4 Automatic - 3 speed - Ford	10001	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Mid Duty Truck	7000	GMC	1994	1994	4x2 Automatic - 5 speed - Ford	25,000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Heavy Duty Truck	4900	International Harvester	1993	1993	4x2 Automatic - 5 speed - Ford	35,000	N/A			8 Hours
EXEMPT	Public Works - Cemetery	Mid Duty Truck	4600	International Harvester	1991	1991	4x2 Allison	25000	N/A			8 Hours
EXEMPT	Public Works - Sanitation	Heavy Duty Truck	4900	International Harvester	1991	1991	4x2 Automatic - 5 speed - Ford	40,000	N/A			8 Hours
EXEMPT	Public Works - Street Clean	Mid Duty Truck	4600	International Harvester	1990	1990	4x2 Automatic - 5 speed	25000	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Heavy Duty Truck	S 1954	International Harvester	1989	1989	4x2 Automatic - 5 speed - Ford	29850	N/A			8 Hours
EXEMPT	Public Works - Park Maint	Heavy Duty Truck	S 1900	International Harvester	1988	1988	4x2 Automatic - 5 speed - Ford	30,000	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	S 1954	International Harvester	1988	1988	4x2 Automatic - 5 speed -Allison	29,500	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	S 1954	IH	1987	1987	4x2 NULL	29,500	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Heavy Duty Truck	S 1954	International Harvester	1986	1986	4x2 NULL	29,500	N/A			8 Hours
EXEMPT	Public Works - Street Maint	Mid Duty Truck	S 1654	International Harvester	1986	1986	4x2 Automatic - 4 speed	25000	N/A			8 Hours
EXEMPT	Public Works - Vehicle Maint	Mid Duty Truck	Gruman Olsen	Chevrolet	1977	1977	6x2 Standard - 4 speed - GMC	14000	N/A			8 Hours
	Public Works - Admin	Hybrid	Civic	Honda	2008	2008	4x2 Automatic - 4 speed	N/A	42			24 Hours
	Public Works - Engineering	Hybrid	Camry	Toyota	2008	2008	4x2 Automatic - 4 speed	N/A	33			24 Hours
	Public Works - Street Maint	Hybrid	Escape Hybrid	Ford	2006	2006	AWD Automatic - 4 speed - Ford	N/A	29			24 Hours
	Public Works - Vehicle Maint	Passenger Vehicle	Crown Vic	Ford	2004	2004	4x2 Automatic - 4 speed - Ford	N/A	16			24 Hours
	Public Works - Building Ops	Passenger Vehicle	Crown Vic	FORD	2003	2003	4x2 Automatic - 4 speed - Ford	N/A	16			24 Hours
	Public Works - Admin	Passenger Vehicle	Taurus	FORD	2002	2002	4x2 Automatic - 4 speed - Ford	N/A	20			24 Hours
	Public Works - Building Admin	Passenger Vehicle	Taurus	FORD	2002	2002	4x2 Automatic - 4 speed	N/A	20			24 Hours
	Public Works - Sanitation	Light Duty Truck	S10 2WD	Chevrolet	2002	2002	4x2 Automatic - 4 speed	4200	17			8 Hours
	Public Works - Sanitation	Light Duty Truck	S10 4-WD CT10653 Extended Cab	Chevrolet	2002	2002	4x2 Automatic - 4 speed	4200	15			24 Hours
	Public Works - Street Clean	Light Duty Truck	S10 4-WD CT10653 Extended Cab	Chevrolet	2002	2002	4x4 Automatic - 4 speed	4200	15			24 Hours
	Public Works - Recycling	Light Duty Truck	S10 2WD	Chevrolet	2001	2001	4x2 Automatic - 4 speed	4200	17			8 Hours
	Public Works - Recycling	Van	Astro	Chevrolet	2001	2001	4x2 Automatic - 4 speed	N/A	15			24 Hours
	Public Works - Building Maint	Passenger Vehicle	Lumina	Chevrolet	2000	2000	4x2 Automatic - 4 speed	N/A	18			24 Hours
	Public Works - Cemetery	Passenger Vehicle	Crown Vic	Ford	2000	2000	4x2 Automatic - 4 speed - Ford	N/A	16			24 Hours
	Public Works - Park Maint	Light Duty Truck	S10 2WD	Chevrolet	2000	2000	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Recycling	Light Duty Truck	S10 2WD	Chevrolet	2000	2000	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Sanitation	Passenger Vehicle	Lumina	Chevrolet	2000	2000	4x2 Automatic - 4 speed	N/A	21			24 Hours
	Public Works - Sewer Maint	Light Duty Truck	S10 2WD	Chevrolet	2000	2000	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Sewer Maint	Passenger Vehicle	Lumina	Chevrolet	2000	2000	4x2 Automatic - 4 speed	N/A	21			24 Hours
	Public Works - Street Maint	Light Duty Truck	S10 2WD	Chevrolet	2000	2000	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Street Maint	Light Duty Truck	S10 2WD	Chevrolet	2000	2000	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Park Maint	Light Duty Truck	S10 2WD	Chevrolet	1999	1999	4x2 Automatic	4200	19			24 Hours
	Public Works - Park Maint	Light Duty Truck	S10 2WD	Chevrolet	1999	1999	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Park Maint	Light Duty Truck	S10 2WD	Chevrolet	1999	1999	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Park Maint	Passenger Vehicle	Lumina	Chevrolet	1999	1999	4x2 Automatic - 4 speed	N/A	21			24 Hours
	Public Works - Sewer Maint	Light Duty Truck	S10 2WD	Chevrolet	1999	1999	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Building Maint	Light Duty Truck	S10 2WD	Chevrolet	1998	1998	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Street Maint	Light Duty Truck	S10 2WD	Chevrolet	1998	1998	4x2 Automatic - 4 speed	4200	19			24 Hours
	Public Works - Sewer Maint	Passenger Vehicle	Lumina	Chevrolet	1997	1997	4x2 Automatic - 4 speed	N/A	21			24 Hours
	Public Works - Park Maint	Light Duty Truck	S10 2WD	Chevrolet	1996	1996	4x2 Automatic - 4 speed	4200	20			24 Hours
	Public Works - Park Maint	Light Duty Truck	S10 4WD	Chevrolet	1996	1996	4x4 Automatic - 4 speed	4200	17			8 Hours
	Public Works - Street Clean	Light Duty Truck	S10 2WD	Chevrolet	1996	1996	4x2 Automatic - 4 speed	4200	20			8 Hours
	Public Works - Street Clean	Light Duty Truck	Ranger	FORD	1994	1994	4x2 Automatic - 4 speed - Ford	4200	20			8 Hours
EXEMPT	School-RSTA	Passenger Vehicle	2500 Express	Chevy	2007	2007	4x2 Automatic	8600	N/A	2000		8 hrs
EXEMPT	School-Maintenance	Light Duty Truck	F250	Ford	2006	2006	Automatic	9800	N/A	4000		24 hrs
EXEMPT	School-Maintenance	Passenger Vehicle	Econovan 250	Ford	2006	2006	Automatic	9000	N/A	8000		8 hrs
EXEMPT	School-Maintenance	Passenger Vehicle	Econovan 250	Ford	2006	2006	Automatic	9000	N/A	5000		24 hrs
EXEMPT	School-Food Services	Passenger Vehicle	Econovan 250	Ford	2002	2002	Automatic	9000	N/A	8000		4 hrs
EXEMPT	School-Maintenance	Passenger Vehicle	Econovan 250	Ford	2002	2002	Automatic	9000	N/A	5000		8 Hrs
EXEMPT	School-Maintenance	Passenger Vehicle	Econovan 250	Ford	2002	2002	Automatic	9000	N/A	8000		24 hrs

Cambridge Vehicle Inventory

Status	Department	Description	Model	Make	Model Year	Year Purchased	Drive System	GVWR	MPG	Annual Miles Driven	Total Fuel Consumption	Usage/Function
EXEMPT	School-Maintenance	Passenger Vehicle	Econovan 250	Ford	1999	1999	Automatic	9000	N/A	9000		24 hrs
EXEMPT	School-Maintenance	Passenger Vehicle	Econovan 150	Ford	1998	1998	Automatic	8600	N/A	7000		8 hrs
	School- Superintendent	Hybrid	Prius	Toyota	2010	2010	4x2 Automatic	N/A	50	5000		24 hrs
	School-Maintenance	Hybrid	Escape Hybrid	Ford	2009	2009	Automatic	N/A	28	30000		8 hrs
	School-Maintenance	Hybrid	Escape Hybrid	Ford	2008	2008	Automatic	N/A	28	8000		8 hrs
	School-Maintenance	Passenger Vehicle	Freestar	Ford	2004	2004	Automatic	N/A	18			8 hrs
	School-RSTA	Passenger Vehicle	Taurus	Ford	2002	2002	4x2 Automatic	N/A	21	7500		8 hrs
	School-RSTA	Passenger Vehicle	Taurus	Ford	1999	1999	4x2 Automatic	N/A	13	9000		8 hrs
	School-RSTA	Passenger Vehicle	Camry	Toyota	1994	1994	Automatic	N/A	19	9000		8 hrs
EXEMPT	Traffic & Parking	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2010	2010	4x4 Automatic - 4 speed	9200	N/A			
EXEMPT	Traffic & Parking	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2010	2010	4x4 Automatic - 4 speed	9200	N/A			
EXEMPT	Traffic & Parking	Light Duty Truck	Silverado 2500 2wd	Chevrolet	2006	2006	4x2 Automatic - 4 speed	9200	N/A			
EXEMPT	Traffic & Parking	Light Duty Truck	CK3500	Chevrolet	2005	2005	4x4 Automatic - 4 speed	11400	N/A			
EXEMPT	Traffic & Parking	Light Duty Truck	Silverado 2500 4wd	Chevrolet	2005	2005	4x4 Automatic - 4 speed	9200	N/A			
EXEMPT	Traffic & Parking	Van	Express	Chevrolet	2011	2011	4x2 Automatic - 4 speed	9600	N/A			
EXEMPT	Traffic & Parking	Light Duty Truck	CK3500 SILVERADO	Chevrolet	2003	2003	4x4 Automatic - 4 speed	10001	N/A			
	Traffic & Parking	Hybrid	Prius	Toyota	2011	2011	4x2 Automatic - 4 speed	N/A	50			
	Traffic & Parking	SUV	Escape	Ford	2011	2011	4x4 Automatic - 4 speed					
	Traffic & Parking	Hybrid	Prius	Toyota	2008	2008	4x2 Automatic - 4 speed	N/A	46			
	Traffic & Parking	Light Duty Truck	Colorado	Chevrolet	2008	2008	4x4 Automatic - 4 speed	5150	18			
	Traffic & Parking	Light Duty Truck	Escape	Ford	2008	2008	4x4 Automatic - 4 speed	N/A	20			
	Traffic & Parking	Light Duty Truck	Colorado	Chevrolet	2007	2007	4x4 Automatic - 4 speed	5150	18			
	Traffic & Parking	Light Duty Truck	Colorado	Chevrolet	2006	2006	4x4 Automatic - 4 speed	5150	16			
	Traffic & Parking	SUV	Trail Blazer	Chevrolet	2005	2005	4x4 Automatic - 4 speed	N/A	16			
	Traffic & Parking	Light Duty Truck	S10 2WD	Chevrolet	2003	2003	4x2 Automatic - 4 speed	4200	19			
	Traffic & Parking	Light Duty Truck	S10 2WD	Chevrolet	2002	2002	4x2 Automatic - 4 speed	4200	17			
	Traffic & Parking	Light Duty Truck	S10 2WD	Chevrolet	2002	2002	4x2 Automatic - 4 speed	4200	17			
EXEMPT	Water	Light Duty Truck	Aeromar	Freightliner	2011	2011	2X4 AUTOMATIC	9200	N/A			8-Hours
EXEMPT	Water	Light Duty Truck	F350	Ford	2009	2009	4X4 AUTOMATIC	10,000	N/A			8-Hours
EXEMPT	Water	Light Duty Truck	F350	Ford	2008	2008	4x2 Automatic - 4 speed	10,000	N/A			8-Hours
EXEMPT	Water	Heavy Duty Truck	700SER	International Harvester	2007	2007	4x2 AUTOMATIC-5 SPEED	35000	N/A			8-Hours
EXEMPT	Water	Light Duty Truck	C2500	Chevrolet	2007	2007	4x2 Automatic - 4 speed	9200	N/A			8-Hours
EXEMPT	Water	Light Duty Truck	E150 VAN	Ford	2006	2006	2X4 AUTOMATIC	8600	13			8HRS
EXEMPT	Water	Light Duty Truck	F350	Ford	2006	2006	4X4 AUTOMATIC	10,000	N/A			8HOURS
EXEMPT	Water	Light Duty Truck	E150 VAN	Ford	2004	2004	2X4 AUTOMATIC	8600	13			8HRS
EXEMPT	Water	Light Duty Truck	F250	Ford	2004	2004	2X4 AUTOMATIC	9800	N/A			8HRS
EXEMPT	Water	Light Duty Truck	F250	Ford	2004	2004	2X4 Automatic - 4 speed - Ford	9800	N/A			8-Hours
EXEMPT	Water	Light Duty Truck	C2500	Chevrolet	2003	2003	4X4 AUTOMATIC	9200	N/A			8 HRS
EXEMPT	Water	Light Duty Truck	C2500	Chevrolet	2001	2001	2X4 AUTOMATIC	9200	N/A			8-Hours
EXEMPT	Water	Light Duty Truck	Silverado 2500 2wd	Chevrolet	2001	2001	2X4 AUTOMATIC	9200	N/A			8-Hours
EXEMPT	Water	Heavy Duty Truck	400SER	International Harvester	1997	1997	4x2 NULL	40000	N/A			NULL
EXEMPT	Water	Heavy Duty Truck	400SER	International Harvester	1995	1995	4x2 Automatic - 5 speed	40000	N/A			8-Hours
	Water	Hybrid	Fusion	Ford	2011	2011	4x2 HYBRID	4200	40			24 Hours
	Water	Hybrid	Prius	Toyota	2010	2010	2X4 HYBRID	N/A	50			8HRS
	Water	Hybrid	Prius	Toyota	2010	2010	2X4 HYBRID	N/A	50			24HRS
	Water	Hybrid	Prius	Toyota	2009	2009	4x2 HYBRID	N/A	46			8-Hours
	Water	Light Duty Truck	F150	Ford	2008	2008	4X4 Automatic - 4 speed - Ford	8200	14			24 Hours
	Water	Hybrid	Camry	Toyota	2007	2007	4x2 HYBRID	N/A	33			24HOURS
	Water	Hybrid	Camry	Toyota	2007	2007	4x2 HYBRID	N/A	33			24 Hours
	Water	Light Duty Truck	F150	Ford	2005	2005	4X4 AUTOMATIC	8200	14			24HOURS
	Water	Light Duty Truck	F150	Ford	2004	2004	4X4 AUTOMATIC	8200	15			8 HRS
	Water	Light Duty Truck	Ranger	Ford	2004	2004	4x2 AUTOMATIC	4200	21			8HRS
	Water	Light Duty Truck	S10 4WD	Chevrolet	2002	2002	4X4 Automatic - 4 speed	4200	17			8-Hours
EXEMPT	Weights & Measures	Light Duty Truck	CTK2500	GMC	2000	2000	4x4 Automatic - 4 speed	8600	N/A			NULL

CITY OF CAMBRIDGE
GREEN FLEET POLICY

Goals

Through the implementation of this policy, the City will work to achieve the following goals:

- Increase the average fuel economy of the City fleet;
- Minimize vehicle miles traveled to the extent operationally feasible
- Minimize greenhouse gases and conventional air pollution;
- Reduce vehicle size when appropriate;
- Incorporate alternative fuel vehicles into the City fleet when feasible;
- Reduce the costs of operating and maintaining the fleet;
- Eliminate vehicles from the City fleet that are unnecessary or not cost-effective.

Applicability

This policy applies to all departments of the City of Cambridge.

The Green Fleet Policy

- A. All departments shall purchase only fuel efficient vehicles for municipal use whenever such vehicles are commercially available and practicable.
- B. The City of Cambridge shall operate and maintain its vehicles in a manner that is energy efficient and minimizes emissions of conventional air pollutants and greenhouse gases.
- C. The City of Cambridge shall incorporate alternative fuel vehicles and hybrid vehicles into the municipal vehicle fleet when feasible taking into account acquisition, operating, and maintenance costs, appropriateness for the task, safety, and reliability.

Green Fleet Policy Strategies

In order to accomplish the goals stated in the section above, the City of Cambridge shall modify procurement procedures, implement policies, conduct reviews, and take other actions as follows:

- A. A Green Fleet Committee will be appointed by the City Manager to support the implementation of this policy.
- B. Each department with vehicles shall maintain a comprehensive vehicle inventory. All departments with vehicles shall submit their vehicle inventory to the Department of Public Works in each fiscal year by March 31 of each year. The Public Works Department shall compile the vehicle inventory annually and distribute the comprehensive inventory to all relevant departments by May 31 of each year. The inventory shall be maintained in a manner that is consistent with the Massachusetts Green Communities guidelines. The Department of Public Works may advise other departments as to the fields of data that should be maintained in the inventory and otherwise coordinate the maintenance and compilation of department vehicle inventories.
- C. Vehicle Acquisition Procedure
 - 1. All departments shall obtain the approval of the City Manager before submitting a vehicle requisition to the Purchasing Department and to the Green Fleet Committee.

2. Prior to submitting a vehicle requisition to the Purchasing Department, the department seeking the vehicle shall submit a completed Green Fleet review form to the Green Fleet Committee. The Committee may request additional information to assist in its review. The Committee shall submit a written recommendation to the requesting department and the Purchasing Agent upon completion of its review.
 3. The requested vehicles shall comply with the Massachusetts Green Communities guidelines on fuel efficiency, unless they fall within the exempted category.
- D. All City vehicles shall comply with the state anti-idling law, MGL Ch.90, s.16A, which limits idling to no more than 5 minutes, except in specified cases.
- E. Maintain vehicles at optimal efficiency by reviewing current maintenance schedule for all fleet vehicles and increasing maintenance wherever cost-effective benefits will accrue as a result.

Issued by:

Robert W. Healy, City Manager

Date issued: May 13, 2010

Construction (Energy Code) FY11

Permit Type	Number	Street Name	Issue Date	CO	HERS Rating	Type of Solution
Addition to Residential Building	89	Belmont Street	6/27/2011			Prescriptive
Addition to Residential Building	222	Brattle Street	4/4/2011			Prescriptive
Addition to Residential Building	15	Chalk Street	11/3/2010			Prescriptive
Addition to Residential Building	336	Concord Avenue	9/3/2010			Prescriptive
Addition to Residential Building	21	Cornelius Way	6/14/2011			Prescriptive
Addition to Residential Building	12	Crescent Street	3/23/2011			Prescriptive
Addition to Residential Building	24	Decatur Street	5/17/2011			Prescriptive
Addition to Residential Building	151	Dudley Street	8/20/2010			Prescriptive
Addition to Residential Building	25	First Street	6/10/2011			Prescriptive
Addition to Residential Building	10	Gerry Street	12/17/2010			Prescriptive
Addition to Residential Building	84	Grozier Road	10/27/2010			Prescriptive
Addition to Residential Building	259	Harvard Street	8/21/2010			Prescriptive
Addition to Residential Building	95	Irving street	7/6/2010			Prescriptive
Addition to Residential Building	24	Russell Street	6/9/2011			Prescriptive
Addition to Residential Building	23	St. Mary Road	6/2/2011			Prescriptive
Addition to Residential Building	16	Stearns Street	9/21/2010			Prescriptive
Addition to Residential Building	30	Tierney Street	10/28/2010			Prescriptive
Major Alteration to Residential Building	13-15	Avon Street	8/17/2010			Prescriptive
Major Alteration to Residential Building	157	Brattle Street	9/3/2010			Prescriptive
Major Alteration to Residential Building	27	Cedar Street	3/14/2011			Prescriptive
Major Alteration to Residential Building	5	Chalk Street	3/29/2011			Prescriptive
Major Alteration to Residential Building	21	Decatur Street	1/21/2011			Prescriptive
Major Alteration to Residential Building	25	Eighth Street	10/5/2010			Prescriptive
Major Alteration to Residential Building	80	Gerry's Landing	11/26/2010			Prescriptive
Major Alteration to Residential Building	45	Highland Street	10/6/2010			Prescriptive
Major Alteration to Residential Building	135	Magazine Street	1/25/2011			Prescriptive
Major Alteration to Residential Building	20-22	Peters Street	11/1/2010			Prescriptive
Major Alteration to Residential Building	1-3	Sedgwick Road	11/5/2010			Prescriptive
Major Alteration to Residential Building	30	Upton Street	11/15/2010			Prescriptive

Construction (Energy Code) FY11

Permit Type	Number	Street Name	Issue Date	CO	HERS Rating	Type of Solution
New Residential	117-A	Charles Street	5/20/2011			
New Residential	117-B	Charles Street	5/20/2011			
New Residential	117-C	Charles Street	5/24/2011			
New Residential	117-D	Charles Street	5/24/2011			
New Residential	46	Concord Avenue	1/2/2011			
New Residential	136	Fayerweather Street	8/25/2010			
New Residential	29	Field Street	11/3/2010	Yes	60	
New Residential	172	Franklin Street	4/12/2011			
New Residential	174	Franklin Street	4/12/2011			
New Residential	178	Franklin Street	4/12/2011			
New Residential	76-A	Harvey Street	9/22/2010	Yes	61	
New Residential	76-B	Harvey Street	9/22/2010	Yes	61	
New Residential	71	Normandy Avenue	7/8/2011			
New Residential	181-1	Walden Street	8/26/2010			
New Residential	181-2	Walden Street	8/26/2010			
New Residential	181-3A	Walden Street	8/26/2010			
New Residential	181-3B	Walden street	8/13/2010			
New Residential	181-4A	Walden Street	8/26/2010			
New Residential	181-4B	Walden Street	8/13/2010			
New Residential	181-5	Walden Street	8/13/2010			
New Residential	181-6	Walden Street	8/13/2010			
Retrofit	18	Ash Street	11/16/2010			Prescriptive
Retrofit	157	Brattle Street	9/30/2010			Prescriptive
Retrofit	7	Broadway Terrace	9/21/2010			Prescriptive
Retrofit	150	Erie Street	9/10/2010			Prescriptive
Retrofit	170	Gore Street	5/18/2011			Prescriptive
Retrofit	35	Gorham Street	10/29/2010			Prescriptive
Retrofit	11	Hemlock Road	11/3/2010			Prescriptive

Construction (Energy Code) FY11

Permit Type	Number	Street Name	Issue Date	CO	HERS Rating	Type of Solution
Retrofit	9	Miller Avenue	6/6/2011			Prescriptive
Retrofit	81	Pemberton Street	9/8/2010			Prescriptive
Retrofit	4-6	Washington Avenue	9/3/2010			Prescriptive
Commerical						
New Residential/4 Story	7	Cameron Avenue	12/14/2010			Modeling
New Residential/Commercial/5 Story	1077	Massachusetts Avenue	4/4/2011			Modeling
New Residential/4 Story	625	Putnam Avenue	1/4/2011			Modeling