

**TOWN OF CONCORD  
SELECT BOARD  
AGENDA  
February 6, 2017**

**7PM – Select Board Room – Town House**

1.	Call to Order
2.	<p>Consent Agenda:</p> <ul style="list-style-type: none"> <li>• Town Accountant's Warrants</li> <li>• Minutes: 11/28, 12/12</li> <li>• Gift Acceptance</li> </ul> <p>Concord Carlisle Community Chest \$8451 to Community Services Coordinator Gift Account  Concord Carlisle Community Chest \$6750 to Youth Services Coordinator Gift Account  Concord Carlisle Community Chest \$8500 to Council on Aging Gift Accounts  Concord Parents League \$1000 to the Recreation Summer Camp Scholarship Fund</p> <ul style="list-style-type: none"> <li>• One Day Special Licenses See attached list</li> <li>• Sunday Entertainment Licenses Emerson Umbrella: 2/26, 3/5, 3/12, 3/19, 3/26, 3PM-6PM, Theater Performance Concord Country Club: 6/25, 1PM-6PM, Golf Tournament; 9/10, 1PM-5PM, Golf Tournament</li> <li>• Extension of Hours 80 Thoreau, 2/14, 5PM-11:30PM with last call at 11:15PM</li> </ul>
3.	Executive Session Minutes – 1/23
4.	Town Manager's Report
5.	7:10 PM Public Hearing: Comcast of Massachusetts III, Inc. for Pole Petition 269 Monument Street
6.	Rideout Park Conservation Restriction
7.	Emerson Umbrella Update – Jerry Wedge
8.	Receive final report from Energy Future Task Force
9.	Proposed Town operation of PEG access television
10.	Review Financial Policies
11.	Public Comments
12.	Committee Liaison Reports
13.	Miscellaneous/Correspondence
14.	Committee Nominations: Maryann Lippert of 19 Cranberry Lane to the Conservation Restriction Stewardship Committee for term to expire 5/31/2017; Neil Ryder of 96 The Valley Road to the Conservation Restriction Stewardship Committee for term to expire 5/31/2019
15.	Adjournment

**PENDING**

Monday	February 20	All Day	Presidents' Day	Town Offices Closed
Monday	February 27	6:30PM	Select Board Meeting	Town House
Monday	February 27	7 PM	Finance Committee Hearing	Town House
Tuesday	February 28	7PM	Finance Committee Hearing – schools	Town House
Thursday	March 2	7 PM	Finance Committee Hearing ( <i>snow date</i> )	Town House
Monday	March 6	6:30PM	Select Board pre-meeting	Town House
Monday	March 6	7PM	Select Board Hearing	Town House
Tuesday	March 7	7PM	Planning Board hearing	Town House
Wednesday	March 8	7PM	Select Board Hearing ( <i>snow date</i> )	Town House
Thursday	March 9	7PM	Planning Board Hearing ( <i>snow date</i> )	Town House
Monday	March 13	7 PM	Select Board Meeting	Town House

**Concord Select Board – February 6, 2017 – One Day Special Licenses**

Concord Country Club, 246 Old Road to Nine Acre Corner

5/5, 7pm-11pm, Wine & Malt  
5/12, 6:30pm-11pm, All Alcohol  
5/19, 1pm-8pm, Wine & Malt  
6/2, 1pm-8pm, Wine & Malt  
6/3, 1pm-8pm, Wine & Malt  
6/16, 1pm-8pm, Malt Only  
6/19, 1pm-8pm, All Alcohol  
6/24, 1pm-8pm, All Alcohol  
6/25, 1pm-8pm, All Alcohol  
6/29, 1pm-8pm, Malt Only  
7/13, 1pm-8pm, Malt Only  
7/20, 1pm-8pm, Wine & Malt  
7/21, 1pm-8pm, Wine & Malt  
8/4, 1pm-8pm, All Alcohol  
8/5, 1pm-8pm, All Alcohol  
8/18, 1pm-8pm, Malt Only  
8/31, 1pm-8pm, Malt Only  
9/7, 1pm-9pm, All Alcohol  
9/8, 1pm-9pm, All Alcohol  
9/9, 1pm-9pm, All Alcohol  
9/10, 1pm-9pm, All Alcohol  
9/21, 1pm-8pm, Malt Only  
10/13, 6:30pm-10pm, Wine & Malt

Emerson Umbrella, 40 Stow Street

2/7, 6:30pm-10pm, Wine & Malt  
2/17, 6:30pm-10:30pm, Wine & Malt  
2/24, 7pm-11pm, Wine & Malt  
2/25, 7pm-11pm, Wine & Malt  
2/26, 2pm-6pm, Wine & Malt  
3/3, 7pm-11pm, Wine & Malt  
3/4, 7pm-11pm, Wine & Malt  
3/5, 2pm-6pm, Wine & Malt  
3/9, 7pm-11pm, Wine & Malt  
3/10, 7pm-11pm, Wine & Malt  
3/11, 7pm-11pm, Wine & Malt  
3/12, 2pm-6pm, Wine & Malt  
3/16, 7pm-11pm, Wine & Malt  
3/17, 7pm-11pm, Wine & Malt  
3/18, 7pm-11pm, Wine & Malt  
3/19, 2pm-6pm, Wine & Malt  
3/23, 7pm-11pm, Wine & Malt  
3/24, 7pm-11pm, Wine & Malt  
3/25, 7pm-11pm, Wine & Malt  
3/26, 2pm-6pm, Wine & Malt  
3/28, 6:30pm-10pm, Wine & Malt  
3/31, 6:30-10:30pm, Wine & Malt  
4/25, 6:30pm-10pm, Wine & Malt  
5/13, 5pm-11pm, Wine & Malt  
5/16, 6:30pm-10pm, Wine & Malt  
5/19, 6:30pm-10:30pm, Wine & Malt  
6/13, 6:30pm-10pm, Wine & Malt

Concord Museum, 246 Old Road to Nine Acre Corner

6/6, 9am-9pm, All Alcohol

Newbury Court/New England Deaconess Association, 100 Newbury Court

3/23, 5:30pm-7:30pm, Wine Only

First Parish Church, 20 Lexington Road

3/4, 7pm-10pm, Wine Only

Concord Children's Center, 51 Walden Street

3/25, 11am-6pm, Wine & Malt



80 Thoreau  
100 North Main Street  
Concord, MA 01742



To: Concord Board of Selectmen

From: Ian Calhoun – Owner – 80 Thoreau

Re: Additional Alcohol Service Hours

Date: 1/24/17

We are seeking additional hours for the following dates:

**Valentine's Day**

2/14/17 – Opening at 5:00pm and concluding alcohol service at 11:30pm (last call 11:15pm)

These are the hours we currently serve on Fridays and Saturdays

Sincerely

A handwritten signature in black ink that reads 'I Calhoun'.

Ian Calhoun

THE COMMONWEALTH OF MASSACHUSETTS

TOWN OF CONCORD

PERMIT

EXTENSION OF HOURS

This is to Certify that **80 Thoreau** is hereby granted a Permit for an **Extension of Liquor Hours for the Sale of Alcoholic Beverages, on February 14, 2017** from **5PM** until **11:30PM** with "**Last Call**" at **11:15PM**.

In Testimony Whereof, the undersigned have hereunto affixed their official signatures, this **6<sup>th</sup>** day of **February 2017**.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Concord Select Board**

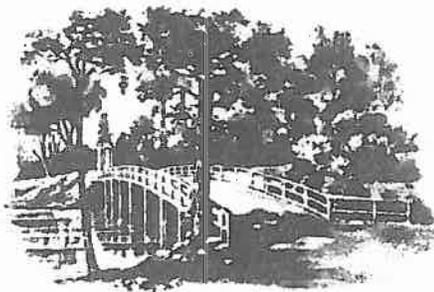
**This Permit Must Be Displayed with Annual Liquor License**

## Gift Acceptance Log – February 6, 2017

<b>Gift Received From:</b>	<b>Date of Meeting:</b>	<b>For Gift Account:</b>	<b>Total Amount:</b>
Concord-Carlisle Community Chest	February 6, 2017	Community Services Coordinator Gift Account	\$8451.00
Concord-Carlisle Community Chest	February 6, 2017	Youth Coordinator Gift Account	\$6750.00
Concord-Carlisle Community Chest	February 6, 2017	Council on Aging Gift Accounts: Volunteer Coordinator \$1450.00 Outreach Worker \$4215.25 Social Services Coordinator \$2500.00 Benefit Costs \$334.75	\$8500.00
Concord Parents League	February 6, 2017	Recreation Summer Camp Scholarship Fund	\$1000.00

## Sunday Entertainment Log – February 6, 2017

<b>Applicant Name</b>	<b>Phone Number</b>	<b>Date of Event</b>	<b>Location of Event</b>	<b>Time</b>	<b>Type of Entertainment</b>
Emerson Umbrella	978-371-0820	February 26	40 Stow Street	3PM-6PM	Theater Performance
Emerson Umbrella	978-371-0820	March 5	40 Stow Street	3PM-6PM	Theater Performance
Emerson Umbrella	978-371-0820	March 12	40 Stow Street	3PM-6PM	Theater Performance
Emerson Umbrella	978-371-0820	March 19	40 Stow Street	3PM-6PM	Theater Performance
Emerson Umbrella	978-371-0820	March 26	40 Stow Street	3PM-6PM	Theater Performance
Concord Country Club	978-371-1089	June 25	246 ORNAC	1PM-6PM	Men's Spring Member-Member Golf Tournament
Concord Country Club	978-371-1089	September 10	246 ORNAC	1PM-5PM	Men's Fall Member-Guest Golf Tournament



OLD NORTH BRIDGE  
1775

## TOWN OF CONCORD

SELECT BOARD'S OFFICE  
22 MONUMENT SQUARE – P.O. BOX 535  
CONCORD, MASSACHUSETTS 01742

TELEPHONE (978) 318-3001  
FAX (978) 318-3002

### TOWN OF CONCORD SELECT BOARD

#### PUBLIC HEARING NOTICE

Notice is hereby given that a Public Hearing will be held at the Town House in the Select Board's Meeting Room, 22 Monument Square, Concord, MA on **February 6, 2017 at 7:10 PM**, upon the petition of Comcast of Massachusetts III, Inc. to **install overhead coaxial cable at 269 Monument Street** in accordance with the plan Overhead Cable Placement Request dated January 9, 2017, filed with the Select Board.

Questions on this matter should be directed to Greg Franks, Senior Manager Government & Regulatory Affairs Comcast Cable, 508-647-1418.

By Order of the  
Select Board

Jane Hotchkiss  
Clerk



**TOWN OF CONCORD**  
**22 Monument Square PO Box 535**  
**Concord, MA 01742**  
**[www.concordma.gov](http://www.concordma.gov)**

## **CONSERVATION RESTRICTION WITH RECREATION USES**

### **Town of Concord to Concord Youth Baseball**

The Town of Concord, a municipal corporation, with an address at its Town House of 22 Monument Square, Concord, Massachusetts, 01744, acting by and through its Select Board, its successors and assigns ("Grantor"), as the owner grants, with quitclaim covenants, to Concord-Carlisle Youth Baseball, Inc. a Massachusetts charitable organization, with an address at 169 Church Street, Carlisle, Massachusetts 01741, its successors and permitted assigns ("Grantee") in perpetuity and exclusively for conservation purposes, the following described Conservation Restriction relative to one third of the parcel of land located at 51 Laws brook Road in the Town of Concord, Massachusetts, constituting a total of approximately 43,560 square feet lying on the southeasterly side of Lawsbrook Road, more particularly described in Exhibit A attached hereto and incorporated herein (collectively referred to as the "Premises"). For Grantor's title, see the deed dated October 15, 2012, recorded in Book 60267 Page 198 in Middlesex North Registry of Deeds.

#### **PURPOSES AND BACKGROUND:**

This Conservation Restriction is defined in and authorized by Sections 31-33 of Chapter 184 of the General Laws and otherwise by law. It is granted in fulfillment of the requirements of G. L. c. 44B, §12 to permanently restrict land acquired with Community Preservation Funds for "recreation use" and "open space" as those terms are used and defined in G. L. c. 44B, §2. It is granted pursuant to the authority granted by the Town of Concord 2014 Annual Town Meeting Article 37. (A certified copy of said vote is attached as Exhibit B recorded herewith.)

The purpose of this Restriction is to assure that the Premises will be retained in perpetuity predominantly in an active recreational area and in open condition, including land to protect existing and future ball fields, open spaces and park amenities.

The Premises is comprised of approximately 43,560 square feet of land containing typical park-space qualities, the protection of which benefits the public. The public benefits resulting from a recreational conservation restriction of the Premises are served within this perpetual Restriction. These benefits include, without limitation:

- (1) Preservation of a large open and peripherally wooded parcel as open and active recreational space which, when added to the adjacent 9-acre park property allows the Town of 'square off' the park into a singular rectangular shape;
- (2) Provision of actual and/or potential links to other, large open space parcels in both West Concord and Acton, including the potential completion of public trail access across MBTA right of way;
- (3) Providing much needed additional space to expand both active and passive recreational opportunities, as well as to modify the parking facilities as needed in accordance with M.G.L. Chapter 44B Section 2.

**TERMS AND PROVISIONS OF RESTRICTION:**

The terms of this Conservation Restriction are as follows:

A. **Prohibited Uses.** The Grantor will neither perform nor allow others to perform following acts and uses which are expressly prohibited on, above and under the Restricted Areas:

- (1) Constructing, placing or allowing to remain any permanent building, landing strip, or barrier;
- (2) Allowing any permanent mobile home, swimming pool, asphalt or concrete pavement, billboard or other advertising display, antenna, tower, or other temporary or permanent structure or facility on, above or under the Premises;
- (3) Mining, excavating, dredging or removing of soil, loam, peat, gravel, sand, rock or other mineral resource or natural deposit;
- (4) Placing, filling, storing or dumping of soil, refuse, trash, vehicle bodies or parts, rubbish, debris, junk, waste or other substance or material whatsoever or the installation of underground storage tanks;
- (5) Cutting, removing or otherwise destroying trees, grasses or other vegetation;
- (6) Activities detrimental to drainage, flood control, water conservation, water quality, erosion control, soil conservation, or archaeological conservation;
- (7) The use of motorcycles, motorized trail bikes, snowmobiles and all other motor vehicles, except as necessary in exercising any of the reserved rights in Paragraph B, or as necessary by the police, firemen or other governmental agents in carrying out their lawful duties;
- (8) Hunting or trapping;
- (9) Any other use or activity thereon which is inconsistent with the purpose of this Recreational Conservation Restriction or which would materially impair significant conservation interests unless necessary for the protection of the conservation and recreational interests that are the subject of this Conservation Restriction.

B. **Reserved Rights.** All acts and uses not prohibited on the Premises according to Paragraph A are permissible provided that they do not materially impair the purpose of this Recreational Conservation Restriction or other significant recreation interests. Notwithstanding the provisions of Paragraph A, the following acts and uses are also permitted for the benefit of the public generally, but only if such uses and activities do not materially impair the purpose of this Restriction or other significant conservation or recreational interests, and provided all applicable permits are obtained:

- (1) Digging or drilling of water wells and installation of sprinkler systems for athletic fields. Installation of wastewater disposal fields and associated above and below grade equipment and structures constituting a wastewater ("septic") disposal system and installation of water supply wells and associated utilities and lines. Said sprinkler system, wells and septic system shall be solely for the purpose of serving the residential improvements to be made on the adjacent Rideout Park Parcel
- (2) Excavation and removal from the Premises of soil, gravel or other mineral resource or natural deposits as may be incidental to the installation or maintenance or removal of an athletic field, wells, septic systems, utilities, a sprinkler system and other underground structures or to the maintenance of good drainage, soil conservation practices or to other permissible use of the premises.
- (3) Mowing of existing athletic fields and open spaces to protect the recreational values of the premises, including without limitation, athletic play and playground use.
- (4) Mowing and general maintenance of athletic fields and open play areas.
- (5) The maintenance of piles of limbs, brush, leaves and similar biodegradable material originating on the premises provided such piles are not conspicuous from abutting properties.

- (6) The placing, removal, maintenance, repair and reconstruction of sight-pervious fences, including without limitation bordering stone walls. As used herein, "sight- pervious fencing" shall include so-called "cyclone", "chain-link" or "snow" fencing.
- (7) Other recreational uses such as community gardens, picnicking, walking, jogging, bird-watching, cross-country skiing, snowshoeing, bicycling, or meditation,
- C. **Notice and Approval.** Whenever notice to or approval by Grantee is required under the provisions of Paragraphs A or B, Grantor shall notify Grantee in writing not less than forty-five (45) days prior to the date Grantor intends to undertake the activity in question. The notice shall describe the nature, scope, design, location, timetable and any other material aspect of the proposed activity in sufficient detail to permit Grantee to make an informed judgment as to its consistency with the purposes of this Conservation Restriction. Where Grantee's approval is required, Grantee shall grant or withhold its approval in writing within thirty (30) days of receipt of Grantor's written request therefor. Grantee's approval shall not be unreasonably withheld, but shall only be granted upon a showing that the proposed activity shall not materially impair the purposes of this Restriction. Failure of Grantee to respond in writing within such thirty (30) days shall be deemed to constitute approval by Grantee of the request as submitted, so long as the request refers to the provisions of this section relating to deemed approval after the passage of time.
- D. **Extinguishment.** If circumstances arise in the future such as to render the purposes of this Restriction impossible to accomplish, the Restriction can only be terminated or extinguished, whether in whole or in part, by judicial proceedings in a court of competent jurisdiction or by other procedure established by law for the extinguishment of a recreational conservation restriction, including compliance with terms of Article 97 of the Amendments to the Massachusetts Constitution applicable to conservation lands acquired with public funds. If any change in conditions ever gives rise to extinguishment or other releases of the restriction under applicable law, then Grantee, on a subsequent sale, exchange or involuntary conversion of the premises, shall be entitled to no portion of the proceeds in accordance with Paragraph E below, subject, however, to any applicable law which expressly provides for a different disposition of proceeds. If, pursuant to applicable law, superseding the terms of this restriction, Grantee were to receive a share of the proceeds, Grantee shall use said proceeds in a manner consistent with the recreational conservation purposes set forth herein.
- E. **Proceeds.** Grantor and Grantee agree that the donation of this Restriction gives rise for purposes of this Paragraph E to a property right, immediately vested in Grantee. Notwithstanding this fact, Grantor and Grantee agree that all expenses associated with acquisition and future improvement of the Premises have been and will be borne by Grantor. Consequently, the value of the property right vested in Grantee shall at all times and for all purposes be deemed to be only nominal value. If Grantee were to contribute to future improvement of the Premises, the parties may agree that Grantee's property right hereunder has a value greater than nominal value. Such an agreement shall take effect only if made in writing signed by both Grantor and Grantee and recorded as an addendum to this restriction further clarifying the respective rights of the parties in the event of an extinguishment of this restriction.
- F. **Access.** Grantor grants to the Grantee an easement to pass and repass upon the premises for the uses permitted pursuant to Paragraph B hereof. Grantor further grants to the general public an easement to pass and repass upon the Premises for the uses permitted pursuant to Paragraph B hereof, subject to reasonable regulation by the Grantor or its successors as owner of the

Premises. Without limiting the foregoing, there is also hereby granted to Grantee and its representatives the right to enter upon the Premises (a) at reasonable times and in a reasonable manner for the purpose of inspecting the same to determine compliance herewith.

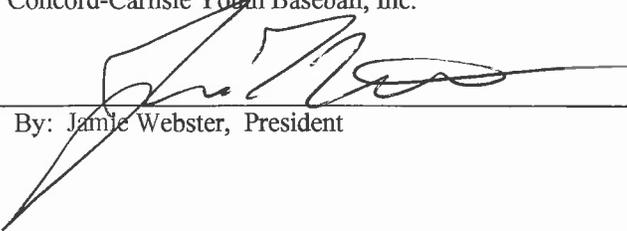
- G. **Legal Remedies of Grantee.** The rights hereby granted shall include the right to enforce this Restriction by appropriate legal proceedings and to obtain injunctive and other equitable relief against any violations, including without limitation, relief requiring restoration of the premises.
- H. **Acts Beyond Grantor's Control.** Nothing contained in this Restriction shall be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Premises resulting from causes beyond the Grantor's control, including, but not limited to, fire, flood, storm and earth movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Premises resulting from such causes. The parties agree that in the event of such an occurrence, if it is desirable that the Premises be restored, the parties will cooperate in attempting to restore the Premises, if feasible.
- I. **Duration and Assignability.**
- (1) **Perpetual Duration.** The burdens of this Restriction shall run with the Premises and shall be enforceable against Grantor in perpetuity.
  - (2) **Execution of Instruments.** After provision of a copy of any proposed instrument or notice to Grantor, Grantee is authorized to record or file any notices or instruments appropriate to assuring the perpetual enforceability of this restriction.
  - (3) **Benefits; Assignability.** The benefits of this Conservation Restriction shall be in gross and shall not be assignable by Grantee, except in the following instances from time to time and with permission of Grantor, which shall not be unreasonably withheld: (i) as a condition of any assignment, Grantee requires that the purpose of this Restriction continue to be carried out; (ii) the assignee, at the time of assignment, qualifies under Section 170(h) of the Internal Revenue Code of 1986, as amended, and applicable regulations thereunder, and under Section 32 of Chapter 184 of the General Laws as an eligible donee to receive this restriction and (iii) in selecting a donee, preference shall be given first to organizations domiciled in the Town of Concord and second to those which are currently holding other conservation restrictions on land located in the Town of Carlisle. In the event that the Grantee ceases to function without having assigned this Conservation Restriction to a qualified donee, such assignment shall be made by a court of competent jurisdiction. The benefits of this Conservation Restriction may be partially assigned in accord with the provisions of Paragraph B.
  - (4) **Effective on Recording.** Grantor and Grantee intend that the restrictions arising hereunder shall take effect when all requisite signatures pursuant to Section 32 of Chapter 184 of the General Laws have been obtained and the document has been recorded in the Middlesex North Registry of Deeds.
  - (5) **Timely Recording.** This instrument shall be recorded in a timely manner.
- J. **Miscellaneous**
- (1) **Severability.** If any provision of this Restriction shall to any extent be held invalid, the remainder shall not be affected.
  - (2) **Entire Agreement.** This instrument sets forth the entire agreement of the parties with respect to the Restriction and supersedes all prior discussions, negotiations, understandings, or agreements relating to the Conservation Restriction, all of which are merged herein.

- (3) Amendment. If circumstances arise in the future under which an amendment to, or modification of, this Restriction may be appropriate, the parties reserve the right to amend the Restriction, provided that any amendment shall be effective only if it is consistent with the recreational and conservation purposes stated herein, and the amendment is consistent with applicable statutes. In addition, no substantial amendment shall be made without its having been approved in advance by a two-thirds or more vote of the Town of Concord Town Meeting. The parties agree that increasing the number of athletic fields permitted under this restriction would constitute a substantial amendment thereof.

**GRANTING OF CONSERVATION RESTRICTION**

Executed under seal as of this 20<sup>th</sup> day of January, 2017.

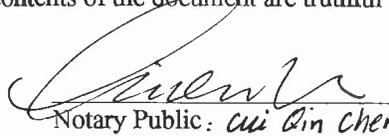
Concord-Carlisle Youth Baseball, Inc.

  
By: Jamie Webster, President

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss

On this 20<sup>th</sup> day of January, 2017, before me, the undersigned notary public, personally appeared Jamie Webster, President as aforesaid, proved to me through satisfactory evidence of identification which was a MA driver's license to be the person whose name is signed on the preceding or attached document, acknowledged to me that he executed it voluntarily for its stated purpose as his free act and deed, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief.

  
Notary Public: Cui Qin Chen

My commission expires: June 15, 2018



**APPROVAL OF SELECT BOARD**

We, the undersigned, being a majority of the Select Board of the Town of Concord, Middlesex County, Massachusetts, hereby certify that at a meeting duly held on this \_\_\_\_ day of \_\_\_\_\_, 2017 the Select Board voted to approve the foregoing Conservation Restriction to Concord-Carlisle Youth Baseball, Inc. pursuant to Chapter 44B, Section 12 and Chapter 184, Sections 31-33. of the General Laws of Massachusetts.

**Select Board**

\_\_\_\_\_  
Michael E. Lawson, Chair

\_\_\_\_\_  
Jane Hotchkiss, Clerk

\_\_\_\_\_  
Alice Kaufman

\_\_\_\_\_  
Thomas McKean

\_\_\_\_\_  
Steven Ng

COMMONWEALTH OF MASSACHUSETTS

Middlesex, ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, 2017, before me, the undersigned notary public, personally appeared Michael E. Lawson, as Chair of the Select Board of the Town of Concord, proved to me through satisfactory evidence of identification which was a MA State Driver's License to be the person whose name is signed on the preceding document, acknowledged to me that he executed it voluntarily for its stated purpose as his free act and deed, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief.

\_\_\_\_\_  
Notary Public  
My commission expires: \_\_\_\_\_



THE UMBRELLA<sup>SM</sup>

**THE UMBRELLA *Community Arts Center***  
**Memo to Select Board**

February 6, 2017

Thank you for inviting us to present an update of the Umbrella's plans for renovations to the Umbrella on Stow Street.

The presentation will include:

1. Design Development update showing building plans, renderings of the front lawn of the building facing Stow Street and of the proposed side entrance to the new Performing Arts wing.
2. Site Plan update showing proposed modifications to parking in the municipal lot and to the buffer zone in the rear of the building.
3. Schedule update
4. Report from second Neighborhood meeting held on February 2.
5. Request for Letter of Approval to demolish and replace the existing auditorium wing and / or amendment to the Lease.

Thank you.

Jerry Wedge, Executive Director

Elise Woodward, Chair of Building Committee

The Umbrella enriches lives and builds a vibrant community through the arts. We inspire creativity, learning, and personal growth through arts education programs, performing and visual arts presentations, and community collaborations.

# **DRAFT REPORT OVERVIEW**

**ENERGY FUTURE TASK FORCE  
TOWN OF CONCORD, MA  
FEBRUARY 1, 2017 PUBLIC MEETING**

# **ENERGY FUTURE TASK FORCE**

**FIND THE DRAFT REPORT** on the Energy Future Task Force web page under important documents.

The web page can be accessed at

<http://concordma.gov/1098/Energy-Future-Task-Force>

**SEND COMMENTS** on the draft report to the Energy Future Task Force email address:

[energyfutures@concordma.gov](mailto:energyfutures@concordma.gov)

# **OUR WORK IS GUIDED BY:**

- 1. International commitments for greenhouse gas reduction expressed in the 2015 Paris Agreement on climate change and Massachusetts' goals for greenhouse gas reduction expressed in the 2008 Massachusetts Global Warming Solutions Act.**
- 2. A commitment to bold approaches and actions to achieve greenhouse gas reduction consistent with the urgency of the current global anthropogenic climate crisis, and with Concord's long history of leadership and of stewardship of our natural world.**
- 3. A recognition that Concord is part of, and should actively contribute to, the fast-paced global, national, state, and municipal transformation from an economy powered by fossil fuels to an economy powered by clean energy.**
- 4. A commitment to Concord's sustainability principles.**

# **GOALS & RECOMMENDED IMMEDIATE NEXT STEPS**

## **GOALS**

**25% reduction in greenhouse gases by 2020**

**80% reduction in greenhouse gases by 2050**

**These are town-wide goals and are applicable to all sectors. The baseline is 2008.**

## **RECOMMENDED IMMEDIATE NEXT STEPS**

- 1. Issue a policy statement to establish decreasing emissions as a criterion in all Town decisions.**
- 2. Hire a Director of Energy [or other title] and a consultant to assist the Director to guide the Town in designing and implementing a sustainable energy future consistent with the recommendations in this Report.**
- 3. Appoint a new advisory group to assist the Town Manager, the Energy Director, and the consultant.**

# **BASELINE DATA**

**ENERGY FUTURE TASK FORCE  
TOWN OF CONCORD, MA  
FEBRUARY 1, 2017 PUBLIC MEETING**

# CONCORD'S CARBON FOOTPRINT

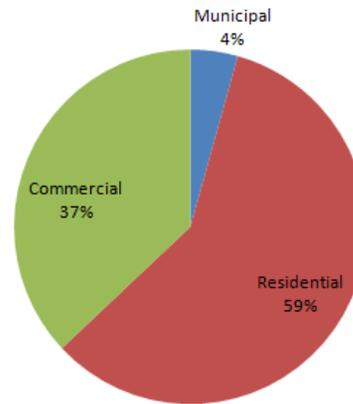
**227,949 Tons of CO<sub>2</sub> in 2015**  
**which is equivalent to the**  
**weight of the Sears Tower.**  
**(minimum value)**

**Concord's full GHG Footprint**  
**is estimated to be 3 times**  
**greater when:**

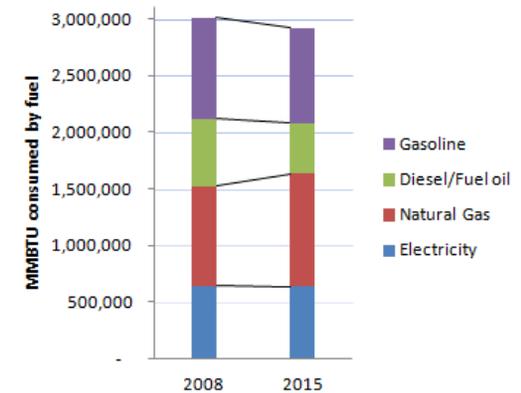
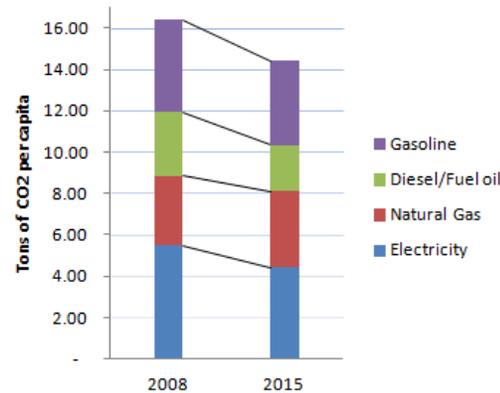
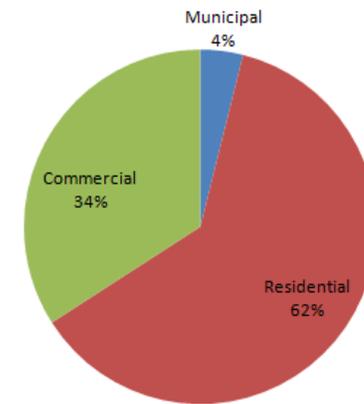
- All GHGs (CH<sub>4</sub>, N<sub>2</sub>O, F-gases)
- Propane Purchases
- Fugitive Methane Leaks
- Products and Services we buy are considered

**Over 7 years Concord has**  
**- Switched Oil to Natural Gas**  
**- Reduced CO<sub>2</sub> by 9.9%**

2008 - 250,852 Tons of CO<sub>2</sub>



2015 - 227,949 Tons of CO<sub>2</sub>



Source: The Comprehensive Sustainable Energy Committee (CSEC)  
 Restated 2011 Concord Master Energy Plan.

# GREENHOUSE GASES (GHG) DATA MEASUREMENT

Where do GHG come from?

- Direct Fuel Purchases(Scope 1)
- Energy Indirect Purchases(Scope 2)
- Other Indirect Purchases(Scope 3)

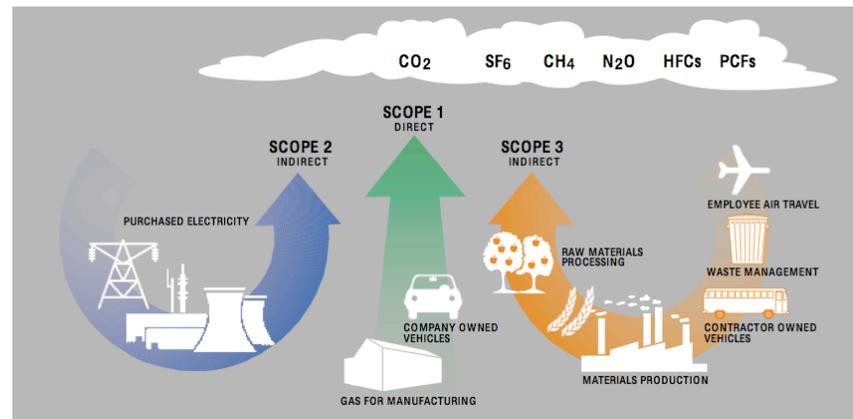
How are they measured?

An internationally recognized, comprehensive methodology for tracking town wide GHG emissions is needed.

- ICLEI, US Community Protocol for Accounting and Reporting GHG
- Massachusetts GHG Emissions Reporting Program (Mass Energy Insight)

How do we ensure accurate, comprehensive and continuous measurement?

- A director level Town staff position focused on GHG emission reduction
- A database to track all direct fuel and electricity purchases made in Town



# **CONCORD MUNICIPAL LIGHT PLANT**

**ENERGY FUTURE TASK FORCE  
TOWN OF CONCORD, MA  
FEBRUARY 1, 2017 PUBLIC MEETING**

# **TOWN OWNERSHIP OF CMLP CREATES OPPORTUNITIES**

**CMLP is a valuable asset for the Town**

**Electric utilities offer close relationships with customers and serve as important advisors on major energy decisions**

**The supply procurement decisions have a profound impact on GHG emissions**

**The EFTF worked closely with CMLP, meeting with Dave Wood and CMLP staff. Laura Scott participated in EFTF meetings as CMLP liaison.**

# **PROPOSED RECOMMENDATIONS REGARDING CMLP**

**Consider alternatives to reduce barriers for adopting energy efficiency measures [including eliminating the practice of having separate energy audits from Massachusetts investor-owned utilities]**

**Develop a comprehensive set of cost-effective energy efficiency incentives and measures that meet or exceed those offered by Massachusetts investor-owned utilities**

**Consider retiring Class I RECs from renewable energy purchases or purchase Class I RECs to allow CMLP to achieve the Massachusetts RPS goals that apply to suppliers of the customers of Massachusetts investor-owned utilities**

# **PROPOSED RECOMMENDATIONS REGARDING CMLP**

**Convert CMLP's electricity supply to non-emitting resources with RECs or certificates for associated environmental attributes retired with a target of achieving 100% from non-emitting resources by 2030**

**Employ smart meters town wide and adopt a Time of Use rate structure**

**Shift to revenue decoupled approach to rate-setting**

**Consider Distributed Energy Resources and battery storage to assist the Town in achieving its GHG emissions reduction goals**

**Develop incentives to encourage users to switch from fossil fuels to electricity for heating and transportation**

# **BEST PRACTICES**

**ENERGY FUTURE TASK FORCE  
TOWN OF CONCORD, MA  
FEBRUARY 1, 2017 PUBLIC MEETING**

# **CONCORD'S SUSTAINABILITY PRINCIPLES**

**ADOPTED JULY 25, 2011**

**GOAL: promote a sustainable future and meet current needs without compromising the ability of future generations to meet their needs.**

- 1) reduce dependence upon fossil fuels, underground metals, and minerals;**
- 2) reduce dependence upon synthetic chemicals and other manufactured substances;**
- 3) reduce encroachment upon nature; and**
- 4) meet human needs fairly and efficiently.**

# **WHAT CONCORD IS ALREADY DOING**

**MUNICIPAL SUSTAINABILITY PLANNING**

**ENERGY CONSERVATION**

**CONCORD PUBLIC SCHOOLS**

**CONCORD SUSTAINABLE ENERGY COMMITTEE  
(CSEC)**

**GREEN COMMUNITIES DESIGNATION**

**REGIONAL SUSTAINABILITY PLANNING WITH  
MAPC, MAGIC, HATS**

**COMMUNITY ENGAGEMENT**

# **STRATEGIES AND TACTICS FROM OTHER CITIES AND TOWNS**

**LENGTHY PUBLIC PROCESS FOR COMPREHENSIVE  
AND RESILIENCY PLANNING**

**CONSIDER CLIMATE CHANGE IN ALL TOWN DECISIONS**

**GHG EMISSIONS REDUCTION TARGETS**

**NET ZERO ENERGY OR CARBON NEUTRAL TARGETS  
FOR NEW CONSTRUCTION**

**FOCUS ON BETTER BUILDINGS, ENERGY AND WATER**

**REDUCE WASTE**

**LOCAL FOOD SOURCES**

**ATTENTION TO ALL SECTORS**

**FUNDING**

**LEGISLATION AND REGULATION**

# **CONCORD'S OTHER SECTORS**

**RESIDENTIAL / COMMERCIAL / INDUSTRIAL**

**BUILT ENVIRONMENT**

**WATER MANAGEMENT**

**WASTE MANAGEMENT**

**HABITAT**

**MOBILITY**

**LAND USE PLANNING INCLUDING ZONING, SMART GROWTH, SAFE STREETS**

**AFFORDABLE HOUSING**

**SAFETY, HEALTH AND WELFARE**

**LOCAL FOOD SOURCES**

**MUNICIPAL PROCUREMENT**

**COMMUNITY ENGAGEMENT**

**EDUCATION AND RESOURCES FOR RESIDENTS**

**FUNDING**

# **PUBLIC OUTREACH**

**ENERGY FUTURE TASK FORCE  
TOWN OF CONCORD, MA  
FEBRUARY 1, 2017 PUBLIC MEETING**

# **THE PUBLIC**

- A. At public meetings**
- B. In the on-line survey**
- C. Through emails**
- D. At task force meetings**
- E. Concord's Townwide Survey**

# **STAKEHOLDER INTERVIEWS**

- A. Dave Wood and CMLP Staff**
- B. Chris Whelan and Kate Hodges and  
Senior Management Team**
- C. John Flaherty and Brian Schlegel – CPS, CCRHS**
- D. Concord Business Partnership**
- E. Ed Stastny – VP Operations, Emerson Hospital**
- F. Brad Hubbard-Nelson - CSEC Chair**
- G. Jane Obbagy - Concord Chamber of Commerce**

# **SUMMARY**

**ENERGY FUTURE TASK FORCE  
TOWN OF CONCORD, MA  
FEBRUARY 1, 2017 PUBLIC MEETING**

# **A CLEAN ENERGY STRATEGY CORE ELEMENTS**

**Through education and raising public awareness, incentivize customers to move to electricity and away from fossil fuel use in heating systems and transportation.**

**Invest in renewable sources for electricity available in our region, and in Concord through photovoltaic installations, to reduce greenhouse gas emissions within the community at large.**

**Increase energy efficiency and reduce energy use with incentives and through community commitment and education.**

# **PUBLIC COMMENT**

**FIND THE DRAFT REPORT** on the Energy Future Task Force web page under important documents.

The web page can be accessed at

<http://concordma.gov/1098/Energy-Future-Task-Force>

**SEND COMMENTS** on the draft report to the Energy Future Task Force email address:

[energyfutures@concordma.gov](mailto:energyfutures@concordma.gov)

Town of Concord  
Energy Future Task Force  
Draft Report for Public Comment  
January 25, 2017

# Energy Future Task Force Draft Report



***Task Force members:***

Pam Hill, Chair  
Brian Foulds, *Vice Chair*  
Elise Woodward, *Clerk*  
John Dalton  
Dan Gainsboro  
Wallace Johnston

***Liaisons:***

Michael Lawson, Select Board  
Alice Kaufman, Select Board  
Laura Scott, CMLP  
Brad Hubbard-Nelson, CSEC

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Anne Stevens  
Amanda Siani  
Trish Ng

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## I. Executive Summary

The Select Board established the Energy Future Task Force (Task Force) in February 2016 and charged it broadly with creating a framework for the design and implementation of a town-wide energy plan that will minimize Concord's carbon footprint and that will be sustainable in the near and long-term future. The framework is to include short and long-term energy goals. (See Appendix for the Charge.) This Final Report is the product of the Task Force's fact-gathering, public outreach, and deliberations. It is comprised of goals and recommendations, with supporting information and rationale.

### Goals

The EFTF's recommendations are centered on aligning Concord's Energy Future with the goals of the *MA Global Warming Solutions Act of 2008* and are informed by the *Paris Climate Agreement of 2016*. The Task Force recommends the following goals:

25% reduction in greenhouse gases by 2020

80% reduction in greenhouse gases by 2050.

These are town-wide goals and are applicable to all sectors. The baseline is 2008.

### Rationale

The Task Force acknowledges that a small proportion of the Concord Municipal Light Plant's (CMLP) electricity is used by the municipal sector with approximately 95% of the remaining electricity used by residential, commercial and industrial sectors. However, because Concord has control of the power purchase portfolio at CMLP (that is, the aggregate amount of all energy purchased from various sources to meet the demands of the CMLP grid), it is in a strong position to advance the reduction of greenhouse gas emissions from the electricity it sells to its customers. It is this rationale that forms the basis of many of the EFTF recommendations and the focus of this report on the energy sector.

A key rationale for the Task Force's recommendations is a clean energy strategy including the following ideas:

1. Through education and raising public awareness, the Town is in a position to advocate for and incentivize customers to migrate away from fossil fuel use in heating systems and transportation to electricity.
2. By investing in renewable capacity for electricity in the New England region and in Concord through photovoltaic installations, CMLP may reduce greenhouse gas emissions from its electricity thereby decreasing emissions within the community at large.
3. By increasing energy efficiency and reducing energy use throughout the community, Concord will reduce emissions for all energy that is conserved.

### Recommendations

1. Immediately (Spring 2017)

- a) Issue a policy statement from the Select Board and Town Manager that firmly establishes these recommended greenhouse gas reduction goals as responsibilities of the Town Manager and that decreasing emissions shall be considered and advanced in all deliberations and decisions of all Town departments and committees;
- b) State the goals and provide annual updates on the Town's progress in meeting them at all future Town Meetings; and educate our citizens about the goals so that they may take individual actions to help Concord achieve them;
- c) Expeditiously hire a Director of Energy [or other title] and a consultant to assist him/her to guide the Town in designing and implementing a sustainable energy future consistent with the recommendations in this Report. See Appendix for Position Description core elements (on p. 48 of this draft report).
- d) Appoint a new small advisory group to assist the Town Manager, the Energy Director, and the consultant.

## 2. Longer term

- a) Measurement: Confirm that the 2008 town wide database for tracking Concord's carbon footprint is complete and maintain this as the baseline for measuring progress toward the GWSA goal of an 80% reduction in GHG by 2050.
- b) Best Practices: Direct the Director of Energy to develop integrated implementation strategies with systems thinking across all departments and to use improvements in low carbon electricity to make rapid progress towards meeting the goals.

### c) CMLP

The Concord Municipal Light Plant (CMLP) is a valuable asset for the Town. CMLP's participation will be essential to achieving the goals stated in this Report. Appropriately, the Charge to the Task Force focuses on the CMLP. Consistent with this, the Task Force recommends that CMLP:

- i) consider alternatives to reduce barriers to the adoption of energy efficiency measures including eliminating the practice of having separate energy audits from Massachusetts investor-owned utilities.<sup>[u1]</sup>
- ii) work to offer a comprehensive set of cost-effective energy efficiency incentives and measures that meet or exceed those offered by Massachusetts investor-owned utilities<sup>[u2]</sup>.
- iii) as a short-term goal, retire Class I RECs from renewable energy purchases or purchase Class I RECs to allow CMLP to achieve the Massachusetts RPS goals that apply to suppliers of the customers of Massachusetts investor-owned utilities.

iv) migrate CMLP's electricity supply to non-emitting resources with RECs or certificates for associated environmental attributes retired<sup>[u3]</sup> with a target of achieving 100% from non-emitting resources by 2030.

v) employ smart meters town wide and adopt a Time of Use rate structure.

vi) shift to revenue decoupled approach to rate-setting.

vii) consider Distributed Energy Resources and battery storage to assist the Town in achieving its GHG emissions reduction goals.

viii) develop incentives to encourage users to exchange fossil fuels for electricity powered by renewables in their homes and vehicles.

#### d) Other sectors

The Task Force's recommendation for an integrated systems approach to reducing greenhouse gas emissions will require a strategy for change within sectors beyond the energy sector.

During the next year, we recommend that attention be given to developing integrated strategies for reducing greenhouse gas emissions from these other sectors and to engaging the public in determining opportunities for individual action. In addition, we recommend that the Comprehensive Long Range Planning Committee be encouraged to include engaging the public for individual action consistent with the support shown in the Town-wide survey for energy efficiency and sustainability. See Appendix for survey analysis.

e) Personal responsibility [not yet written]

f) Framework [see "Immediately" above]

## II. Climate Change Background

Since about 1950 the world has experienced an unprecedented increase in global temperature and greenhouse gas emissions. The clear scientific consensus, confirmed by the Intergovernmental Panel on Climate Change among other leading scientific bodies, is that the warming is human-caused and driven by greenhouse gas emissions from developed countries such as the United States and western European nations, and recently, from countries trying to transition from the status of developing to developed, such as China and India. The effects of this anthropogenic warming are already being observed and they will inevitably affect future generations much more than they are affecting us, although it is we in the industrialized world, including Concordians, an affluent, high-consuming demographic, who are mostly responsible. Indeed, Concord's per capita carbon emissions are 39% higher than the national average.

As demonstrated by the extraordinary collective global attention to this crisis at the Paris Conference in 2015, and the Paris Agreement that followed, climate change response cannot

wait. Countries, cities, and individuals all over the world are acting to mitigate climate change; and if mitigation alone is not sufficient (which it appears not to be), to adapt in various ways.

### III. The Energy Future Task Force

The Select Board established the Energy Future Task Force (Task Force) in February 2016. Task Force members were appointed by the Town Manager with the Select Board's approval. The Task Force was charged broadly with creating a framework for the design and implementation of a town-wide energy plan that minimizes Concord's carbon footprint and that is sustainable in the near and long-term future. The framework was to include short and long-term energy goals. (See Appendix for the Charge.) This Final Report is the product of the Task Force's fact-gathering, public outreach, and deliberations. It is comprised of goals and recommendations, with supporting information.

#### A. Task Force Approach

Necessarily, the work of the Task Force is grounded in the economic, social, and political world as it is today, and in current widely-accepted scientific projections on climate change. But important variables could affect future greenhouse gas emissions and Concord's ability to achieve the ambitious emissions reduction goals the Task Force recommends. For example, the market for renewable energy is rapidly growing and could over time substantially ease the Town's ability to migrate toward renewable energy sources and commensurate lower greenhouse gas emissions. Moreover, there is little doubt among economists that the cost of addressing climate change will greatly increase over time and will become a crushing financial as well as social and ecological burden on future generations if we don't invest in greenhouse gas mitigation immediately. That is, it is much cheaper to act now than to act later, and it is a moral imperative. In fact, the Task Force's recommended goals reflect not only the urgency of the climate crisis, but also the opportunities we should embrace to address it.

The goals and recommendations of the Task Force are guided by the following:

1. International commitments for greenhouse gas reduction expressed in the 2015 Paris Agreement on climate change and Massachusetts' goals for greenhouse gas reduction expressed in the 2008 Massachusetts Global Warming Solutions Act (GWSA) and implementing regulations. See Appendix for Paris Agreement and GWSA.
2. A commitment to bold approaches and actions to achieve greenhouse gas reduction consistent with the urgency of the current global anthropogenic climate crisis, and with Concord's long history of leadership and of stewardship of our natural world.
3. A recognition that Concord is part of, and should actively contribute to, the fast-paced global, national, state, and municipal transformation from an economy powered by fossil fuels to an economy powered by clean energy.
4. A commitment to Concord's sustainability principles.

In order to make the changes required to implement these ideas, the Task Force has concluded that Concord and its citizens will need to invest significant financial resources, and will need to alter, and sometimes abandon, familiar institutional and personal practices and behaviors. The recommendations of the Task Force reflect these challenges.

#### B. The Process the Task Force Followed

The Task Force met first in April of 2016 and since then, with few exceptions, every other week for two hours. All meetings have been attended by members of the public who have had opportunities to comment at each one. We have held three public meetings: in June 2016 and October 2016, and in February 2017. Each meeting was attended by approximately 50 Concord citizens. Public engagement has been robust and insightful.

The Task Force also conducted in-person interviews with several stakeholders. See list of interviewees in the Appendix. In addition, we distributed an on-line survey to XXX and received XXX responses. See the Appendix for survey instrument. Finally, we maintained an email account for citizens to submit comments any time. We received XXX substantive emails. Survey responses and emails are available at the Town House, as are summaries of the interviews.

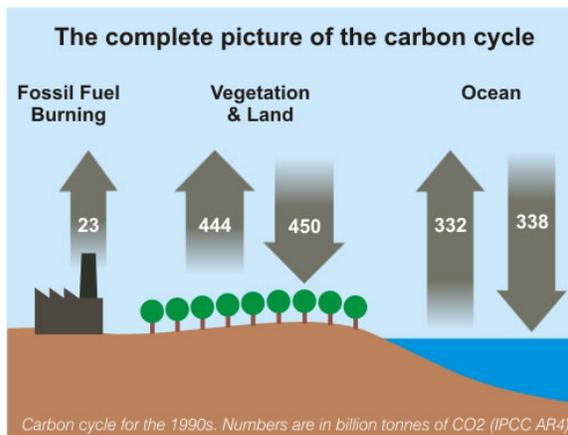
The Task Force identified five areas of focus based on directions in the Select Board Charge: stakeholders; energy and emissions; other cities and towns/best practices; government documents; and Concord Municipal Light Plant. Each area was led by a Task Force member and is described in detail later in this Final Report. We have included relevant materials gathered during our work on these areas in the Appendix. These materials may be of interest to those who succeed us.

The goals stated by the Task Force are intended to apply town wide to all sectors. However, the Task Force focused most of its attention on the energy sector and especially the Concord Municipal Light Plant (CMLP). This too reflected the Select Board's Charge. This focus also reflects the view of the Task Force that the greatest near-term opportunity for greenhouse gas reductions in Concord are offered by CMLP and that CMLP offers the greatest potential to change residential, municipal, and commercial energy-consumption behavior. Notwithstanding this CMLP focus, the Task Force also strongly recommends GHG reductions in other sectors.

## IV. Concord Today

### A. What are Greenhouse Gases (GHG), how do they work and why do we like fossil fuels?

Carbon dioxide CO<sub>2</sub>, Methane CH<sub>4</sub>, Nitrous Oxide N<sub>2</sub>O and other compounds<sup>1</sup> are called "Greenhouse" Gases because, like glass, they are transparent to visible light and opaque to parts of the infrared spectrum. Visible light emitted from the sun passes easily through the atmosphere to the surface of earth. That energy is then absorbed by the surface and emitted as infrared energy (heat). This infrared energy is then reflected by these greenhouse gases in all directions until it is released into space. The amount of Greenhouse Gas concentration in the air determines how quickly heat escapes into space and how warm the planet becomes. The concentration of these greenhouse gases in the atmosphere had reached an equilibrium with the natural cycles of earth over millions of years. This balance kept global temperatures relatively stable. The amount of greenhouse gases emitted from the occasional volcano,

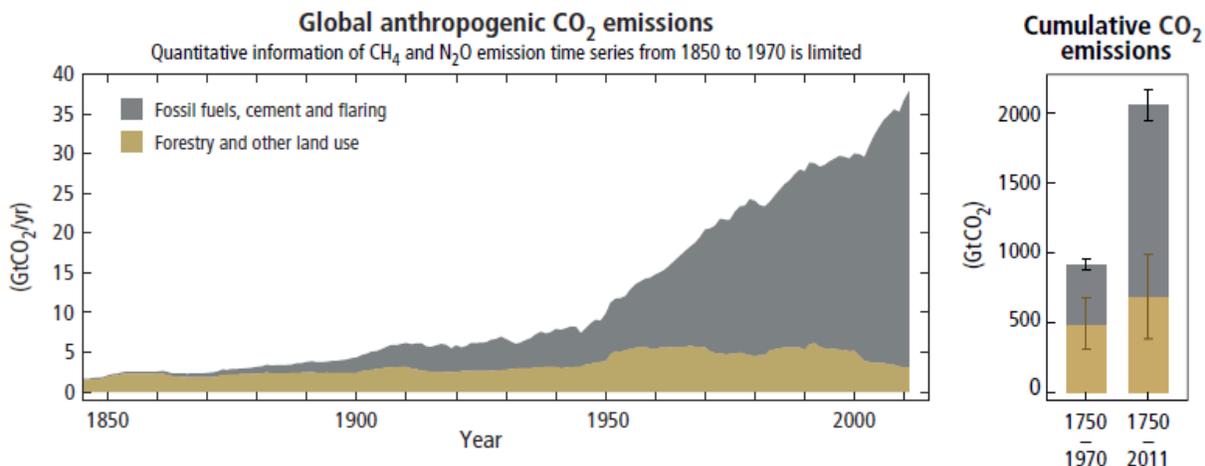


seasonal plant decay or other natural GHG sources were absorbed by new plants and the oceans. This was until humans began digging up sequestered fossil fuels and adding them to the atmosphere by burning and overwhelming this natural balance.

Anthropogenic (human caused) CO<sub>2</sub> emissions have increased dramatically after World War II. The post–World War II economic expansion which lasted from 1945 to 1970 brought with it suburban development and urban sprawl, aided by automobile ownership. Oil was cheap and the new highway system allowed people to live miles away from where they worked. Between 1945 and 1975, Concord's population doubled from 8,382 to 17,270<sup>2</sup> as people moved from cities and farms to suburban areas.

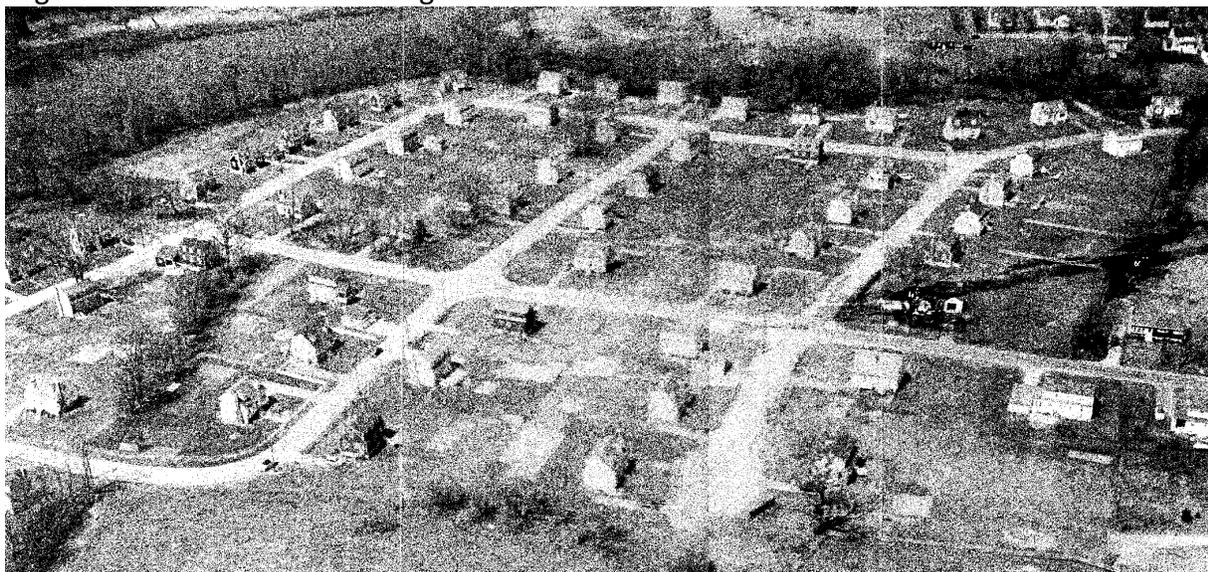
<sup>1</sup> GHG GWP values [WG1AR5 Chapter08 FINAL](#) page 731-737 or GHG Protocol, [GWP Values](#)

<sup>2</sup> Concord's [Population History](#)



**Figure 1.5 |** Annual global anthropogenic carbon dioxide (CO<sub>2</sub>) emissions (gigatonne of CO<sub>2</sub>-equivalent per year, GtCO<sub>2</sub>/yr) from fossil fuel combustion, cement production and flaring, and forestry and other land use (FOLU), 1750–2011. Cumulative emissions and their uncertainties are shown as bars and whiskers, respectively, on the right-hand side. The global effects of the accumulation of methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) emissions are shown in Figure 1.3. Greenhouse gas emission data from 1970 to 2010 are shown in Figure 1.6. [modified from WGI Figure TS.4 and WGIII Figure TS.2] Source: IPCC Climate Change 2014 Synthesis Report SYR\_AR5

The US and other developed countries became, in the words of George W. Bush, “addicted to”<sup>3</sup> the benefits of cheap fossil fuel. Some of the country was ignoring or denying<sup>4</sup> the harm to our climate. The car had become a dominant means of transportation while trolleys, passenger rail service and other forms of mass transit did not meet the needs of a population spread across large areas of land. Forests and grasslands were cleared for homes.



South Meadow neighborhood just after its construction in the mid 1950's. Source: ???

The challenge we face is how can we continue to enjoy the standard of living we have today while reducing the pollution it creates. Energy efficiency, renewable energy and energy storage, and responsible conservation of open space are just some of the many solutions<sup>5</sup> available.

## Context

<sup>3</sup> 2006, [State of the Union](#) address by President Bush

<sup>4</sup> Frontline, Investigation Finds [Exxon Ignored Its Own Early Climate](#) Change Warnings

<sup>5</sup> The Future Arrives for [Five Clean Energy Technologies](#) – 2016 Update

The town has undertaken many efforts to reduce its impact on the environment and has had modest success in making reductions.

What many fail to consider is just how much energy we consume. When we fill up at the pump or pay our home's utility bills we only see the energy we are directly consuming without calculating the total impact from producing the energy. As a wealthy suburb, Concord's per capita energy consumption is greater than the average as a result, in part for example, of larger, air conditioned homes and newer, larger vehicles that burn more fuel as we commute to jobs in the city.

When asked "what is your carbon foot print?" in addition to direct energy consumption, indirect energy consumption must also be included. The services we hire, vacations we fly to, the products we buy and the food we eat and the production of these goods and services, all emit large amounts of GHG to fulfill our needs. Unlike direct energy purchases, the environmental impact of these decisions is very hard to quantify. The embedded energy consumed within these products and services can be far greater than what we see in our utility bills.

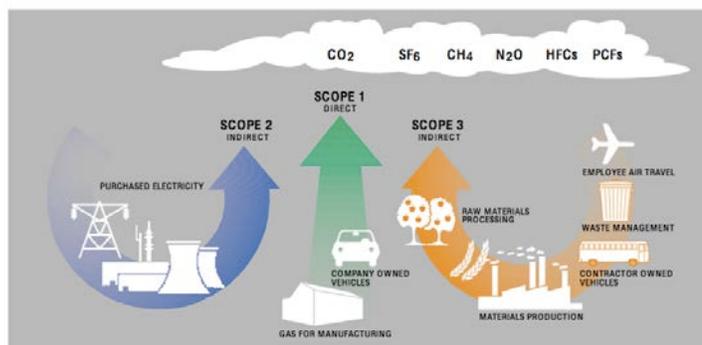
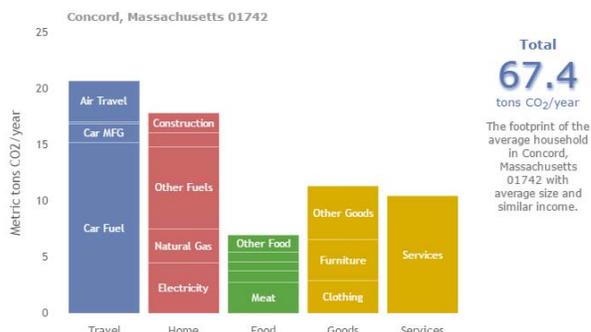
For example, the [Berkeley Carbon Footprint Calculator](#) shows the US household national average of 48.5 metric tons of CO2 emitted per year. Concord's average household emits 67.4 metric tons of CO2 emitted per year or 139% of the US national average. [need citation] Additionally, as a country the US is the world's second largest CO2 emitter. While China's total CO2 emissions are higher than the US their population is larger too. The average US citizen emits 170%<sup>6</sup> more CO2 than the average citizen in China and Concord is 39% higher than the US average. [need citation]

Setting a goal to reduce Concord's carbon footprint will require measurement of energy units consumed and to establish a baseline year. This will clearly define what we hope to accomplish in quantifiable terms.

### Who should be included?

When considering "Concord's carbon footprint" the Task Force is referring to the municipal buildings and services as well as all other sectors and all individuals who live and work in town.

### How do we measure?



<sup>6</sup> [Each Country's Share of CO2 Emissions](#) - Metric Tons of CO2 per Person US 17.62 / China 6.52

The [Greenhouse Gas Protocol](#) offered a good way to separate the accounting of emissions into three categories<sup>7</sup>.

1. Direct GHG (scope 1). These are the fuels we buy and combust in town like home heating fuel and gasoline.
2. Energy Indirect GHG (scope 2). These are the fuels we buy like electricity where the combustion happens far from town.
3. Other Indirect GHG (scope 3). These are the products or services we buy.

Concord has direct control over and the ability to measure scopes 1 and 2. Direct GHG emissions can be tracked as fuel is purchased by residents, businesses and town government. Town government already tracks its GHG through the Massachusetts Green Communities<sup>8</sup> program. In addition, Concord is uniquely positioned to directly control the emission that comes from electrical generation<sup>9</sup> through the Light Plant's power supply portfolio and management of Class I Renewable Energy Certificates (REC) in the Massachusetts' Renewable Energy Portfolio<sup>10</sup> Standard (RPS).

It is difficult to accurately measure the GHG emitted from the things we buy and the services we hire. The best Concord can hope to do is educate residents and business owners to identify products and services have more (or less) embedded energy (GHG emissions) in them. [iphone example?]

### Concord's Carbon Footprint

Using the data collected from many sources, the Comprehensive Sustainable Energy Committee (CSEC) has restated the 2011 Concord Master Energy Plan findings of Concord's 2008 town wide carbon footprint and compare this to Concord's 2015 town wide carbon footprint. The comparison showed a 9.9% reduction in measurable CO2 emissions over 7 years. This is not Concord's total carbon footprint as data on some direct fuel purchases are not accounted for and the GHG emissions impact of the products and services we buy is too difficult to quantify.

Measured CO2	2008 restated	Metric Tons CO2	2015	Metric Tons CO2	7 Year Change
Scope 1					
Natural Gas	8,827,929	51,643	10,001,119	58,507	+6,863 /

<sup>7</sup> [High level examination](#) of [The Greenhouse Gas Protocol](#) use of scope

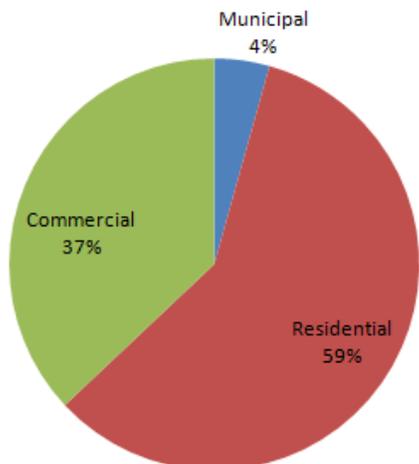
<sup>8</sup> [Massachusetts Green Communities](#)

<sup>9</sup> Concord Light [power supply portfolio](#)

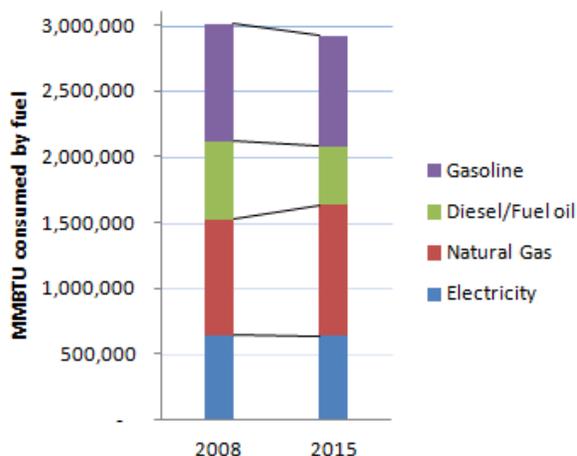
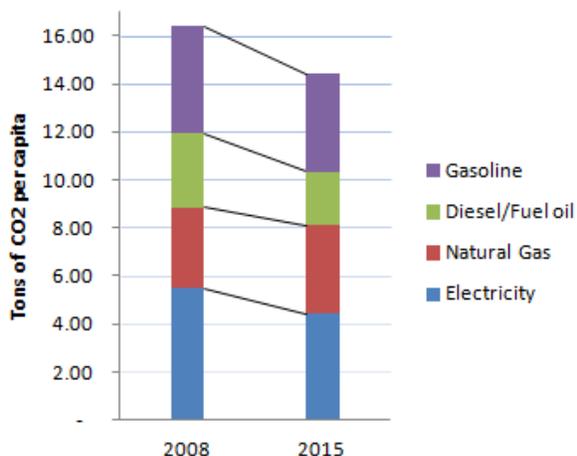
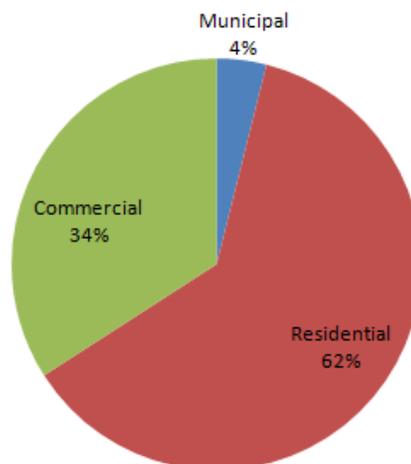
<sup>10</sup> Massachusetts' [Renewable Energy Portfolio](#) Standard (RPS)

					+13.3%
Diesel/Heating Oil	4,239,267	47,056	3,174,281	35,235	-11,821 / -25.1%
Propane	Complete Data	Not Available	Complete Data	Not Available	
Gasohol E10	7,208,673	68,302	6,814,625	64,569	-3,734 / -5.5%
Scope 2					
Electricity	188,427,559	83,850	182,541,437	69,640	-14,211 / -16.9%
Scope 3					
Goods & Services	Complete Data	Not Available	Complete Data	Not Available	
Total CO2		<b>250,852</b>		<b>227,949</b>	<b>-22,902 / 9.9%</b>
Population	15,300	16.40	15,798	14.43	-1.97 / -12%

2008 - 250,852 Tons of CO2



2015 - 227,949 Tons of CO2



To better understand Concord’s carbon footprint, consider the 227,949 Metric Tons of CO2 each year as a minimum value. The calculations used represent only the CO2 content and do not give full weight to the fugitive (that is, unintended, such as leaks) CH4 and N2O emissions. Additionally, they do not incorporate the purchasing data on direct energy consumption of vehicle transported fuels. (Propane, Diesel/Heating Oil and Gasohol E10) 227,949 Metric Tons is equivalent to **XX** number of high schools each year by weight. [alternatively 227,949 Metric Tons is equivalent to the weight of the Sears (now Willis) Tower in Chicago. Once I hear back in the weight of the high school I’ll enter that value.]

The Berkeley Carbon Footprint Calculator estimates that the average Concord household generates 67.4 tons of GHG per year when using all three scopes of the GHG Protocol. That is a carbon footprint of 437,021 tons per year<sup>11</sup> for only the residential sector which accounts for 62% of Concord’s total GHG emissions.

<sup>11</sup> 437,021 Metric tons is calculated using the 2010 census data of 6,484 households in Concord times 67.4 Tons.

With the help of a consultant, the Task Force recommends Concord establish a town wide database for tracking Concord's carbon footprint and maintain this as we work toward the GWSA goal of an 80% reduction in GHG by 2050. Many carbon tracking programs exist. Concord is currently using the Mass Energy Insight web-based tool<sup>12</sup> for tracking direct fuel purchases in the municipal sector as part of the state Green Communities program. This is an excellent tool for tracking direct fuel and electricity purchases (scope 1 and 2) but is limited to the municipal sector which accounts for approximately 4-7% of Concord's energy use. It is also unclear if this tool could be made available to residents and business owners.

In 2009, Concord became a member of the International Council for Local Environmental Initiatives (ICLEI).<sup>13</sup> The ICLEI offers the US Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions. This is a comprehensive methodology for tracking town wide GHG emissions. The ICLEI protocol offers GHG Protocol compliant emissions inventories, emissions forecasting, cost and benefit analysis for GHG reduction initiatives and guidance and training through a web portal. The town of Wellesley<sup>14</sup> actively uses the ICLEI system so Concord can learn from their experience.

[Massachusetts Greenhouse Gas Emissions Reporting Program](#) also offers many resources for creating a GHG inventory for Concord that is compliant with the states GWSA. For data on the states progress toward the GWSA see the states [Greenhouse Gas \(GHG\) Emissions reports](#). A GHG reporting system like Mass Energy Insight or the ICLEI protocol is needed to quantify the town wide GHG emissions Concord can control. Once this measuring tool is fully implemented Concord can better track progress toward the GWSA goal of an 80% reduction in GHG emissions by 2050.

### **Retiring RECs to Claim Renewable Attributes**

In early February 2016, the Concord Journal posted an article titled "[Concord's energy plans raise questions](#)" which called into question Concord Municipal Light Plant's (CMLP) claim that "Concord receives 20 percent of its electricity from renewable sources." CMLP does contract 20% of its generation from renewable sources like solar, wind, landfill gas and hydro<sup>15</sup> but, to reduce cost, CMLP does not retire the related Renewable Energy Certificates (REC). A REC as defined by the Massachusetts Renewable Energy Portfolio Standard (RPS) is "The positive environmental attributes associated with this clean energy production."<sup>16</sup> By selling the REC associated with the renewable generation, CMLP's claim that it provides "renewable" electricity is inaccurate. CMLP has traded the "renewable" claim to one of Massachusetts' investor owned utilities (IOU) and, in turn, taken credit for conventionally sourced electricity. This practice effectively causes double counting.

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<sup>12</sup> [Municipal Carbon Footprint Reports](#) and [Mass Energy Insight web-based tool](#)

<sup>13</sup> The [International Council for Local Environmental Initiatives](#) (ICLEI) Greenhouse Gas (GHG) Protocols

<sup>14</sup> ICLEI testimonial from [Wellesley, MA](#)

<sup>15</sup> Concord Lights [Power Supply Portfolio](#)

<sup>16</sup> DOER [RPS and APS Program Summaries](#) – What are REC?

Carbon Offsets like Renewable Energy Certificates (REC) represent a reduction in greenhouse gas (GHG) emissions from an individual project that can be used to reduce emissions from other sources. Though both represent emissions reductions, Carbon Offsets are commonly used to offset emissions from direct fuel purchases (Scope 1) but can be used to offset emissions from electricity (Scope 2). Renewable Energy Certificates can only be used to offset emissions from electricity (Scope 2). For more information on the proper use of carbon offsets and renewable energy certificates, see The Center for Resource Solutions report titled "[Renewable Energy Certificates, Carbon Offsets, and Carbon Claims](#)" as shown below.

Fuel	Used	Rate	Fuel Units to lb. CO2	lb. CO2	
Electricity	11,426	0.726 lbs CO2/kWh		8,295	
REC Retired (not sold)	12	-726 lbs CO2/MWh		-8,712	<-- claim of 100% Renewable Electricity
Net Electricity				0	<-- Can't go below zero lb.
Electricity after REC Retired				0	
Gasoline	195	19.6 lbs CO2/gallon		3,822	
Natural Gas	321	11.7 lbs CO2/therm natural gas		3,756	
Oil	0	22.61 lbs CO2/gallon oil		0	
Propane	5	12.43 lbs CO2/gallon propane		62	
CO2 Footprint				7,640	
CO2 Footprint				7,640	
Purchased Carbon Offsets	3.5	-2205 Metric Tons of CO2		-7,718	<-- claim of Net Zero CO2
Offset CO2 Footprint				-78	

### C. Energy and Sustainability Planning

#### **Sustainability Principles**

To acknowledge the responsibility of the Town of Concord to plan for a resilient and sustainable future, on July 25, 2011, the Concord Select Board voted to adopt the following four sustainability principles (based on the American Planning Association's 4 Sustainability Objectives- see Appendix D):

1. Reduce dependence upon fossil fuels, underground metals, and minerals;
2. Reduce dependence upon synthetic chemicals and other manufactured substances;
3. Reduce encroachment upon nature; and
4. Meet human needs fairly and efficiently; and to ask the Town Manager and Department Heads to report on methods and successes in implementing sustainable principles and balancing reductions in order to meet human needs fairly and efficiently.

The Select Board adopted Sustainability Guidelines in 2011 as a filter for decision-making by town officials. This act raised the awareness of citizens and town employees for the importance of making sustainable choices as the Town invests in the future. Concord's governance structure controls the municipal sector and it is the municipal sector that the town funding directly affects. However, Concord is more than its municipality. Concord is a "system"

that supports all of the people who live within its boundaries as well as the natural and physical environment they enjoy. To achieve the bold goals that are recommended herein, it will require a systems approach to achieve the innovative integration of choices to move Concord to a low carbon future.

### **Municipal Energy Planning Leadership**

The Town Manager has provided constructive leadership across the municipal departments within Concord to engage the Directors in making sustainable choices in other sectors. In regular intervals, Concord's town departments develop evaluative reports and forward-looking strategies with participation and input from citizens. A sample of these include:

- Comprehensive Long Range Plan of 2005 (a renewed long range plan committee was formed in 2016 to write the sequel),
- Open Space and Recreation Plan 2015
- Building Local Food Connections 2012
- Healthy Concord, Creating a Healthier Community with Stickiness 2014  
<http://concordma.gov/DocumentCenter/Home/View/3176>
- Housing Production Plan 2016
- Healthy Communities 2015
- Wastewater Task Force 2008
- Zoning Bylaw amended April 2016

January 2017 Summary of activities to date **(more to be added?)**

Members of the Task Force interviewed the Town Manager and the Senior Management Team including the Directors of Town departments and were briefed on the sustainability and energy conservation practices presently employed. As part of this conversation "obstacles to progress" were discussed. Obstacles include: **XXXX**

### **Energy Conservation and Sustainability**

Concord has a track record of taking energy conservation seriously. In addition to the focused energy conservation strategies employed by the Concord Municipal Light Plant and conservation initiatives supported by other Town departments such as Reuse Recycle Renew, there are many volunteer citizen groups that are working to raise public awareness for choices that citizens of Concord will make together to improve the environment and decrease the speed of climate warming.

### **The Concord Sustainable Energy Committee (CSEC)**

At the municipal level, The Concord Sustainable Energy Committee (CSEC) was established in 2007 to assist the Town in identifying, designing and implementing projects in town-owned buildings that fostered energy conservation, energy efficiency, and renewable energy generation. In 2009, The Sawyer Trust made a \$1.7 million donation to the Town to be used to fund energy-efficient project in municipal facilities. Since that time, CSEC has worked with town officials to oversee the expenditures of this donation with the approval of the Town Manager. Over \$1.5 million in energy-efficient projects have been realized with annual operational

savings and reports on this progress are documented in the Annual Reports of the Town. The Sawyer Trust gift has been depleted and has been replaced with a modest contribution in each budget cycle to a Sustainability Fund overseen by the Town Manager for use in funding on-going projects.

CSEC has sponsored community wide initiatives to improve Concord's energy performance and reduce greenhouse gas emissions such as Green Communities, Green Your Heat Project, and the Solar Concord Challenge. To achieve success with these initiatives, CSEC has applied for and received state grant funds to invest in energy savings projects in Concord. Identifying funding sources outside the traditional Town budget process has been critical to the success of these projects and identifying revenue sources will continue to be a significant catalyst to Concord's ability to move rapidly in the direction of reducing greenhouse gas emissions. The Select Board adopted Sustainability Guidelines in 2011 as a filter for decision-making by town officials (see Appendix D). This act raised the awareness of citizens and town employees for the importance of making sustainable choices as the Town invests in the future. It is the municipal sector that the town funding directly impacts, and the Sawyer Trust investments were made directly for municipal facilities. However, Concord is more than its municipality. Concord is a "system" that supports all of the people who live within its boundaries as well as the environment they enjoy. To achieve the bold goals that are recommended herein, it will require systems thinking to achieve the innovative integration of choices to move Concord to a low carbon future. This report urges more robust integration and systems thinking across all departments and the use of improvements in low carbon electricity to make significant strides towards the goals.

### **Green Communities**

Concord applied for and received the Green Communities designation in 2013. With this designation, it became possible for Concord to apply for grant funding to be used for sustainable initiatives. The requirements for Green Communities were adopted including 1) As-of-right siting and expedited permitting for renewable energy facilities, 2) the electric Stretch Code requirements for building construction and major renovations, 3) an Energy Reduction Plan to reduce Concord's municipal energy consumption in 5 years by 20% from 2011 baseline, 4) Purchase only fuel-efficient vehicles. The Green Communities designation has reinforced the partnership between the town and schools in the prioritization of projects for funding that will achieve the highest energy efficiency payback. This is an example of the systems approach to achieve benefit to the system as a whole.

### **Planning for Sustainability and MAPC, MAGIC and HATS**

The American Planning Association's Policy Guide on Planning for Sustainability was the basis for the Board of Selectman's Sustainability Principles adopted in 2011. Within these Principles are action items for land use, transportation, housing and buildings, economic development, open space and recreation, infrastructure, growth management, resource conservation, floodplain management, watershed planning and management, and education.

<https://www.planning.org/policy/guides/adopted/sustainability.htm>

Concord participates with neighboring towns as a member of MAPC (The Metropolitan Area Planning Council) and of MAGIC (Minuteman Advisory Group on Interlocal Coordination), a regional subgroup of MAPC representing 14 towns in the SUASCO (Sudbury Assabet and Concord rivers) watershed area.

The Metropolitan Area Planning Council (MAPC) supports initiatives by its members. The Sustainable Communities Program supported land use studies and sustainable initiatives within member towns funded by a grant from HUD resulting in action plans across sectors to improve equitable access to housing and jobs and practice in regional solutions.

<http://www.mapc.org/sites/default/files/Sustainable%20Communities%20Accomplishments.pdf>

In addition, The MAPC Regional Climate Change and Adaptation Strategy advises each municipality to “consider climate change adaptation and mitigation given the magnitude of climate change impacts on the environment, developed areas and infrastructure, the economy and public health in the Boston Metropolitan region”.

<http://www.mapc.org/regional-climate-change>

In May 2015 the 14 cities and towns of the Metropolitan Mayors Coalition (of which Concord is not a member) pledged to achieve Net Zero Carbon-free status by 2050 with interim implementation steps.

Importantly, the sectors identified within this agreement include Buildings, Transportation, Renewables, Energy Efficiency, Municipal Facilities, and Waste.

<http://www.mapc.org/metro-mayors-coalition>

In October 2016 the MAGIC Climate Resilience working group focused on the vulnerabilities of our communities in the areas of water infrastructure, transportation, energy, land use, habitat, health and welfare, healthcare, agriculture, tourism, and local government. All are integrated sectors that together maintain the security, safety and abundance of the life we share in Concord.

[http://www.mapc.org/sites/default/files/VA\\_AM\\_Discussions.pdf](http://www.mapc.org/sites/default/files/VA_AM_Discussions.pdf)

Additionally, Concord engages with neighboring towns in setting goals and developing programs to meet sustainability goals through. The Hanscom Area Towns Committee (HATS) is an alliance of Concord, Lincoln, Bedford, and Lexington dedicated to addressing matters of common concern, especially with regard to development at Hanscom Field. Collaborating on sustainable energy practice is gaining momentum among these towns.

[www.hanscomareatownscouncil.com](http://www.hanscomareatownscouncil.com)

## V. Concord Municipal Light Plant: A Critical Role in Enabling Realization of GHG Reduction Goals

Concord is one of forty-one communities in Massachusetts with a municipally-owned electric utility. This provides Concord with a unique opportunity to ensure that the town's electric utility, the Concord Municipal Light Plant (CMLP), is appropriately aligned with the town's GHG emission reduction goals and provides the community with an effective lever for realizing these goals in a financially prudent manner.

In some ways, Concord's GHG challenge can be understood in terms of transitioning to a clean energy economy. The World Resources Institute has described this transition in terms of three pillars, all of which CMLP can have a critical role in promoting: (1) end-use fuel switching to electric sources— focusing in particular on heating and transportation; (2) decarbonization of electricity – increasing the proportion of CMLP's power supplies provided by renewable and non-carbon emitting resources; and (3) energy efficiency- reducing electricity and overall energy consumption.

Our review of the opportunities offered by CMLP as a vehicle to assist the Town in achieving its GHG emission reduction goals as outlined in this report, is framed in terms of these three pillars. However, the report first reviews CMLP, its customers, power supplies and electricity rates.

### A. Overview of CMLP

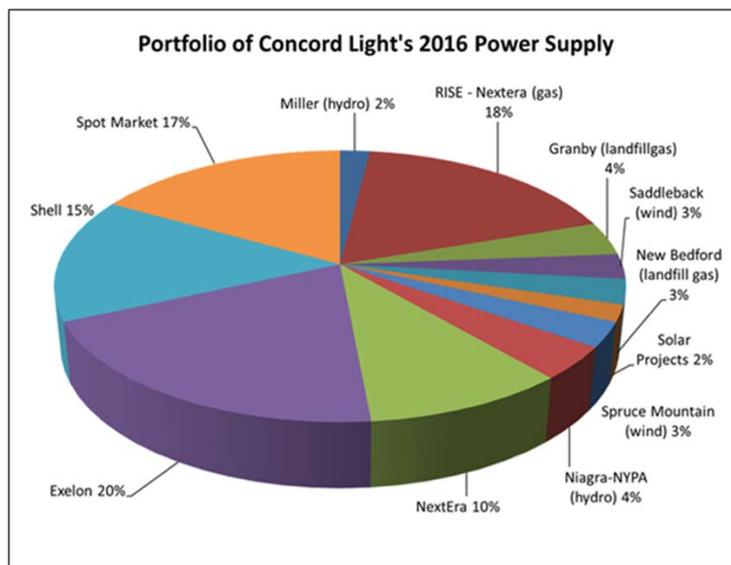
CMLP has two classes of customers: Residential and Commercial. The Commercial segment includes Institutional and Municipal customers. In 2016 Residential sales made up approximately 45% of the total sales, while Commercial and Municipal made up the remaining 55% as measured by revenues. CMLP's total sales were approximately \$24,509,000 or 171,000 Mega Watt hours (MWh).

CMLP presently has 8,300 customers. There are 260 net metering customers with approximately 2.5 Mega Watt (MW) of total capacity of privately owned solar arrays, which represents 28% of the total solar capacity in town. The town currently contracts with third party vendors through power purchase agreements (PPA) totaling 9MW of solar. This represents 72% of total solar capacity in town and 23% of peak demand in 2016.

CMLP doesn't own any generation facilities; it purchases all of its electricity supply from third parties or the market. The pie chart below illustrates the power supply resources that CMLP utilized in 2016. CMLP currently purchases approximately 21% of its energy requirements from non-carbon emitting sources.<sup>17</sup> CMLP is considering creating a Green Power purchase option which will enable customers to purchase and retire Renewable Energy Credits (RECs). CMLP's renewable energy procurement practices are discussed further below.

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<sup>17</sup> CMLP does not presently retire the Renewable Energy Credits for the renewable resources which it purchases. The implications of this is discussed below.



## B. Rates

### **Current rate system explained**

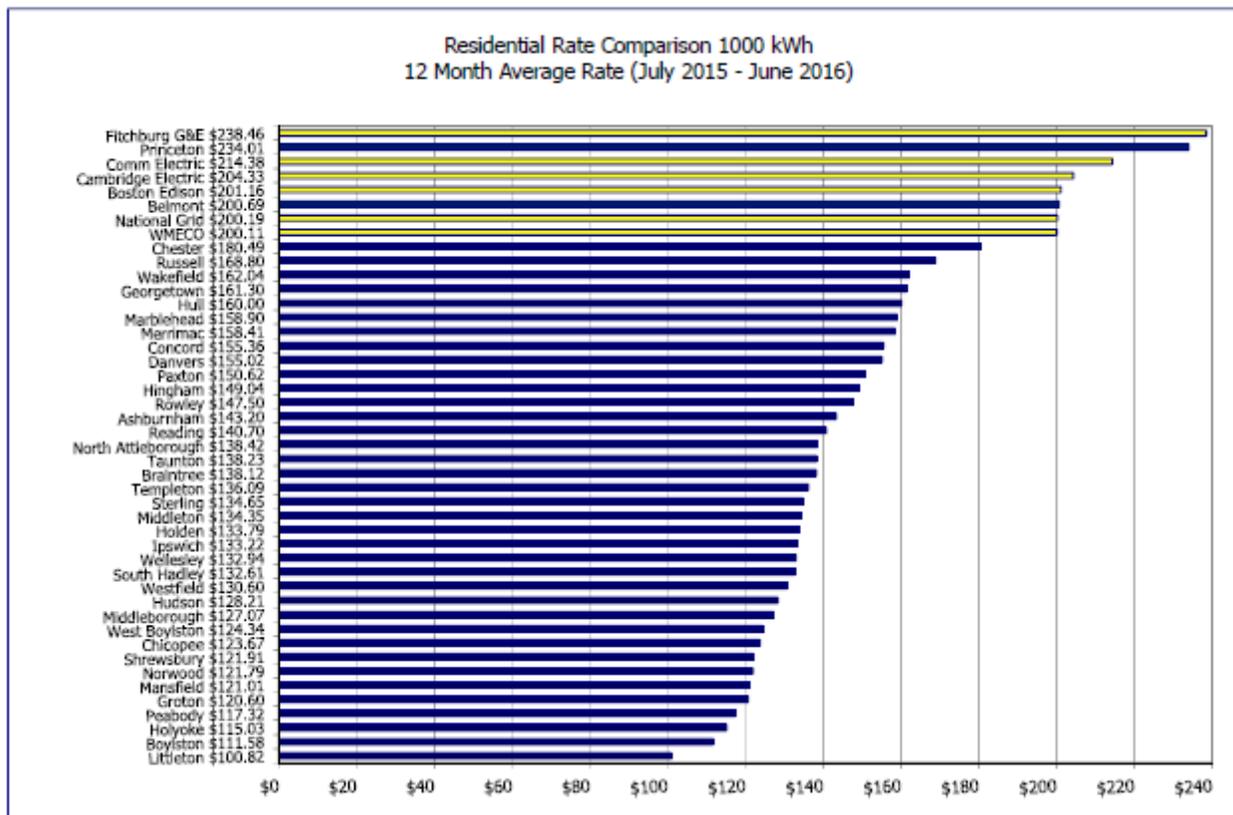
CMLP relies on the revenue from the sale of electricity to cover the cost of operations and energy purchases. As a municipal light plant, CMLP is subject to Chapter 164 of the Massachusetts General Laws, which among other things limits the profit that can be realized in any year. The purpose of rate setting is to match total annual revenues with the total cost of operations including a modest profit. CMLP has a Light Board composed of town residents, who are appointed by the Town Manager to oversee CMLP's electric rates. To ensure revenues and costs are aligned, CMLP has undertaken a cost of service study every 3 to 5 years. The most recent study was completed by Energy New England (ENE) in January of 2015.

### **The rationale for our current rate system**

When setting rates, consideration is given to reliability, efficiency, cost of energy, fairness and the long term financial sustainability of the light plant. In addition, CMLP has historically tried to avoid abrupt rate increases. To do so CMLP has undertaken two strategies: employ Power Cost Adjustments (PCA) and Rate Stabilization Funds throughout the year and from year to year.

In 2006, 2008, 2010, 2012, and 2014, the Town conducted a survey of Concord residents to gauge the level of satisfaction and overall impression of the cost of electrical service (the rates). This included the question: "What is your opinion of the price of electric rates?" In 2014, 29% of the responders thought that the price is a Good Bargain and 60% thought that it is Reasonably Priced, while 11% thought it was Excessively Priced. Historically, CMLP rates consistently rank in the middle of the pack when compared to other municipal light plants state wide. The figure below indicates that at a consumption level of 1,000 kWh per month, CMLP's rates are at about the top one-third (16 out of 45), but almost 25% below National Grid and Eversource (serving

Carlisle) the two largest investor-owned utilities that serve much of Massachusetts.<sup>18</sup> CMLP is the only municipal light plant whose rates include a cost for undergrounding all electrical and communications utilities.



In 2013, at the request of the Light Board, the Light Plant unbundled the components of the monthly utility bills so that customers could better understand the origin and nature of costs. These costs were broken down into the following components: Meter Charge, Energy Charge, Tier I Capacity and Transmission, Distribution Charge, Net Metering Distribution Charge, Rate Stabilization Fund, Underground Surcharge and Energy Conservation Charge.

### C. New Realities

Given the threat posed by climate change and the need for Concord to reduce our GHG emissions, it is essential that CMLP's rate structures promote conservation and reduce the reliance on carbon emitting fuels. The 2015 Paris Conference of the Parties (COP) and the adoption of the 2008 Global Warming Solutions Act (GWSA) demonstrates that the debate has shifted from: is climate change real to what are we going to do about it. Therefore, the EFTF recommends we acknowledge the true cost of our energy decisions and adjust our behaviors accordingly. To accomplish this the EFTF believes we must educate, empower and embrace a rate system that rewards energy conservation efforts and provides CMLP's customers with the

<sup>18</sup> The average CMLP residential customer uses about 859 kWh per month. At lower consumption levels, CMLP rates are more competitive.

tools to make informed decisions. This new rate system must also ensure the long term financial viability of CMLP.

### **CMLP's Strategic Planning Process**

In July 2015, the Concord Municipal Light's (CMLP's) Strategic Planning Team began meeting regularly to discuss how to continue to deliver the same reasonably-priced, highly reliable, socially responsible and friendly services (for which it is known) to its customers in the 21st century. In October 2016 CMLP engaged an energy industry consulting company to expedite and guide CMLP's strategic planning efforts. The consultant's scope of work is to suggest a list of sequenced strategic alternatives that will best meet CMLP's stated goals and provide examples of how other utilities have planned and implemented selected strategic initiatives. The consultant is directed throughout the scope of work to consider the short and long term goals and principles developed by the EFTF as well as CMLP's goals.

The first meeting with the consultant was held in mid-November. In the consultant's, RFP proposal, the consultant indicated the project would last approximately 22 weeks, meaning a conclusion in May 2017. There will be plenty of time for the consultant to incorporate the EFTF's recommendations if the final EFTF report is issued by February 15, 2017. In light of the scope and timeline for this work and its likely impact on CMLP operations and priorities and the fact that it will be considering EFTF's recommendations, to ensure that there is appropriate understanding of its work and the basis for its recommendations, EFTF strongly recommends that the Select Board and Town Manager ensure that there be appropriate opportunity for public input and an opportunity for the public to respond to comments and concerns raised by the strategic planning consultant in connection with this report's recommendations and goals.

### **D. Suggested Tools for achieving Concord's goals**

As discussed, there are a number of tools or strategies that can be employed by CMLP to assist the town in achieving its GHG emission reduction goals. One strategy is to increase the proportion of electricity that the Light Plant receives from renewable and non-carbon emitting resources. This is discussed further below. To facilitate the goals laid out in the GWSA and empower CMLP customers to make informed decisions, the EFTF recommends that CMLP adopt the following customer rate empowering tools:

#### **Employ Smart Meters town wide**

In November 2016, the Light Plant recommended and the Light Board voted to recommend the Town Manager request town approval to install smart meters' town wide. Smart meters would enable CMLP to better manage customers' electricity needs in four important ways: 1. Allow customers to report outages on line which will in turn expedite the resolution of the outage. 2. Simplify the billing process. 3. Enable the Light Plant to right size the distribution system and balance the load. 4. Use Demand Side Management (DSM), a means by which CMLP can engage with customers to help lower their bills with a centrally operated direct load control (DLC) system.

### **Revenue decoupling**

Recently several customers have requested the Light Plant and Light Board shift to a revenue decoupled approach to rate setting. Revenue decoupling separates fixed costs from those that vary by sales revenue. Each cost is in turn billed separately. All distribution system costs that change with sales volume would be collected with a per kWh charge. Revenue decoupled rates ensure the long term financial viability of the Light Plant regardless of total sales or resulting reduction due to conservation measures and increased adoption of distributed generation such as solar arrays.

Once Smart meters have been deployed town wide and revenue decoupling has been initiated, then the town can implement the following rate options:

### **Time of Use (TOU) rate structure**

EFTF believes it is important to empower our customers to make informed choices by adopting enhanced TOU rates. Time of Use Rates, as the name implies, vary based on the time-of-day, recognizing that the costs of serving customers varies over the course of the day based on the total demand on power grid. The objective is to set rates that reflect these cost differences and to allow customers to shift their energy usage to lower cost periods. CMLP currently has a Residential (R-1) TOU rate that is used by 16 customers. EFTF also recognizes that Critical Peak Pricing (CPP) may have a role to play in providing a strong price signal to reduce CMLP's peak demand and understands that the consultant that CMLP has engaged for its strategic initiatives study will be assessing CPP.

**Distributed Energy Resources (DERs)** and battery storage are smaller power sources that can be aggregated to provide power necessary to meet regular demand and help balance out the load throughout the day. As the electricity grid continues to modernize, DERs such as storage and advanced renewable technologies can help facilitate the transition to a smarter grid. Conventional power stations, such as coal-fired, gas and nuclear-powered plants, as well as hydroelectric dams and large-scale solar powered stations, are centralized and often require electricity to be transmitted over long distances. By contrast, DER systems are decentralized, modular and more flexible technologies, that are located close to the load they serve. These systems can comprise multiple generation and storage components. EFTF believes small scale, non-carbon emitting, DERs could play an important role in Concord's ability to lower its carbon emissions and transition to a more renewable, locally generated and stored power grid.

### **Pillar 1: End-use Fuel Switching with Increasing Electrification**

As discussed in the introduction to this section, increasing the reliance on electricity is a critical strategy to reducing GHG emissions. This includes using electricity to displace fossil fuels when used for heating and in the transportation sector.

**Shift homes from fossil fuels to heat by electricity** – Concord's Comprehensive Sustainable Energy Committee (CSEC) has initiated an effort to shift homes from oil or gas fired heating to efficient electricity heat sources such as mini-split heat pumps through their Green Your Heat program. Shifting fossil fuel sourced heating loads to the electrical grid will enable CMLP to

provide a non-carbon emitting alternative as it shifts its power portfolio to non-carbon emitting power supplies.

**Shift more transportation energy demands to the electrical grid** – As more Concord residents shift from internal combustion engine vehicles to electric vehicles the opportunity exists to provide that energy from non-carbon emitting, CMLP provided resources.

## **Pillar 2: Decarbonizing Electricity Through Renewable Energy Procurement**

Concord’s Comprehensive Sustainable Energy Committee (CSEC) estimates that 31% of the Town’s total GHG emissions in 2015, the largest from any fuel source, were attributable to electricity consumption within the Town.<sup>19</sup> A common and practical strategy for reducing these GHG emissions is to increase the proportion of CMLP’s electricity supply provided by renewable energy resources such as wind, solar, hydroelectric, or landfill gas. However, for CMLP to claim the emission reductions associated with the production of this renewable energy it must purchase and retire the renewable energy certificates (RECs) that are generated by these renewable energy resources.<sup>20</sup> CMLP currently sells, rather than retires, those RECs that it receives when purchasing qualifying renewable energy.<sup>21</sup> By reselling these RECs CMLP customers avoid paying the premium associated with renewable energy resources, but by doing so they aren’t able to claim any credit for promoting the development of these resources. To claim such credit and to promote the development additional Class I renewable energy resources CMLP would need to purchase and retire the Class I RECs. In CMLP’s 2011 *Renewable Energy Strategy*, the Light Board recommended: “that CMLP commit to increase the renewable energy portion of its energy supply portfolio from 10% in 2010 to 20% by 2015 and 30% by 2020.” (p. 4) As discussed, CMLP currently resells the RECs that it obtains from its Class I renewable power supply agreements to reduce electricity rates to customers.

As shown in the table below about 15% of CMLP’s power supply is provided by Class I renewable resources. CMLP only purchases the RECs for the wind plants. The RECs for the landfill gas plants are sold to other parties by the owner of these units.

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<sup>19</sup> Brad Hubbard-Nelson Presentation to EFTF, Concord Energy Baseline 2015, October 20, 2016.

<sup>20</sup> Massachusetts adopted a renewable portfolio standard (RPS) in the late 1990s when it restructured its electricity market. The objective of the RPS was ensure that environmental objectives were furthered with industry restructuring. The RPS puts an obligation on parties that serve electricity customers to ensure that an increasing proportion of their electricity supply is provided by renewable energy resources. The RPS obligated these suppliers to purchase and retire (they are retired so that they can only be used for compliance once) renewable energy certificates that would be generated by these renewable energy resources. If these RECs are resold then they can be used by another party to satisfy its RPS obligations and there is no incremental benefit attributable to the reseller of the RECs from the production of renewable energy.

<sup>21</sup> There are a range of classes of renewable energy resources. In Massachusetts the highest value class of renewable resources is Class I, other than solar PV, which is a “carve-out” or portion of the Class I program. Class I resources include wind, small hydro under certain conditions, landfill gas, and various other technologies (e.g., tidal, wave power).

<b>Project</b>	<b>% of Supply</b>	
Miller Hydro	2%	
Granby	4%	
Saddleback	3%	
New Bedford	3%	<b>Class I</b>
Spruce Mountain	3%	<b>15%</b>
<b>Solar Projects</b>	<b>2%</b>	
<b>Niagara - NYPA</b>	<b>4%</b>	
<b>Total All Renewables</b>	<b>21%</b>	

Under the Massachusetts RPS, suppliers of customers of investor-owned utilities (IOUs) must purchase Class I RECs equivalent to 12% of the electricity requirements of these customers as of 2017. This percentage increases by 1% per year, i.e., the requirement will be 13% in 2018. Customers of municipally-owned utilities (e.g., CMLP) don't have an RPS obligation. Recognizing that electricity supply in New England is provided on a regional basis and Concord residents benefit from the cleaner electricity that this procured for the benefit of customers of investor-owned utilities, a case can be made that Concord is a "free-rider" and not paying its fair share by not participating in the Massachusetts RPS. (All six New England states have RPS programs and as such are contributing to the expansion of renewable energy in the region.) To address this, one option would be for CMLP to commit to purchasing Class I renewables at same level as if it were serving customers of the Massachusetts IOUs. The EFTF estimated that CMLP's rates would have to increase by about 3.8% if CMLP were to purchase and retire Class I RECs for 12% of its electricity supply. Recall that CMLP's residential rates are currently about 25% less than those of investor-owned utilities. For an average residential customer this would be a bill increase of about \$4.93 per month.<sup>22</sup> This bill impact on an annual basis would represent less than .05% of the median reported annual household income in Concord.

Another alternative would be to allow customers to elect to purchase and retire RECs (renewable energy) and pay a premium for this. This is an opt-in approach and similar to a program that the town of Wellesley has implemented. The EFTF believes that such an approach may be appropriate, but only after CMLP has at least achieved the state's existing RPS obligation. Simply put, we don't believe that this is a reasonable alternative to CMLP committing to achieve the same renewable energy procurement obligations that the suppliers of Massachusetts IOUs face.

Therefore, the EFTF recommends that as a short-term goal CMLP should retire Class I RECs from renewable energy purchases or purchase Class I RECs to allow it to achieve the Massachusetts RPS goals that apply to suppliers of the customers of Massachusetts investor-owned utilities.

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<sup>22</sup> This is based on an assumed for of a Class I REC of \$35 and based on Concord's current customer requirements. Massachusetts Class I REC prices for 2016 compliance year on December 28, 2016 were reported to be \$19 and \$24 for 2017 compliance year, suggesting that this cost and rate impact estimate may be too high.

As indicated, CMLP would be able to comply with this recommendation by just purchasing Class I RECs. Therefore, this doesn't require fundamental changes to CMLP's power supply plan and given the available supply of Class I RECs this goal should be achievable in relatively short order. As discussed, the Massachusetts Class I RPS is scheduled to increase by 1% per year so that by 2030, Class I RECs would be required for about 24% of the electricity requirements of customers served by IOUs. In addition, the Massachusetts legislature in July 2016 passed legislation calling on these IOUs to procure 9.45 million MWhs of clean electricity generation and 1,600 MW from off-shore wind projects. These two procurement obligations are projected to represent about 40% of Massachusetts' total electricity requirements. Clearly, an increasing proportion of Massachusetts customers' electricity supply is to be provided by non-emitting resources.

The Sierra Club reports that Aspen, Colorado, Columbia, Maryland, and Greensburg, Kansas, are powering their cities today with entirely renewable sources. A dozen additional cities have made commitments to reach 100% clean energy in the next 15-20 years.<sup>23</sup> In addition, the city of Austin had a renewable energy goal of 35% of renewables by 2020 and 55% by 2025. However, a 2015 solar purchase will allow the city to realize 40% renewables by 2020. Texas wind and solar resources are much more favorable, resulting in lower costs for these renewable resources and lower costs to realize such a target. Fort Collins, Colorado has a goal for an 80% reduction in GHG emissions from utility-scale electricity by 2030. Boulder, Colorado has a goal to rapidly transition to an energy system and economy that is powered 80 percent or more by renewable, clean energy, with 50 percent or more produced locally.

This raises the question as to what is an appropriate long-term goal for Concord. As discussed, CMLP is one of the most effective vehicles that the Town has for realizing its GHG emission reduction goals. With CMLP able to purchase energy from the New England grid and RECs a convenient tool to promote the development of renewable energy resources. CMLP can increase its purchases of Class I RECs as a viable renewable energy procurement strategy. Consistent with our broader goals the aggressive actions that they dictate, the EFTF recommends that by 2030, as an interim target, 100% of CMLP's electricity supply should be from non-emitting resources with RECs or certificates for associated environmental attributes retired.

The EFTF has estimated that realizing this goal would require electricity rate increases of about 20 to 30%.<sup>24</sup> This is based on projected costs for Class I RECs of about \$35/MWh and assumes that electricity requirements would grow by 1% per year and total costs by 2.5% per year.<sup>25</sup>

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<sup>23</sup> Sierra Club, *Cities Are Ready for 100% Clean Energy: 10 Case Studies*.

<sup>24</sup> This analysis takes no credit for the clean energy resources (e.g., nuclear and existing hydroelectric power) that already exist in New England and provide about 30% of the region's total energy requirements. The availability of this non-carbon emitting generation will reduce the amount of fossil generation that will be displaced.

<sup>25</sup> This 1% growth in requirements is high if CMLP aggressively pursues energy efficiency measures as the EFTF has recommended. Furthermore, this analysis doesn't account for the fact that Massachusetts has aggressive targets for the procurement of non-emitting resources that could reduce the incremental amount of clean energy that CMLP would need to procure to achieve this target.

CMLP may wish to consider strategies to mitigate adverse rate impacts from this procurement strategy to low income customers.

The cost of realizing this goal would be reduced with major cost reductions in the clean energy technologies that would provide this energy. As a point of reference, solar costs today are one-third of what they were six years ago, and many experts project wind costs to decline by over 20% by 2030.<sup>26</sup> Similar dramatic cost declines are being experienced and are forecast to continue for energy storage technologies, which can play a critical role in reducing the costs of integrating additional amounts of renewable energy.<sup>27</sup>

One risk to such a procurement strategy would be the loss of large customers to other communities with lower power supply costs and the potential for shifting of the fixed costs paid by the lost customers to the remaining CMLP customers. The cost impact that we have estimated doesn't consider the likely increases in costs in other communities as they comply with state clean energy (non-GHG emitting generation) mandates or pursue their own clean energy procurement strategies. For example, the Massachusetts Class I RPS requirement is scheduled to increase to 25% by 2030 and Massachusetts has called for the procurement of 9.45 TWh of clean energy generation by 2022. Therefore, the EFTF believes that the risk of major customer losses is low.

Another issue that has been raised with respect to this goal is whether it is achievable, i.e., can CMLP procure 100% of its energy requirements from such clean energy sources? CMLP's energy requirements are a miniscule percentage (slightly more than 0.001%) of New England's total electricity requirements. This implies that early action by CMLP will not affect the broader New England electricity market and there might in fact be first mover advantages, with the ability to lock in attractive opportunities (e.g., a long-term supply agreement with a hydroelectric supplier) when there is less competition from other buyers. Experience indicates that achieving higher penetration levels of renewables is easier for larger, better interconnected, and more diverse electricity systems. Finally, with the purchase and retirement of Class I RECs an effective strategy for promoting the development of non-emitting Class I renewable resources, CMLP could achieve this goal by purchasing and retiring RECs. Alternatively, CMLP doesn't need to assemble a power supply portfolio that provides renewable energy in all hours of the year; it can use the purchase and retirement of RECs as a compliance strategy.

### **Pillar 3: Promote Increased Energy Efficiency**

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<sup>26</sup> This 1% growth in requirements is high if CMLP aggressively pursues energy efficiency measures as the EFTF has recommended. Furthermore, this analysis doesn't account for the fact that Massachusetts has aggressive targets for the procurement of non-emitting resources that could reduce the incremental amount of clean energy that CMLP would need to procure to achieve this target.

<sup>27</sup> One major energy storage developer recently indicated that the costs of lithium-ion batteries have dropped 70% in the 18-month period ending in June 2016.

Energy efficiency can mean many things. The EFTF has defined energy efficiency broadly, encompassing the full range of measures, behaviors, and programs that reduce energy consumption. Electric utilities such as CMLP have had a role in the delivery of energy efficiency programs since the 1980s. With dramatic increases in the costs of fossil fuels in the 1970s and large capital investments that significantly increased rates to electricity customers, regulators and policy makers sought to ensure that energy efficiency was considered alongside other traditional investments (i.e., the construction of large power plants) or procurement alternatives.

Energy efficiency is often the least cost “supply source”, i.e., it can cost less to implement energy efficiency measures than more traditional power supplies. In fact, the design of energy efficiency programs is focused on ensuring that they are “cost-effective” or that the value of savings is greater than the costs of the program and the costs incurred by customers for the measures.

Energy efficiency has a critical role to play in assisting Concord in achieving its GHG emission reduction goals given that energy efficiency avoids CO<sub>2</sub> emissions from fossil fuels that otherwise would be burned. Fossil fuels are typically the “marginal resource” in terms of electricity supply, i.e., the highest cost supply source and the resource that would be displaced by energy efficiency. A recent study by an energy efficiency advocacy organization indicated that through energy efficiency some states could meet over 25% of the GHG emission reduction goals in the U.S. EPA’s Clean Power Plan.

Furthermore, among the lowest cost forms of energy efficiency can be the purchase of more efficient appliances (e.g., high efficiency air source heat pump). With many of these appliances and investments having long-useful lives, it is important to ensure that energy efficiency receives appropriate attention now to assist Concord in achieving its long-term GHG emission reductions goals at the lowest possible cost. Therefore, for Concord to achieve the GHG emission reduction goals, we are recommending that CMLP’s energy efficiency programs be highly effective and promote the adoption of energy efficiency measures where cost-effective recognizing the social cost of carbon<sup>28</sup>

CMLP offers energy audits whereby customers can have their home evaluated for possible energy efficiency measures. This program is administered by Energy New England (ENE), whom CMLP funds and has an ownership interest. These ENE administered energy audits only cover electric end uses and in some instance oil heat. Customers must contact the Mass Save program administrators to have an energy audit that is focused on natural gas end-uses. Requiring a second call is a barrier to the delivery of energy efficiency. To ensure that customers take advantage of these programs they should be simple to participate in, e.g., require one phone call for all possible energy efficiency measures to be considered. Customers are likely to focus on the fuels that represent the biggest cost. For CMLP customers with natural gas heat, this is likely to be natural gas and result in the customer calling the Mass Save

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<sup>28</sup> The social cost of carbon has been estimated by the US Environmental Protection Agency to be \$39/ton

program for an energy audit. The Mass Save audits for Concord residents don't address electricity end-uses (e.g., lighting, refrigeration, air conditioning, etc.) Requiring a second audit reduces the likelihood that customers will take advantage of these services and realize the energy efficiency savings offered. While this could be viewed as a "cost" of being served by a Municipal Light Plant, with many offsetting benefits, the EFTF believes that this barrier to the development of Concord's cost-effective energy efficiency potential should be addressed. Interestingly, Wellesley Municipal Light Plant partnered with National Grid, the local natural gas supplier and an investor-owned utility, to offer no-cost energy audits to 400 customers. Therefore, the EFTF recommends that the Town Manager direct CMLP to consider alternatives to reduce barriers to the adoption of energy efficiency measures including having separate energy audits from Massachusetts investor-owned utilities.

Massachusetts investor-owned utility<sup>29</sup> energy efficiency programs are administered jointly and cover all end uses. These programs are funded through: (1) a .25 cent/kWh System Benefits Charge (SBC); (2) revenues from the Regional Greenhouse Gas Initiative ((RGGI) a CO<sub>2</sub> cap and trade program for the electricity sector);<sup>30</sup> and (3) other possible revenues including an energy efficiency surcharge where necessary. In 2016, the total statewide program funding from electricity customers was about \$692 million, with about 17% from the SBC, 8% from RGGI, 8% from other sources and 67% from additional on-bill charges of about 1 cent/kWh. In contrast, CMLP's Energy Conservation Charge is about .52% of the total current charges billed excluding the finance charge and sales tax. This compares to 1.5% for the Underground Surcharge. CMLP raises about \$120,000 through this charge and contributes another \$100,000 for conservation purposes from power factor charges. The \$220,000 equates to about .13 cents/kWh, indicating that Massachusetts investor-owned utility (IOU) energy efficiency funding is about nine times the amount on per kWh basis spent by CMLP. The higher funding for these IOU programs has an appreciable impact on electricity rates. However, it is important to differentiate between electricity rates (cent/kWh) and the total electricity bill (\$). If the energy efficiency measures are cost-effective, over time customers will have higher electricity rates, but pay lower total bills. This indicates that customers will likely be better off since they are paying less for electricity in total and presumably receiving the same or better service. Energy efficiency programs offered by the Massachusetts IOUs are highly rated. These energy efficiency programs have for the last six years been ranked first among the 50 states by the American Council for Energy-Efficient Economy (ACEEE). ACEEE is a highly-regarded energy efficiency advocacy organization and its ranking for the state of Massachusetts is a testament to the quality of the energy efficiency programs offered.

The quality of these programs is evident in the depth of service offerings and their comprehensiveness. Reflecting the quality of these programs and the level of investment Massachusetts total electricity consumption is forecast to decline by -0.3% through 2025.

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<sup>29</sup> Massachusetts investor-owned utilities include Eversource Energy (formerly known as NStar) and National Grid. These two utilities are owned by private investors and have shares that are publicly traded.

<sup>30</sup> CMLP is only able to access RGGI Funding through grants. However, CMLP customers effectively fund RGGI. This is an inequity for municipal light plants in Massachusetts.

CMLP's programs are developed by a well-qualified team, but one which doesn't have the same level of resources as the Massachusetts IOUs. Given the lower level of funding and the inability to realize the economies of scale available to the IOUs, the scope of programs available to Concord residents is more modest than available to those of customers of the IOUs. However, the Town does benefit from shared resources for the design of energy efficiency programs with CMLP. Specifically, the capability that these individuals provide to CMLP with respect to the design and evaluation of energy efficiency programs is also available to the Town and to support its energy efficiency programs.

Therefore, the EFTF recommends that the Town Manager direct CMLP develop a comprehensive set of cost-effective energy efficiency incentives and measures that meet or exceed those offered by Massachusetts investor-owned utilities. We recognize that this investment will increase CMLP's rates, but believe this to an essential investment if the Town is to achieve its GHG goals and to do so in a least cost manner. Furthermore, higher rates will be offset by lower overall electricity bills as customers use less electricity.

## VI. Best Practices/Governance Opportunities

### A. Other Cities and Towns

The Task Force’s scan of “best practices” exhibited by other towns and cities identified many sources of information providing learning for Concord. Excerpts of these climate action plans developed by other cities and towns that may inform Concord’s choices to plan for a low carbon future may be found in the Appendix. In general, these action plans were developed with robust community input developed over several months and emphasize the importance of education to raise public awareness to initiate behavior change.

### B. Energy and Other Sectors

Concord is one of 41 municipalities in the Commonwealth that owns its municipal electricity plant. The value of independent municipal (muni) electricity has been lower cost power to rate payers and improved service as well as fair distribution of costs. A white paper published by MAPC in July 2016 spotlighted clean energy initiatives within the “muni” communities and offered several “lessons learned” and recommendations for communities with municipal electric plants. The conclusion that the success of clean energy initiatives depends on community involvement and that communities with municipal electric plants have the potential to implement “pioneering strategies” in renewable energy and energy conservation is pertinent to Concord.

[www.mapc.org/sites/default/files/MAPC\\_MLPWhitePaper\\_Jul2016.pdf](http://www.mapc.org/sites/default/files/MAPC_MLPWhitePaper_Jul2016.pdf)

Because Concord has control of the power purchase portfolio at CMLP it is in a strong position to advance the reduction of greenhouse gas emissions from the electricity it sells to its rate payers. By advocating that users migrate away from fossil fuels to electricity and that CMLP reduce greenhouse gas emissions from its electricity power supply is the most effective and expedient means to decrease emissions within the community. It is this rationale that forms a key basis of the EFTF recommendations and why the EFTF focused largely on the energy sector.

To achieve this overarching goal implementation tactics will be required including:

- Establish community-wide Net Zero goals and expectations
- Prioritize adapting buildings that use the most energy
- Generate solar energy in town without “paving over paradise” – use already developed sites and rooftops
- Identify and utilize opportunities for carbon sequestration.

### **Other Sectors**

Adapting to a warming climate is important for Concord to anticipate and recover from events such as droughts, floods, tornadoes, fire. Increased resiliency to climate change throughout Concord and the region will require strategic attention to sectors beyond the energy sector.

Within Concord's Sustainability Principles are implied action items for land use, transportation, housing and buildings, economic development, open space and recreation, infrastructure, growth management, resource conservation, floodplain management, watershed planning and management, and education. The Task Force recommendation for an integrated systems approach to reducing greenhouse gas emissions will require a strategy for change within sectors beyond the energy sector. During the next year, we recommend that attention be given to developing integrated strategies for reducing greenhouse gas emissions from these other sectors and to engaging the public in determining opportunities for individual action.

- Built Environment including permitting for new construction and renovations for municipal, schools, hospital, airport, commercial, industrial, residential structures
- Water Management including infrastructure
- Waste Management including transportation and reducing pollution
- Habitat including biodiversity and carbon sequestration
- Mobility including public transportation and alternative fuels and improved air quality
- Land Use Planning including Zoning, Smart Growth, Safe Streets and access to Affordable Housing
- Safety, Health and Welfare including street lighting, walkable streets
- Local Food sources including sustainable agriculture
- Municipal procurement
- Community Engagement including Education and Resources for residents
- Funding including grants and independent funding sources

### C. Legislation and Regulation

The Task Force catalogued government documents with implications for success in reduction greenhouse gas emissions. These are documented in the Appendix. Additionally, the Massachusetts Building Code and supplemental regulations are enforced in Concord. Legislation and Regulations enacted in the Commonwealth have direct implications for emissions. Following is a partial list of legislation and regulation that has had positive implications for greenhouse gas emissions in Massachusetts.

- MA Brownfields Act 1998 – created financial and liability incentives for cleanup and redevelopment of contaminated property
- MA Green Communities Act 2008 – created funding opportunities for communities complying with energy use reduction
- MA Stretch Energy Code 2009 – designed to improve energy efficiency by 20 percent over the base energy code
- MA Global Warming Solutions Act 2008

Looking ahead to the 2017-2018 legislative session, possible Legislative Advocacy Efforts may include:

- Revenue Neutral Carbon Tax sponsored by Senator Michael Barrett
- An Act promoting Zero Net Energy buildings sponsored by Senator James Eldridge
- An Act providing for Comprehensive Adaptation Management Plan in response to climate change sponsored by Senator Mark Pacheco
- An Act fueling job creation through energy efficiency sponsored by Senator Brian Joyce
- An Act promoting the use of total energy impact analysis sponsored by Senator James Eldridge

## VII. What We Heard from the Public

The importance of public input to the work of the Task Force cannot be overstated. Any effort to make large gains on carbon reduction is dependent upon willing public commitments. From the outset, the Task Force invited participation from people attending regular Task Force meetings and the three public meetings, through email, and participation in the on-line citizen survey. Response was strong with several dedicated attendees at regular meetings, between forty and sixty people at each community meeting and 129 respondents to the on-line survey. In addition to the above, the committee conducted five individual interviews with people of specific interest to the committee's work: Chris Whelan, Town Manager & Kate Hodges, Assistant Town Manager; Eric Stastny, VP of Operations at Emerson Hospital; John Flaherty, Deputy Superintendent of Concord Public & Concord-Carlisle Regional Schools; Brad Hubbard-Nelson, CSEC Board Chair; and Jane Obbagy, Concord Chamber of Commerce.

The notes from the public meetings and the results of the survey are included in the Appendix.

### A. At public meetings

The public meetings provided the Task Force the opportunity to engage in two-way conversation with stakeholders. Several themes flowed through the meetings as well as specific carbon emission mitigation recommendations.

The first public meeting was held at the Harvey Wheeler Community Center on June 22<sup>nd</sup>, 2016. After offering some insight into the Task Force plans and initial thinking, groups were formed to have brainstorming sessions. An overarching sentiment to "Be Bold" in recommendations for attacking GHG emission reduction was emblematic of the discussions. The notes from the group discussions are included in the appendix. Here are a few of the big themes recorded from the meeting:

- Focus on emission of all GHG not just carbon
- Utilize the opportunity to have direct control of electricity source via CMLP
- Address all sectors not just municipal aspects of Concord
- Identify goals that move toward a "net-zero" energy paradigm
- Move toward more low emitting electricity use – less fossil fuel use (i.e. electric vehicles, home heat pumps, electric yard equipment)
- Incentivize transitions to clean energy production and use
- Ensure citizen ability to produce energy through solar
- Have area of Town Operations specified to focus on these efforts

The Task Force's second public meeting was held October 20<sup>th</sup>, 2016 at Harvey Wheeler Community Center. The Task Force presented nine "Draft Recommendations" at the outset of the meeting:

1. Align Concord's Energy Future with the goals of the *MA Global Warming Solutions Act of 2008* and with the *Paris Climate Agreement of 2016*.
2. Sustain CMLP.
3. CMLP should work to offer a comprehensive set of cost-effective energy efficiency measures comparable to those being offered by MA investor-owned utilities.
4. CMLP should consider alternatives to reduce barriers to adoption of energy efficiency measures including having separate energy audits from MA investor-owned utilities.
5. CMLP should retire Renewable Energy Credits (RECs) from renewable energy purchases or purchase RECs to allow it to achieve MA Renewable Portfolio Standards (RPS) goals that apply to investor-owned utilities.
6. By 2030, 100% of CMLP's electricity supply should be from non-emitting resources with REC's or certificates for associated environmental attributes retired.
7. Identify and pursue opportunities for similar reductions in greenhouse gas emissions in other sectors of the economy.
8. Empower residents and businesses to be energy-wise.
9. Employ a Director of Energy to be accountable to the Town Manager for establishing policy and measuring progress toward meeting these goals and tracking and assessing new energy technologies and funding opportunities.

There was a consensus that the "Draft Recommendations" were in tune with where the audience wanted to take things, as far as they went. Several comments had to do with expanding the effort to include aspects of Concord's emissions profile that were outside the scope or effect of CMLP and town operations. A consideration of the built environment - housing, business buildings, conservation efforts within the built environment, preservation of open space and more public transportation - were all common themes. Most of the thoughts from the first meeting were existent in the discussion as well. Some of the newer ideas recorded include:

- Consistent interest in the Director of Energy/Sustainability/Emissions
- Varying ideas of how to reach 100% clean energy for CMLP’s power supply
- Concerns about cost of various recommendations
- Consideration for opportunities to work with other towns and districts to expand the positive effects
- “Citizens have to be willing to change behaviors and step up – we are responsible for our own behavior and what we do makes a difference”
- A very small percentage of townspeople have participated in this effort to date. We need buy in from most citizens to have truly impactful results.
- Strong interest in requiring stronger energy efficiency building codes
- Build out every bit of renewable energy generation capacity possible without damaging our environment
- Educate citizenry on what can and needs to be done
- “I feel like one thing I want to see is a philosophical direction to the next group. I’m not saying you must disrupt things for the sake of being disruptive. Let’s manage how the disruption works. One day it’s going to get really disruptive. I understand the dilemma. I want something here that says we might have to break some things; that how we interact as citizens might have to change.”

#### A. In the on-line survey

The Task Force created an on-line Citizen Survey. The survey included nine scale, six multiple choice, and two open response questions. The Task Force goal was to allow a larger number of people the opportunity to weigh in on some of the work being done. The survey received 129 responses. The two open response questions received 53 responses on one and 37 on the other. The full survey result data is in the appendix.

The aggregate data is shown in the table below;

QUESTION	AVG RESPONSE (scale 1-5, 5= most agree)
1. Align Concord's energy future with the goals of the Massachusetts Global Warming Solutions Act of 2008 and with the Paris Climate Agreement of 2016: 25% reduction in GHG emissions by 2020 and 80% reduction by 2050.	4.33
2. Sustain Concord Municipal Light Plant (CMLP) into the future.	4.46
3. CMLP should work to offer a comprehensive set of cost-effective energy efficiency measures comparable to those being offered by MA investor-owned utilities.	4.25
4. CMLP should consider alternatives to reduce barriers to adoption of energy efficiency measures including having separate energy audits from MA investor-owned utilities.	3.61
5. CMLP should retire Renewable Energy Certificates (REC) from renewable	3.05

energy purchase REC's to allow it to achieve MA Renewable Portfolio Standards (RPS) goals that apply to investor-owned utilities.	
6. By 2030, 100% of CMLP's electricity supply should be from non-emitting resources with REC's or certificates for associated environmental attributes retired.	3.80
7. Identify and pursue opportunities for similar reductions in Green House Gases (GHG) emissions in other sectors of the economy.	4.30
8. Empower residents and businesses to be energy-wise.	4.68
9. Employ a Director of Energy to be accountable to the Town Manager for establishing policy and measuring progress toward meeting these goals and tracking and assessing new energy technologies and funding opportunities.	3.61

The clear majority of respondents track or review their energy usage. Natural gas and home heating oil are the most prevalent means for heating homes. The average number of drivers in each household is 2.11. 19% of respondents' primary vehicle is full electric, plugin or standard hybrid. 50-60% of primary or second vehicles achieve 20-30 mpg. If CMLP offered time of use discounts respondents said 49% definitely, and 49% maybe, would change their usage patterns. As for whether people would pay more for electricity and by how much, the numbers are:

- 11% would pay 50% or more
- 14% would pay 25% more
- 27% would pay 15% more
- 28% would pay 5% more
- 19% would pay no more

All the open responses are listed in the appendix. In large part, they were similar to the comments made in the public meetings.

### B. Through emails

Most emails the Task Force received were from people who also attended meetings and the public meetings. The comments were helpful in providing thoughtful, documented commentary on the Task Force's proceedings and the results of those proceedings. Emails are in the appendix, and included here are some sample comments:

- The Task Force could consider organizing the work into the following categories:
  - Energy Supply and Alternatives (This includes the Light Plant Business Model, green energy generation on and offsite, etc.)
  - Regulation and Policy (This includes measures like a Building Energy Use and Disclosure Bylaw, building codes, zoning, requirements for efficiency upgrades at the time of sale, requirements for making new construction solar-ready, etc.)
  - Financing and Incentives
  - Community Engagement, Education and Behavioral Change
- Pain motivates us to change—but we won't feel it until it's too late. So, your work—our work—our efforts need to be very clearly on behalf of those people who will directly

experience the pain in its full force. We are the last of those who will get off so easily. Yes, we are afraid about the future, but our lives are still easy for the most part.

- Energy covers a very broad spectrum, and as mentioned by numerous previous commenters last night, includes many other sectors in addition to electricity, such as transportation, most home heating, water, agriculture, construction and more. My suggestion is to divide and conquer. Task forces are needed in each of these sectors to reduce carbon emissions and will require sector specific focus and expertise to find solutions.
- A focus on electricity makes sense for two reasons: electricity is the biggest source of carbon in Concord and green electricity is going to be the best way to deal with the other two large sectors - heating and transportation. A related point is that any progress we make with electricity is both measurable and immediately reduces CO2 emissions.
- At a high level, our group urges a focus for the Town's effort on CO2 emissions from electricity, natural gas, diesel fuel, and natural gas and we see electricity as the gateway to greener transportation and heating. We need to do two fundamental things: replace fossil electricity with green electricity and transition fossil devices to greener devices: EVs, heat pumps, LEDs, etc. This is a daunting effort and focus through measurable objectives is going to be critical. This seems to be consistent with the Recommendations of the Committee but there's always the temptation to add other areas which could make it more difficult to succeed with the overall mission.
- The goals that the Select Board will need to approve include both Town-wide emissions reductions (Paris agreement and GWSA) and 100% decarbonization of the CMLP by 2030. While the Town-wide emissions reduction goals are challenging, we are most concerned about the CMLP decarbonization goal. Examples of some of the challenges:
  - Purchase of RECs to take credit for green attributes of existing and planned solar installations in Concord
  - Purchase RECs to cover electricity purchases from fossil sources
  - Rapid expansion of solar in Concord on both public and private property (beyond Landfill, Grace, and planned public rooftops)
  - Investment in wind power and other renewable sources in New England along with long-term power contracts and retirement of RECs
  - Competitive policies and incentives to grow supply of renewables and to encourage efficiency/reduced use ('meet or exceed IOU's')
- These things are difficult and need to be moved on quickly and the CMLP may feel they don't have the support of the Town to proceed. And, these items are critical as the best strategy for Concord is to lead from the electricity segment. On the other hand, if the Select Board and the Town Manager feel it is possible to proceed aggressively without an explicit Town vote on the goals, that would certainly be the best route to follow.
- There are at least two critical dependencies. First, because this is a process that will be transformative in Concord, it is inconceivable that this function could be successful without the active participation and support of Concordians. The only way to ensue this is through a GHG Committee which meets monthly, holds hearings, listens to input, and

advises the Director and Town Manager. Second, there have been comments at multiple meetings about conflict between this function and various Town departments. Because this is a function that does not fit under any one department, it needs to stand alone, under the Town Manager, and we need to count on the Town Manager, acting as the Town CEO, to resolve any differences that may arise.

- First, we would recommend a bolder and more forceful statement of the overall committee recommendation to frame your discussion. It's safe to say at this point (a) that Concord needs to reduce its GHG emissions by 80% by 2050, (b) that Concord will need to transform itself to a clean energy economy to achieve this result, and (c) that this transformation be electricity-led. There is no other way to achieve desired mitigation outcome. There are other contributors to this outcome, e.g. carbon sinks, but clean energy via an electricity-led transformation is the prime mover.

### C. At task force meetings

The Task Force had a steady group of attendees who engaged often on topics under consideration. Comments are in the minutes. Some samples follow:

- Carbon price should be considered by the light plant. Carbon price is also known as shadow price or social cost of carbon. Decisions could include carbon price.
- The important thing about Renewable Energy Credits and offsets is that it means we can have goals that are either 100% renewable or 100% clean energy with 0% greenhouse gas emissions.
- There is value in targeting 80% reduction by 2030 (rather than more) because things will be discovered that we don't know now that may make the puzzle easier to finish.
- The idea of 100% reduction could begin with new buildings or municipal buildings that undergo a certain extent of renovation.
- The Task Force should look at GWSA as a minimum and Paris as the goal.
- Straight lines to achieving reduction goals is ill advised. Climate change has tipping points and waiting could mean reaching those tipping points sooner which is why it is important to act as early as possible.
- Need to create a means to track progress toward the goal in addition to having a dedicated staff member for this effort. Concord spends \$60M annually on fuel; \$25M on electricity, a staff member is approximately .01% of that.
- The Director of Energy must not become the "scapegoat in chief". The Select Board needs to hold the Town Manager accountable to implement these goals.
- Respect for future generations should be your call to action.
- Consultant may be needed to work with "EFTF2" to define strategy to meet 80% reduction number; to prioritize what pieces to work on and how to fund.
- EFTF should identify core elements for meeting the goal to decrease greenhouse gas emissions and should employ systems thinking to make sure the town is doing everything possible to reduce carbon in this system.
- Funding report should cite the social cost of carbon for justifying investments in the program

- CMLP cannot argue that goals are not feasible. Load does not have to be matched hour by hour – miscommunication perhaps.
- Load growth is an opportunity for CMLP
- Avoid or minimize investment in
- more carbon emitting structure/vehicles etc.

## VIII. Personal Responsibility [section to be added]

## IX: Recommended Framework Going Forward [incomplete. Will be reworked]

### A. Goals

The EFTF's recommendations are centered on aligning Concord's Energy Future with the goals of the *MA Global Warming Solutions Act of 2008* and are informed by the *Paris Climate Agreement of 2016*. This framework will focus on achieving:

25% reduction in greenhouse gases by 2020

80% reduction in greenhouse gases by 2050.

These are town-wide goals and are applicable to all sectors. The baseline is 2008.

### B. Where responsibility should reside

To meet the goals, Concord also needs governmental leadership. Concord's municipal governance, with leadership from the Select Board and Town Manager, derives from several town departments, volunteer committees, and individual entities. Some of them have complicated governance structures, such as the Concord Library's mixed public/private structure or the Concord-Carlisle Regional High School, governed by two jurisdictions. All of them are loosely connected often operating independently. The recommended goals can be accomplished only with a systemic, unified approach. In order to achieve this, the Task Force recommends that the Town expeditiously hire a Director of Energy [or other title] to guide the Town in designing and implementing a sustainable energy future consistent with the recommendations in this Report. See Appendix for Position Description core elements. The Director would have overarching authority, under the direction of the Town Manager, to establish an emissions baseline, measure progress, set policy, educate the public and Town officials, and implement and coordinate actions required to meet the goals. In instances where line authority does not exist (such as authority over the Concord-Carlisle School District) the Director would be a key liaison and advocate for emissions reduction strategies that could be advanced by such an entity.

Because GHG reduction is such a complex endeavor, and because action is urgent, the Task Force also recommends that a consultant be hired expeditiously to assist the Director of Energy.

Because the issues requiring attention raise novel and important questions of public policy, the Task Force further recommends that the Select Board expeditiously appoint a new small advisory group to assist the Town Manager, the Energy Director, and the consultant as the Town sets out to achieve its GHG reduction goals.

Other actions recommended to create a framework to enable systemic progress include:

a) Issuing expeditiously a policy statement from the Select Board and Town Manager that firmly establishes these recommended greenhouse gas reduction goals as responsibilities of the Town Manager and that states that decreasing emissions shall be considered and advanced in all deliberations and decisions of all Town departments and committees; and

b) Stating the goals and providing annual updates on the Town's progress in meeting them at all future Town Meetings; and educating our citizens about the goals so that they may take individual actions to help Concord achieve them.

Of course, the ultimate responsibility for achieving the town-wide goals recommended by the Task Force rests with the citizens of Concord.

### **C. Baseline data and measurement tools [section to be added]**

## Appendix [incomplete]

### Appendix xx Energy Future Task Force Charge

### Appendix xx Paris Agreement

link

### Appendix xx Global Warming Solutions Act

link

### Appendix xx Concord Sustainability Principles

On July 25, 2011, the Concord Board of Selectmen voted to adopt the following four sustainability principles (based on the American Planning Association's 4 Sustainability Objectives):

1. Reduce dependence upon fossil fuels, underground metals, and minerals;
2. Reduce dependence upon synthetic chemicals and other manufactured substances;
3. Reduce encroachment upon nature; and
4. Meet human needs fairly and efficiently, and ask the Town Manager and Department Heads to report on methods and successes in implementing sustainable principles and balancing reductions in order to meet human needs fairly and efficiently.

### Appendix xx Mitigation Plans from other Cities and Towns

A sample of the climate action plans that have been developed by other cities and towns may inform Concord's choices to plan for a low carbon future.

[Acton 2020 Comprehensive Community Plan, April 2012](http://doc.acton-ma.gov/dsweb/Get/Document-35852/ActonCommunityPlan%20-%20Volume1.pdf) – membership in ICLEI, Green Community: key findings in Water Quality and quantity, Agricultural land, Biodiversity, Reducing Waste and the Accumulations of Toxins in the Environment, Conserving Energy and Reducing Carbon Emissions:

<http://doc.acton-ma.gov/dsweb/Get/Document-35852/ActonCommunityPlan%20-%20Volume1.pdf>

[California Title 24, 2014](http://www.title24express.com/what-is-title-24/) – all new residential buildings must be Zero Net Energy by 2020, and commercial buildings by 2030

<http://www.title24express.com/what-is-title-24/>

[Cambridge, MA Plan for Net Zero Communities 2014](https://www.cambridgema.gov/cdd/projects/climate/~media/6087ff675ade4d51a6677e689d996465.ashx) – Focus on new construction targets for net zero beginning in 2020; targeted retrofit energy metrics; increase renewable energy generation; coordinated community engagement  
<https://www.cambridgema.gov/cdd/projects/climate/~media/6087ff675ade4d51a6677e689d996465.ashx>

[Carlisle, MA Energy Use Plan](#) - Green community. Focus on energy use in town buildings, land use, vehicle use, sustainable resources for residents, educational programs.

[Lexington, MA Climate Action Plan 2014](http://www.lexingtonma.gov/sites/lexingtonma/files/uploads/climatechangebos2-24-2014_r3.pdf) – Resolved: That the Town (a) consider climate change in all appropriate decisions and planning processes; (b) take action to prepare for the impacts of a changing climate; (c) reduce greenhouse gas emissions; (d) develop and implement a comprehensive climate action plan; all with the goal of making Lexington a truly sustainable community. Focus on better buildings, energy, water / public health and safety, appropriate town decisions, community engagement.  
[http://www.lexingtonma.gov/sites/lexingtonma/files/uploads/climatechangebos2-24-2014\\_r3.pdf](http://www.lexingtonma.gov/sites/lexingtonma/files/uploads/climatechangebos2-24-2014_r3.pdf)

[Chicago, IL Climate Action Plan](http://www.chicagoclimaction.org/) – by 2020 reduce emissions below 1990 levels; by 2030 80% reduction goal for new and renovated buildings. Focus on five strategies: energy efficient buildings, clean and renewable energy sources, improved transportation options, reduced waste and industrial pollution, adaptation. [www.chicagoclimaction.org/](http://www.chicagoclimaction.org/)

[Austin, TX Climate Plan](http://austintexas.gov/sites/default/files/files/Sustainability/OOS_AustinClimatePlan_032915_SinglePages.pdf) – Net Zero community-side greenhouse gas emissions by 2050. Focus on electricity and natural gas sectors, transportation and land use sectors, materials and waste management sectors.  
[http://austintexas.gov/sites/default/files/files/Sustainability/OOS\\_AustinClimatePlan\\_032915\\_SinglePages.pdf](http://austintexas.gov/sites/default/files/files/Sustainability/OOS_AustinClimatePlan_032915_SinglePages.pdf)

[Burlington, VT Climate Action Plan](http://carbonn.org/uploads/tx_carbonndata/Burlington_Climate_Action_Plan.pdf) – Goal: stop the increase of emissions and bring 2016 emissions down to 2010 levels for all sectors (municipal, airport, community-wide). Focus on compact mixed use development, reduce VMT by 10% by 2025, policies to support local food production, increase energy efficiency in buildings, clean and renewable energy sources, carbon storage and sequestration, reduce waste sent to landfills, annual assessment.  
[http://carbonn.org/uploads/tx\\_carbonndata/Burlington\\_Climate\\_Action\\_Plan.pdf](http://carbonn.org/uploads/tx_carbonndata/Burlington_Climate_Action_Plan.pdf)

[Fort Collins, CO](#) included the following sectors in its resiliency plan.

- Building Efficiency
- Alternative Transportation and Electric Vehicle Adoption
- Distributed and Renewable Energy Sources
- Waste Reduction and Diversion
- Carbon Sequestration and an Increased Urban Forest
- <http://www.fcgov.com/environmentalservices/pdf/cap-framework-2015.pdf>

Middlebury College in Vermont defined carbon neutral:

<http://www.middlebury.edu/sustainability/our-commitment/carbon-neutrality>

Middlebury followed the same simple carbon reduction plan as many other projects:

1. Reduce energy use
  - New LEED building and more efficient mechanicals in older buildings
  - B20 in vehicles
  - Locally grown organic food
  - School policies (habit change)
2. Generate the energy needed with renewables:
  - Solar
  - Wind
  - BioMass
3. Support other renewable projects through carbon off sets and REC retirement.

#### Appendix xx Your monthly CMLP bill explained

The **Meter Charge** – This includes the costs to monitor the electrical system, read the meters, billing and customer service. The Light Plant has a modern operations center to facilitate this task. The Meter Charge is a fixed amount charged per month designed to cover a portion of the Light Plant’s operating costs. Currently this charge primarily covers the cost of monthly billing. More recently CMLP and the Light Board have discussed increasing the fixed charge to cover a higher proportion of the fixed cost of operations and decouple the reliance on sales. The Director has reservations about the impact to rate payers who are on fixed income or limited means who typically consume less electricity and would see their rates increase.

Purchased power expenses are comprised of two components: energy and capacity. Energy represents the consumption over time (measured in MWh or kWh) while capacity measures the maximum amount of electricity delivered at any one moment (measured in MW or kW). CMLP must purchase both. Capacity and Transmission Charges are the costs to get the energy from the generating source to the substation in Concord as well as the cost to ensure Concord has access to sufficient power supplies (Capacity) to meet our needs on the warmest day in the summer, known as peak demand.

The **Energy Charge** – Since the Light Plant does not own generating capability, it purchases power from suppliers. The Energy Charge is the cost to purchase the energy (MWh) and typically is based on fuel and variable operating costs and by regulation is designed to be revenue neutral, meaning the cost of purchasing the energy is what the customer is charged. The cost of purchased power makes up approximately 74% of the total Light Plant expenditures.

The **Tier I, II & III Capacity/ Transmission Charge** – In 2008 a decision was made by the Select Board, Town Manager and the Light Board to promote energy conservation by introducing a 3-tiered rate structure for Residential customers. The goal was to shift load away from peak

demand periods and promote energy conservation by charging customers an increased rate based on 3 progressive thresholds usages (under 600, 600 to 916 and above 916 kilo Watt hours(kWh)).<sup>31</sup>

The **Distribution Charge** – to distribute electricity, the CMLP operates three substations along with distribution facilities. The power lines are maintained by CMLP line workers. The Distribution Charge is the cost to get the energy from the substations in Concord to individual homes, buildings and devices. This includes the costs to connect and maintain our local grid and recover from power outages.

The **Net Metering Distribution Charge** (only applies to customers with a solar array) is a charge to net metered customers to compensate for the revenue lost from the energy they generate on site and the resulting reduction of energy consumed.

The **Rate Stabilization Fund** When energy costs fluctuate, CMLP accumulates the excess or recovers the shortfall of rates relative to energy costs in the Rate Stabilization Fund so these accumulated amounts can be refunded or recovered from customers in the future. This ensures rate payers pay the actual energy cost. The Rate Stabilization Fund is a fee levied to each customer based on total energy consumed and which is designed to help smooth out and avoid abrupt swings in rates during the year and as a result of seasonal variations in the energy markets. Power Cost Adjustments are used in a similar manner.

The **Underground Surcharge** is a 1.5% charge to cover the cost of undergrounding our local distribution grid. It was put in place by the direction of the Select Board and Town Manager after a successful vote at Town Meeting to ensure the reliability of the grid and enhance the overall town streetscape.

The **Energy Conservation Charge** is a .52% surcharge to cover the cost of energy conservation programs and rebates the Light Plant offers throughout the course of the

#### Appendix xxx Director of Energy PD

### **Director of Energy [or other title] PD Core Elements draft**

#### **Responsibilities**

- Establish GHG baseline and GHG tracking and reporting system
  - Develop strategic plan and related action and implementation plans to meet Town GHG reduction goals; plans will include, among others, land use and zoning elements
  - Develop corollary plan to educate citizens, enabling them to make GHG reductions in their individual lives and participate in Town GHG policymaking
  - Oversee, and engage all stakeholders in, planning and implementation process
-

- Maintain relationships with, coordinate with, and guide relevant Town staff, departments, boards, and committees in areas of responsibility
- Keep apprised of relevant state, federal, scientific, and policy developments concerning GHG reduction; develop relationships and coordinate with municipal, state, and other officials and stakeholders working to reduce GHG emissions.

**Requirements**

- Minimally, Bachelor's degree in Environmental Studies, Energy or Environmental Policy, or another related discipline; preferred, graduate degree (masters or PhD) in a relevant field
- Five to 7 years' relevant work experience or equivalent
- Demonstrated management experience, with ability to provide direction to senior staff and consult with elected and other Town officials
- Strong analytic, writing, speaking, and collaboration skills; demonstrated creative and innovative thinking

**Reporting and accountability**

- Reports directly to the Town Manager
- Is accountable to the Town Manager
- Is responsible for interfacing with a new energy committee of citizen members appointed by the Select Board as directed by the Town Manager, and with the Concord Public and Concord-Carlisle Regional School Committees.

## Energy Futures Task Force: Important Documents **Incomplete**

Document Title	Enacted	Access/URL	Relevant Section	Description/ <b>Relevance</b>
Community Preservation Committee Bylaw	2004	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Chapter 2.2	Tasks the committee with recommending acquisition, creation, preservation, and use of open space, community housing, and historic resources. <b>These recommendations could include use of space for energy initiatives or repurposing a space for more efficient energy usage.</b>
Inspector of Gas Piping and Gas Appliances Bylaw	1964	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 1, 2, 4, 5	Designates Town Manager as responsible for appointing an Inspector of Gas Piping and Gas Appliances for the town each year. Outlines the responsibilities of the inspector and his/her access to buildings within Concord. <b>Inspector can examine buildings that have high or inefficient energy usage.</b>
Land Fund Bylaw	1986	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Section 3b	Allows the town manager to designate funds from the Land Fund to acquired real estate for engineering and planning purposes. <b>Fund could be used to improve energy efficiency in affordable housing or historic buildings.</b>
No New Construction of Utility Poles or Overhead Wires Bylaw	1987	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 1, 2	Prohibits the addition of any utility poles (unless through replacement) or overhead wires on public and private ways in Concord.
Planning Board Bylaw	1932	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 4, 5, 6,	Requires that all plans to create or change public buildings be submitted to Planning Board for their opinion. Assigns Planning Board the duty of investigating any petitions to alter Zoning Bylaws and submit a recommendation to the Board of Selectmen. <b>This board could be tasked with assuring that any changes made to public buildings do not increase energy usage.</b>

Records Management Bylaw	1990	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Entire Document	Outlines the management of town records and how they are to be archived. <b>If the town's energy use is recorded and archived, it could be beneficial for task force to look at to understand a baseline.</b>
Underground Fuel Storage Systems Bylaw	1993	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 2, 3, 4	Prohibits installation of underground fuel tanks and requires registration of existing underground fuel tanks for the purpose of preventing contamination of groundwater and surface water, and the environment generally. <b>Could affect initiatives towards alternative fuel use in households.</b>
Water Bottle Bylaw	2012	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 1,2	Prohibits sale of single serving water bottles except under emergency circumstances. <b>Can be cited as a town mandate that benefits energy reduction and sustainability.</b>
Zoning Bylaw	1928	Concordma.gov, Important Documents, Bylaws, Zoning Bylaws	Table I, Table II, Sections 4, 5, 7-10	These tables denote what structures and uses are permitted in each district within the town of Concord. Sections 4 & 5 define each type of use. Sections 7-10 outline special uses and how rules may be different for these uses. <b>These restrictions would need to be consulted if the energy plan called for new infrastructure or repurposing existing buildings.</b>
Inclusionary Housing Bylaw	1987	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 2, 3	Defines rules for land reservation and design for housing developments and subdivisions. <b>Could be amended to require certain energy efficiency standards for new housing developments.</b>
Progressive Removal of Utility Poles and Overhead Wires	1987	Concordma.gov, Important Documents, Bylaws, Town	Sections 1, 3	Requires that any utility with poles or overhead wires must remove these structures by the given timeline. This can be avoided if an

Required Bylaw		Bylaws		agreement between the town and the utility are met.
Solid Waste Disposal Fund Bylaw	1989	Concordma.gov, Important Documents, Bylaws, Town Bylaws	Sections 2, 3	Establishes a revolving fund for the Solid Waste Disposal Department and the manner of establishing rates and schedules. Allows funds to be used for improvements. <b>This could be a way to estimate energy used through waste by the town.</b>
Historic Districts Act – Updated Design Guidelines	2015	Concordma.gov, Boards and Committees, Historic Districts Commission	Pg. 17	Historic Districts Commission (HDC) supports property owners’ and town’s efforts to reduce environmental impact, especially through preservation rather than re-building. <b>HDC acknowledges importance of environmental impact, therefore may be open to any efforts to reduce impact.</b>
			Pg. 27, 67-69	HDC’s rules on doors/windows in Historic Districts state that the original design/materials should always be maintained when modifying/replacing. Architectural character and appearance are prioritized over energy efficiency, and improvements are always encouraged over replacement. <b>HDC does not seem very open to replacing windows in Historic District buildings.</b>
			Pg. 28-29, 45-46	HDC policy on solar panels and ‘modern equipment’ (HVAC, utilities, etc.) generally limits equipment from being visible from public ways. <b>Modifications/additions in Historic Districts related to energy usage/production must be approved by HDC and visual components can be strict.</b>
			Pg. 56	Roofs on buildings within the Historic District must maintain the appropriate slope, style, and texture of its period, but the HDC does recognize the importance of the functionality of a roof in preventing freeze/thaw cycles.

				<b>Seems as though the HDC wants roofs that insulate heat well to prevent ice dams and other effects that would affect a building.</b>
			Pg. 39-40	Changes to lights and light fixtures (seemingly outdoor, though not explicitly stated) must maintain appropriate color, intensity, and light distribution as deemed by HDC. <b>HDC is concerned with light pollution and glare for drivers, may have opinions on new energy efficient bulbs.</b>
APP #59 – Energy Management Policy	June 2011	<a href="http://www.concordnet.org/documentcenter/view/3241">http://www.concordnet.org/documentcenter/view/3241</a>	Entire Document	Very general, non-specific document that establishes Concord’s intent to focus on good energy management that will reduce operating expenses and pollution. <b>Does not offer anything tangible for the Task Force.</b>
Comprehensive Sustainable Energy Committee – Committee Charge	April 2007	<a href="http://www.concordnet.org/DocumentCenter/Home/View/3526">http://www.concordnet.org/DocumentCenter/Home/View/3526</a>	Purpose, Duties and Responsibilities	Establishes committee’s purpose of helping town to identify, design, and implement projects that support energy conservation, efficiency, and renewables across entire spectrum of uses. Important duties include establishing mechanisms to measure energy consumption across the community, recommending short and long-term energy goals to Town Manager, and to explore funding options for energy related projects. <b>Shows some overlap with EFTF duties, and their findings/recommendations could be used by EFTF to build upon.</b>
Concord Energy Master Plan	2011	<a href="http://www.concordnet.org/DocumentCenter/Home/View/3527">http://www.concordnet.org/DocumentCenter/Home/View/3527</a>		
APP #63 - Fuel Efficient Vehicle Policy	October 2013	<a href="http://www.concordnet.org/documentcenter/view/2147">http://www.concordnet.org/documentcenter/view/2147</a>	Entire Document	Sets a floor for efficiency levels required for newly purchased town vehicles and encourages retirement of least efficient vehicles. <b>Town must keep an inventory on all</b>

				<b>town vehicles, including fuel consumption. This could help EFTF in assessing town's emissions and/or setting levels of emissions in any vehicle recommendations for town.</b>
Municipal Energy Use Reduction Plan	August 2011	<a href="http://www.concordma.gov/DocumentCenter/View/3238">http://www.concordma.gov/DocumentCenter/View/3238</a>	Policy Statement (pg. 1)	BOS established goal to reduce municipal energy consumption for town buildings/facilities and streetlights from 2008 levels by 20% by 2015. <b>Investigate if this goal was accomplished, and if not, what prevented it from being accomplished?</b>
Municipal Energy Use Reduction Plan Cool Trends – ISSP	August 2011 N/A	<a href="http://www.concordma.gov/DocumentCenter/View/3238">http://www.concordma.gov/DocumentCenter/View/3238</a> <a href="https://www.sustainabilityprofessionals.org/files/Cool%20Trends.pdf">https://www.sustainabilityprofessionals.org/files/Cool%20Trends.pdf</a>	Four Sustainability Objectives (pg. 1)	Objectives are to reduce Concord's dependency on fossil fuels, chemicals/manufactured substances that accumulate in nature, and activities that harm life-sustaining ecosystems, and to meet the hierarchy of present <i>and future</i> human needs fairly and efficiently. <b>Objectives were not implemented at time of this document, and if they have been implemented, these provide opportunity to create new programs to complete these goals.</b>
			Baseline Data & Tracking Software (pg. 2-3)	In 2009 Concord joined the ICLEI, which allowed them to implement their Clean Air & Climate Protection (CACP) software to calculate town's carbon footprint from 2008. In 2010 Concord signed up for Mass Energy Insight (MEI) tool, which tracks energy use in municipal buildings. <b>These tools, if still in use, can be used to find baseline data and track progress of further energy-reducing efforts.</b>
			Getting a Greener Focus, Recommendations (pg. 9-28)	Multiple sub-sections in this topic outline 2011 state of progress on specific areas of energy reduction, followed by recommendations for how to further improve on these areas. <b>It would be helpful to review which of these recommendations have been</b>

				<b>implemented to understand which would be helpful to focus on moving forward.</b>
			Transportation	Gives concrete methods to reduce individuals car use towards public transportation, biking, and car-sharing programs. <b>Some methods could be feasible for Concord with regards to bike use and a car-share program (zipcar).</b>
Cool Trends – ISSP	N/A	<a href="https://www.sustainabilityprofessionals.org/files/Cool%20Trends.pdf">https://www.sustainabilityprofessionals.org/files/Cool%20Trends.pdf</a>	Energy	Gives recommendations of ways to decrease energy use and increase energy efficiency such as light bulb replacement, changes to infrastructure, and committing to renewable energy sources.
			Waste	

Documents checked:

- Civil Defense Bylaw
- Conservation Commission Bylaw
- Farming Bylaw
- Internal Combustion Engines on White Pond Bylaw
- Personnel Bylaw
- Regulation of Vehicles Bylaw
- Sale of Real Property Bylaw
- Unregistered Motor Vehicle Bylaw
- Comprehensive Long Range Plan - 2005



**February 1, 2017**

TO: Christopher Whelan, Town Manager  
CC: Jon Harris, Budget & Purchasing Director  
FROM: Kate Hodges, Assistant Town Manager

**RE: CCTV as a Town Department; Logistics and Recommendations**

For the past several months we have been discussing the possibility of the CCTV Organization becoming a Town Division. I have had an opportunity to speak with current CCTV Board Members, staff, and stakeholders regarding this proposed change. Thus far, their feedback has been positive.

It has been said that having the cable operation as an internal Town Department would be more advantageous for the community; moreover, the reasons identified by those who are *not* in support of such an endeavor have been notably less in number. The identified pros and cons regarding this venture are outlined below.

**Establishment of a Town-Run Studio**

*Pros:*

- Town shall have control of all personnel and studio operating procedures regarding provisions for, or relating to, PEG programming in Concord;
- Human resource matters may be managed in-line with the Town's Personnel Polies and Procedures as well as any applicable State and/or Federal laws;
- Town will have greater control of funds within the Cable-PEG access accounts, assuring expenditures and capital improvements are properly outlined, vetted, and complaint with PEG guidelines;
- Expanded control and assurances relating to the continuity of Concord-specific Governmental programming; and
- Renewed assurances that television personnel will be responsive to Town requests regarding special programming, events, and Town-wide public outreach initiatives.

*Cons:*

- Town will have to take on personnel and programming oversight and any issues arising therein; and
- Protection of the First Amendment and free speech rights will have to be monitored and upheld in-line with applicable PEG Access and FCC guidelines.

While there are many details relating to how specific operation of CCTV may work, I have taken the past several months to examine some of the more pertinent operational considerations that have been identified.



**Time Frame & Staffing**

The Current CCTV Contract expires mid-October 2018. Should we determine that CCTV *is* to become a Town entity, I would propose the effective date of that arrangement be July 1, 2017. We would, in essence, break the current contract with CCTV (by mutual agreement); all their assets and holdings would shift to the Town effective July 1<sup>st</sup>. The CCTV Corporation, as a registered non-profit *could*, after July 1<sup>st</sup>, choose to keep their non-profit status active—perhaps creating a “*friends of CCTV*” sub-organization or they may choose to dissolve the Corporation entirely and transfer their remaining non-Town assets (should there be any) in accordance with the Attorney General’s rules regarding the dissolution of non-profits in MA. For more information regarding the dissolution of 501c3’s in MA, please see the attached link: <http://www.mass.gov/ago/doing-business-in-massachusetts/public-charities-or-not-for-profits/information-for-existing-charities/dissolving-a-charitable-entity/>

Currently, CCTV employs five individuals—an Executive Director and four support staff. We need to allow a decent amount of time to properly understand the employee roles and functions relative to the overall cable operation. My recommendation would be that we extend these employees’ current position titles and salaries, at a minimum, to the former CCTV contract end date of October 2018. By this time, we will have had an appropriate amount of time to create job descriptions and position titles that are consistent with the Town’s classification and compensation schedules and templates. New positions must be evaluated, and graded, before being placed on our classification schedule. New positions must also be accepted by the Personnel Board and ratified at Town Meeting. The 16-month time frame discussed above would allow for these actions to take place in a thoughtful and calculated manner.

**Managing CCTV Finances/Assets**

At a meeting which you and I had with Tamara Green, CCTV Executive Director, you explained that the goal of the CCTV Corporation should be to spend down their balance over the next several months. This would, hopefully, leave CCTV’s balance below \$30,000 on July 1<sup>st</sup>. Ms. Green has been working on this endeavor and believes the threshold should be met by the July 1, 2017 deadline as requested.

The terms of the current contract specify that all CCTV equipment is the property of the Town of Concord. Ms. Green explained that there are some items which are installed in the Town of Carlisle’s buildings. My recommendation is that any equipment located or installed within the Town of Carlisle shall remain the property of the Town of Carlisle. The remainder of the CCTV assets, as outlined and described in *Appendix A* attached hereto, shall be deemed the property of the Town of Concord.

**Coordination and/or Partnership with Carlisle**

When I spoke with several of the current CCTV Board Members in December, they expressed their dissatisfaction regarding Concord’s proposed ‘*split*’ from Carlisle for cable



**Memorandum**

access television programming and services. While nothing is set in stone, the idea that Concord would seek to operate as a *stand-alone* PEG entity is preferable. However, in recognition of the fact that the Town of Carlisle may not have the ability, or available funds, to operate their *own* independent television studio, the options outlined below could be explored. These options should be revisited on a yearly basis with the overall goal that *Concord Television* and *Carlisle Television* become **independent** and **separate** entities over a period of the next three to five years.

**Option 1: Concord-Carlisle Intermunicipal Agreement**

The Town of Concord may enter into an intermunicipal agreement with the Town or Carlisle that allows proceeds resulting from the provision of cable services to be expended for programming for, or within, the Town of Carlisle. Under the terms of such an agreement, Carlisle's portion of the PEG funds (granted through Comcast) would be segregated into a special account, or line item, within Concord's overall PEG budget.

I suggest limiting the amount allowed to be held in this type of account to an amount at or less than \$50,000 annually. Said services *may* be rendered, under the direction of the CCTV Executive Director and with the approval of the Town Manager (or your designee), for Carlisle-specific programming. Concord would specify that the services provided by Concord to Carlisle may not have a value, or cost, which exceeds the amount of money designated for '*Carlisle Programming*' within the overall Town-operated PEG budget per year.

For example, as described above, if there were to be \$50,000 in Carlisle's PEG line-item, Carlisle may request, and receive, no more than \$50,000 worth of services for the year.

**Option 2: Pay-As-You-Go Option**

The Town of Concord, in consultation with the staff and Executive Director of CCTV, would '*cost out*' actual services that CCTV may provide to the Carlisle.

As an example, *if* Carlisle wanted to have their Selectmen's meetings taped and broadcast, they would make a request to the Executive Director of CCTV. A cost breakdown (*costs, at this point, are for exemplary purposes only*) may appear as follows:

Item	# Hrs.	\$/Hr.	Total Due
Staff for Filming	2.5	\$30	\$75
Use of Camera Equip.	2.5	\$10	\$25
Editing	.5	\$30	\$15
Broadcast-Related Work	.25	\$20	\$ 5
<b>NET AMOUNT OWED</b>			<b>\$120</b>

In this option, the Town would set fees for particular services such as filming, editing, or broadcasting. Once a request for service is made, the CCTV Executive Director would,

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**TOWN OF CONCORD**  
**Town Manager's Office**

**22 Monument Square**  
**Concord, MA 01742**



**Memorandum**

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depending on staff availability, schedule an employee member to perform the work requested. He/she would be responsible for documenting the time they dedicate to the job and under which categories their responsibilities fell for the assignment (camera work vs. editing, etc.). Once the job is completed, a synopsis of services rendered would be given to the Executive Director who would generate an invoice and send it to the Town of Carlisle for reimbursement.

In analyzing both options, it is agreed that both are viable solutions for each of the Towns. However, the administrative overhead and staff time needed to ensure that billing is done accurately, and on time, is more significant in option 2 than in option 1. I would suggest that, should Carlisle wish to continue receiving services from CCTV, that an intermunicipal agreement, as outlined in Option 1 above, be entered into between the Towns of Concord and Carlisle. I can draft this should the proposal be acceptable and the parties agree.

There are additional details and procedures that will require exploration in order to ensure that CCTV's transition to the Town is smoothly carried out. However, I believe it to be in the best interest of the Town as whole for CCTV to move under the Town's umbrella effective July 1, 2017. Over the next several weeks, once a decision has been made, I will work on a plan of action and timeline regarding the transition.

As always, I am available to speak with you and/or members of the Select Board should you require additional information, or have additional questions, regarding CCTV as a Town entity. I am looking forward to this new challenge and the benefits it shall bring to the Concord community, employees, boards and committees.

CCTV Inventory

In Service Date	Make	Model	Description	Serial #	Purchase Price
04/20/2015	Hitachi	Z-HD5000-ST1-LCD	HD Studio Camera Kit		\$24,505
04/20/2015	Hitachi	Z-HD5000-ST1-LCD	HD Studio Camera Kit		\$24,505
04/20/2015	Hitachi	Hitachi Z-HD5000-ST1-LCD	HD Studio Camera Kit		\$24,505
04/20/2015	Gepco	HFO100F	100-Foot SMPTE 9.2mm Hybrid Fiber Cable with Lemo Ends		\$795
04/20/2015	Gepco	HFO100F	100-Foot SMPTE 9.2mm Hybrid Fiber Cable with Lemo Ends		\$795
04/20/2015	Gepco	HFO100F	100-Foot SMPTE 9.2mm Hybrid Fiber Cable with Lemo Ends		\$795
04/20/2015	Manfrotto	528XB	Professional Heavy Duty Tripod		\$625
04/20/2015	Manfrotto	528XB	Professional Heavy Duty Tripod		\$625
04/20/2015	Manfrotto	509HLV	Telescoping Pan Bar - 15.4" to 24.8" Long 41.00		\$750
04/20/2015	Miller	1028	Arrow 55 Fluid Head		\$3,924
04/20/2015	Miller	1028	Arrow 55 Fluid Head		\$3,924
04/20/2015	Miller	1028	Arrow 55 Fluid Head		\$3,924
04/20/2015	Miller	694	Additional Pan Handle		\$207
04/20/2015	Miller	694	Additional Pan Handle		\$207
04/20/2015	Miller	694	Additional Pan Handle		\$207
04/20/2015	Miller	1589	HD Studio Single Stage Tripod		\$1,188
04/20/2015	Miller	1589	HD Studio Single Stage Tripod		\$1,188
04/20/2015	Miller	1589	HD Studio Single Stage Tripod		\$1,188
04/20/2015	Miller	480	Studio Dolly Base		\$832
04/20/2015	Miller	480	Studio Dolly Base		\$832
04/20/2015	Miller	480	Studio Dolly Base		\$832
04/20/2015	Sony	EVIH100S	1/2.8" HD Exmor CMOS Remote PTZ Camera w/ HD-SDI		\$2,433
04/20/2015	Mirror Image		Mirror Image Teleprompter System		
04/20/2015	Mirror Image	EZPROMPT	Teleprompter Software		\$413
04/20/2015	Prompter People	PRO-17	Proline 17" Teleprompter Kit		\$1,954
04/20/2015	NewTek	FG-000456-R001	TriCaster 860 Production Switcher with Control Surface		\$29,995
04/20/2015	NewTek	FG-000005-R001	Tricaster Virtual Set Editor - Two License Package		\$1,495
04/20/2015	Metasentz	TLC-8S	Tally Light Controller for TriCaster		\$396
04/20/2015	Metasentz	TLC-8S	Tally Light Controller for TriCaster		\$396
04/20/2015	Metasentz	TLC-8S	Tally Light Controller for TriCaster		\$396
04/20/2015	Metasentz	RU-2	Tally Light Relay Unit for CCU		\$32
04/20/2015	Samsung	ME46C	46-Inch Commercial LED LCD Display		\$1,310
04/20/2015	Samsung	ME46C	46-Inch Commercial LED LCD Display		\$1,310
04/20/2015	Samsung	ME46C	46-Inch Commercial LED LCD Display		\$1,310
04/20/2015	Samsung	ME46C	46-Inch Commercial LED LCD Display		\$1,310
04/20/2015	Chief	LTMU	Large Adjustable Tilting Wall Mount		\$179
04/20/2015	Clear-Com	MS-702	Two Channel Headset/Speaker Main Station		\$1,022
04/20/2015	Clear-Com	RS-701	Single Channel Standard Beltpack		\$254
04/20/2015	Clear-Com	CC-300-X4	Single Ear Standard Headet with Microphone		\$234
04/20/2015	Clear-Com	CC-300-X4	Single Ear Standard Headet with Microphone		\$234
04/20/2015	Clear-Com	CC-300-X4	Single Ear Standard Headet with Microphone		\$234
04/20/2015	Clear-Com	CC-300-X4	Single Ear Standard Headet with Microphone		\$234
04/20/2015	Clear-Com	CC-300-X4	Single Ear Standard Headet with Microphone		\$234
04/20/2015	Clear-Com	IFB-1000	Monaural IFB Talent Receiver		\$190
04/20/2015	Clear-Com	IFB-1000	Monaural IFB Talent Receiver		\$190
04/20/2015	Clear-Com	EMV-2	Monaural Talent Earphone		\$33
04/20/2015	Clear-Com	EMV-2	Monaural Talent Earphone		\$33
04/20/2015	Mackie	ONYX-1620i	16 Channel Audio Mixer OFE OFE		
04/20/2015	JBL	Control5	5" Monitors		\$128
04/20/2015	JBL	Control5	5" Monitors		\$128
04/20/2015	JBL	Control5	5" Monitors		\$128
04/20/2015	Samson	Servo120A	Stereo Audio power amplifier (control room and VOG)		\$186
04/20/2015	Samson	Servo120A	Stereo Audio power amplifier (control room and VOG)		\$186
04/20/2015	Omni Mount	10.0 W	Wall Mount for JBL Speakers		\$22
04/20/2015	Omni Mount	10.0 W	Wall Mount for JBL Speakers		\$22
04/20/2015	Omni Mount	10.0 W	Wall Mount for JBL Speakers		\$22
04/20/2015	JK Audio	Broadcast Host	Phone Hybrid		\$486



In Service Date	Make	Model	Description	Serial #	Purchase Price
04/20/2015	Bittree	VPCM1200-75	Video Patch Cable - Mini-weco, 18" Black		\$22
04/20/2015	Bittree	VPCM1200-75	Video Patch Cable - Mini-weco, 18" Black		\$22
04/20/2015	Bittree	VPBM7200-75	Video Patch Cable - Mini-weco to BNC Adapter		\$28
04/20/2015	Bittree	VPCM1200-75	Video Patch Cable - Mini-weco to BNC Adapter		\$28
04/20/2015	Bittree	B96DC-NNAIT/E90 M2OU12B	Audio Patch Bay, Programmable, 2x48 - Bantam		\$1,250
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	Bittree	BPC1800-110	Audio Patch Cable, 18" Black		\$17
04/20/2015	HB custom plates (lot)	--	HB custom plates		\$667
04/20/2015	HB cables, connectors cables, hardware,	--	HB cables & connectors cables, connectors, hardware		\$4,307
05/15/2014	Apple	MacBook Pro	750M with 2GB GDDR5 memory		\$2,913
05/15/2014	Apple	MacBook Pro	750M with 2GB GDDR5 memory		\$2,913
05/15/2014	Apple	MacBook Pro	750M with 2GB GDDR5 memory		\$2,913
02/13/2015	Apple	MacBook Pro 15.4/CTO	2.8GHz Quad-core Intel Core i7, Turbo Boost up to 4.0GHz 16GB		\$3,007
02/13/2015	Apple	MacBook Pro 15.4/CTO	2.8GHz Quad-core Intel Core i7, Turbo Boost up to 4.0GHz 16GB		\$3,007
02/13/2015	Apple	IMAC 27"	3.5GHz Quad-core Intel Core i7, Turbo Boost up to 3.9GHz		\$2,772
02/13/2015	Apple	IMAC 27"	3.5GHz Quad-core Intel Core i7, Turbo Boost up to 3.9GHz		\$2,772
02/13/2015	Apple	IMAC 27"	3.5GHz Quad-core Intel Core i7, Turbo Boost up to 3.9GHz		\$2,772
02/13/2015	Apple	IMAC 27"	3.5GHz Quad-core Intel Core i7, Turbo Boost up to 3.9GHz		\$2,772
02/13/2015	Apple	IMAC 27"	3.5GHz Quad-core Intel Core i7, Turbo Boost up to 3.9GHz		\$2,772
02/13/2015	Apple	IMAC 27"	3.5GHz Quad-core Intel Core i7, Turbo Boost up to 3.9GHz		\$2,772
02/13/2015	Apple	APP FOR IMAC			\$152
02/13/2015	Apple	APP FOR IMAC			\$152
02/13/2015	Apple	APP FOR IMAC			\$152
02/13/2015	Apple	APP FOR IMAC			\$152
02/13/2015	Apple	APP FOR IMAC			\$152
02/13/2015	Apple	APP FOR IMAC			\$152
02/13/2015	Apple	THUNDERBOLT DISPLAY	Monitor		\$939
02/13/2015	Apple	THUNDERBOLT DISPLAY	Monitor		\$939
02/13/2015	Apple	THUNDERBOLT DISPLAY	Monitor		\$939
02/13/2015	Apple	THUNDERBOLT DISPLAY	Monitor		\$939
02/13/2015	Apple	APP FOR DISPLAY			\$89
02/13/2015	Apple	APP FOR DISPLAY			\$89
02/13/2015	Apple	APP FOR DISPLAY			\$89
02/13/2015	Apple	APP FOR DISPLAY			\$89
02/06/2015	EditShare	ESXSATA-64TB	EditShare XStream Workflow Director 64TB (16 drives x 4TB)		\$59,752
02/06/2015	Startech	ST-SDOCKU33EF	External Docking Station for 2.5/3.5 Inch SSD - eSATA and USB 3		\$279
06/16/2015	Videssence	P110-255BX-DPM.120	Videssence 110W 2-Lamp Power Key Fixture with Phase Dim, Lamps & Clamp		\$350
06/16/2015	Videssence	P110-255BX-DPM.120	Videssence 110W 2-Lamp Power Key Fixture with Phase Dim, Lamps & Clamp		\$350
06/16/2015	Videssence	P110-255BX-DPM.120	Videssence 110W 2-Lamp Power Key Fixture with Phase Dim, Lamps & Clamp		\$350
06/16/2015	Videssence	P110-255BX-DPM.120	Videssence 110W 2-Lamp Power Key Fixture with Phase Dim, Lamps & Clamp		\$350
06/16/2015	Videssence	P110-255BX-DPM.120	Videssence 110W 2-Lamp Power Key Fixture with Phase Dim, Lamps & Clamp		\$350
06/16/2015	Videssence	P110-255BX-DPM.120	Videssence 110W 2-Lamp Power Key Fixture with Phase Dim, Lamps & Clamp		\$350
06/16/2015	Lowel	PRM-400TU	Lowel prime LED 400 - Tungsten - w/ C-Clamp, Gel Frame & DMX Control		\$1,913
06/16/2015	Lowel	PRM-400TU	Lowel prime LED 400 - Tungsten - w/ C-Clamp, Gel Frame & DMX Control		\$1,913
06/16/2015	Lowel	PRM-400TU	Lowel prime LED 400 - Tungsten - w/ C-Clamp, Gel Frame & DMX Control		\$1,913





In Service Date	Make	Model	Description	Serial #	Purchase Price
06/16/2015	Safety Cable	Black Safety Cable - 30"	Black Safety Cable - 30"		\$15
06/16/2015	Safety Cable	Black Safety Cable - 30"	Black Safety Cable - 30"		\$15
06/16/2015	Safety Cable	Black Safety Cable - 30"	Black Safety Cable - 30"		\$15
06/16/2015	ETC	ETCSF2496	ETC Smartfade 24/96 DMX Control Console		\$1,795
06/16/2015	ETC	ETCSFDC2	ETC Smartfade 24/96 Dust Cover		\$55
06/16/2015	Vectra	4GB Card	Data Memory Card for Smartfade		\$9
06/16/2015	Videssence	DC-4X600	4x600 4-Channel DMX Dimmer Strip		\$1,240
06/16/2015	Videssence	CB-D-GE15	15' GTL Receptacle to 15A Edison Power Cable		\$5
06/16/2015	DMX	DMX505P	5-Pin DMX Cable - 50'		\$41
06/16/2015	DMX	DMX505P	5-Pin DMX Cable - 50'		\$41
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX255P	5-Pin DMX Cable - 25'		\$39.00
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX155P	5-Pin DMX Cable - 15'		\$35
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX105P	DMX Cable - 10'		\$33
06/16/2015	DMX	DMX-Term	5-Pin DMX Terminator		\$14
06/16/2015	DMX	DMX-Term	5-Pin DMX Terminator		\$14
06/16/2015	Pipe Grid	25x19' Pipe Grid	1.5" Schedule 40 steel pipe grid, painted black		\$10,286
06/16/2015	360-Degree Curtain Track	360-Degree Curtain Track	360-Degree Curtain Track		\$6,036
06/16/2015	Black Velour Curtain	Crescent	Black Crescent Velour IFR Curtain, 11'-6"H x 40'W, Sewn Flat, Grommets 9" O.C.		\$1,641
06/16/2015	Grey Velour Curtain	Crescent	Pewter Grey Crescent Velour IFR Curtain, 11'-6"H x 40'W, Sewn Flat, Grommets 9" O.C.		\$1,641
06/16/2015	Chroma-Key Green	Poly Pro	IFR Chroma-Key Green Curtain, 11'-6"H x 35'W, Sewn Flat, Grommets 9" O.C.		\$1,040
06/16/2015	Chroma Floor	Chroma Floor	4'x8'x3/8" Chroma-Key Green Flooring		\$150
04/21/2015	Editing Desks	Editing Desks	Editing Desks		\$1,804
04/21/2015	Friant Zone	BJ-MM2242BT	Mid Back Chair in Black		\$239
04/21/2015	Friant Zone	BJ-MM2242BT	Mid Back Chair in Black		\$239
04/21/2015	Friant Zone	BJ-MM2242BT	Mid Back Chair in Black		\$239
04/21/2015	Friant Zone	BJ-MM2242BT	Mid Back Chair in Black		\$239
04/21/2015	Friant Zone	BJ-MM2242BT	Mid Back Chair in Black		\$239
04/21/2015	Friant Zone	BJ-MM2242BT	Mid Back Chair in Black		\$239
04/21/2015		W-WS3054	Height Adjustable Worksurface		\$889
04/21/2015		W-WS3054	Height Adjustable Worksurface		\$889
04/21/2015		W-WS3054	Height Adjustable Worksurface		\$889
04/21/2015		W-WS3054	Height Adjustable Worksurface		\$889
04/21/2015		S-PEDBFMSMJ24	Box/File Mobile Pedestal with Cushion		\$264
04/21/2015		S-PEDBFMSMJ24	Box/File Mobile Pedestal with Cushion		\$264
04/21/2015		S-PEDBFMSMJ24	Box/File Mobile Pedestal with Cushion		\$264

In Service Date	Make	Model	Description	Serial #	Purchase Price
04/21/2015		S-PEDBFMSMJ24	Box/File Mobile Pedestal with Cushion		\$264
04/21/2015	9 to 5	1460-Y1-A6	9 to 5 Vault Chair with Sliding Seat Pan, Simple Synchro Tilt		\$269
04/21/2015	9 to 5	1460-Y1-A6	9 to 5 Vault Chair with Sliding Seat Pan, Simple Synchro Tilt		\$269
04/21/2015	9 to 5	1460-Y1-A6	9 to 5 Vault Chair with Sliding Seat Pan, Simple Synchro Tilt		\$269
04/21/2015	9 to 5	1460-Y1-A6	9 to 5 Vault Chair with Sliding Seat Pan, Simple Synchro Tilt		\$269
04/21/2015	L Series	S-LATJ4D36	L Series 4 Drawer Lateral File 36W		\$550
04/21/2015	L Series	S-LATJ4D36	L Series 4 Drawer Lateral File 36W		\$550
04/21/2015		W-WS3048	Straight Worksurface 30x48		\$798
04/21/2015	9 to 5	1210-GT-UP	Shuttle Chair with Upholstered Seat and Back		\$234
04/21/2015	9 to 5	1210-GT-UP	Shuttle Chair with Upholstered Seat and Back		\$234
04/21/2015	9 to 5	1210-GT-UP	Shuttle Chair with Upholstered Seat and Back		\$234
04/21/2015	9 to 5	1210-GT-UP	Shuttle Chair with Upholstered Seat and Back		\$234
04/21/2015	Compel	TRT-NF-4824	Nifty Mobile Nesting Table 48x24		\$249
04/21/2015	Safco	23H	Zenergy Ball		\$159
04/21/2015	Safco	23H	Zenergy Ball		\$159
04/21/2015	Safco	23H	Zenergy Ball		\$159
11/09/06	Sony	Anycast Studio Kit	Studio in a box		\$20,000
04/30/07	CADCO	Modulator	Modulator		\$889
	Whirlwind		100' Audio Snake		\$350
	AJS	Pelican	Case		\$195
	Telex	X0AP	Base Station	5641	\$1,111
	Telex	X0-1	Headset Pack	8770	\$450
	Telex	X0-1	Headset Pack	8771	\$450
	Telex	X0-1	Headset Pack	9665	\$450
	Telex	X0-1	Headset Pack	9666	\$450
	Telex	X0-1	Headset Pack	8768	\$450
	Telex	X0-1	Headset Pack	8769	\$450
	Apple	IMAC 27"			\$1,700
	Canon		Battery Charger		\$498
	Adobe	Creative Cloud	Software		\$279.92/month
	TelVue	TelVue Connect	Software		\$3,000
	TelVue	Cloudiest	Software		\$3,000
	Scala, Inc		Software		\$280
	Intuit	QuickBooks On line	Software		\$83

# **Town of Concord**

## **Proposed Administrative Policies and Procedures**

### **Financial Policies**

**February 2, 2017**

**Finance Department  
Concord, Massachusetts**

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## Concord Financial Policies

### 1. Annual Budgets

#### A. *General Fund Budget*

1. It is Town policy that the Town Manager shall direct the preparation of the General Fund budget that takes into account the Finance Committee guideline.
2. It is Town policy that the Town Manager shall submit a budget detailing estimated revenues and expenditures for the ensuing fiscal year to the Select Board at least 90 days before the Annual Town Meeting, per Concord Town Charter, Section 16, Estimate of Expenditures.

#### B. *Enterprise Budgets*

1. It is Town policy that the Town Manager shall direct the preparation of budgets for the Enterprise Funds and certain Revolving Funds that ensure that these funds operate in a fiscally self-sustaining manner with respect to operating expenses, capital expenses, and long-term liabilities.

### 2. Revenue Assessment

#### A. *Full and Fair Cash Value*

1. It is Town policy that the Assessing Division assesses real estate and personal property at its full and fair cash value per M.G.L. 59 § 2A. To accurately assess real estate property values, the Assessing Division inspects all properties on a 5-year cycle or at a pace of approximately 1,200 properties per year.

#### B. *Calculation of Tax Rate*

1. It is Town policy that the Board of Assessors calculates a tax rate by dividing the total taxable property value as determined on January 1<sup>st</sup> of a given year, plus the value of any new taxable construction (“New Growth”) occurring before June 30<sup>th</sup>, by the tax levy as appropriated by Town Meeting in the spring of that year.
2. In the Fall, the Board of Assessors shall make a recommendation to the Select Board in a Classification Hearing for the adoption of the following four tax rate-related factors: the residential factor, open space discount, residential exemption, and small commercial exemption.
3. With the adoption of these factors, the Assessing Division shall submit this information to the Bureau of Local Assessment, which certifies the tax rate.

### **3. Revenue Collection**

#### *A. Property Taxes*

##### *1. Collection of Property Tax*

- a. It is Town policy to issue bills for real estate and personal property taxes on a quarterly basis in order to optimize cash flow. Interest shall be charged at a rate of 14 percent per annum for any unpaid balances after the respective due dates. Demand notices shall be mailed by May 31<sup>st</sup> on any balances outstanding after May 1<sup>st</sup>. A demand fee of \$10.00, as well as 14% interest, shall be included on the demand bills in accordance with state statute. If the outstanding balance is less than \$10, the demand fee is not charged.

##### *2. Application of Tax Payments*

- a. It is Town policy to assure the correct application of taxpayers' payments to their accounts on a timely basis. Receipts that are subject to interest, demands and other costs shall be applied based on the following order: interest, demand or other fees, utility liens, betterment assessments, real estate or personal property tax due.

##### *3. Tax Abatements and Exemption*

- a. The Town policy is to assure the correct application of taxpayers' abatements and exemptions to their accounts on a timely basis. As approved by the Board of Assessors or directed by the Appellate Tax Board, the Assessing Division grants abatements for real estate and personal property tax. The Board of Assessors may grant exemptions to qualifying veterans, the blind, surviving spouses, elderly and others along with those applying for tax deferrals that meet the statutory requirements as of July 1<sup>st</sup>.
- b. The Assessing Division enters all abatements and exemptions into the financial service software. As a result of this process, a *Notice and Certificate of Abatement Document* is created, signed by the Board of Assessors, and mailed to the taxpayer and provided to the Treasurer/Collector Division as evidence of the reduction in accounts receivable.

##### *4. Property Tax Refunds*

- a. It is Town Policy that the Treasurer/Collector Division is responsible for taxpayer refunds. Refunds for real estate and personal property are processed after May 1<sup>st</sup> (last tax due date) of any given year to assure all taxes due for the fiscal year have been paid. All precautions must be taken to assure the correct party receives the refund. Refunds shall be processed within 30 days (of the posting of the abatements/exemptions) for credit balances caused by the abatement/exemption.

##### *5. Refunds on Overpayments Due to Abatements*

- a. It is Town policy to assure the accurate calculation and the subsequent distribution of taxpayers' abatements to the proper party on a timely basis.

##### *6. Special Situations*

- a. It is the policy of the Town to bill, collect and record in an accurate and timely manner all of the special situations in accordance with Massachusetts General Law.

##### *7. Property Tax Payment Delinquency*

- a. It is Town policy is to collect all property taxes owed. Property taxes that are owed and not paid on time shall result in the taxpayer being charged penalties and interest, and may result in a tax taking and ultimately in a foreclosure.

*B. Motor Vehicle Excise Tax*

1. It is Town policy to optimize the Town's cash flow by mailing each motor vehicle commitment within 15 days of receipt of the *Assessors Warrant to the Treasurer/Collector* for each commitment from the Registry of Motor Vehicles (RMV).
2. The RMV maintains all records on motor vehicles and values. Several times over the course of the year, the RMV provides an electronic record to the Town Assessor, which documents the total value of the specific commitment and contains all of the information for billing to specific motor vehicle owners/accounts.
3. The first major motor vehicle excise (MVX) commitment of each calendar year, which is the largest commitment, will be mailed within 21 days of receipt of the commitment file from the RMV. All subsequent commitments are to be mailed within two weeks of receipt of the file from the RMV.
4. The Town currently has a contract with a Deputy Collector which provides that this vendor is responsible for MVX bill printing and mailing, delinquent payment processing, collection at warrant and reporting. The Town is responsible to assure that the commitment is accurate, for review and approval of abatements; for refunds and the overall monitoring of the process and for the reconciliation of the MVX receivable.
5. Bills are due and payable in full within 30 days of issue. Demand notices will be mailed within 15 days of the due date of the excise bill.
6. A \$10.00 demand fee will be included along with interest on the unpaid balance of the bill. Payments not paid at demand are subject to:
  - o Warrant fee of \$10.00 and notice fee of \$12.00
  - o If not paid, then final warrant fee of \$17.00 and
  - o If not paid, then Registry of Motor Vehicle fee of \$20.00.

**4. Other Revenues**

*A. State Aid*

1. It is Town Policy to budget conservatively in anticipation of the receipt of State Aid. Under M.G.L. 58 § 25A, the Commissioner of Revenue is required to provide an estimate of local aid to municipalities. Likewise, under M.G.L. 59 § 21, the Commissioner of Revenue is required to provide the Town with advance estimates of state assessments and charges and the Assessing Division is required to use these figures in determining the local property tax rate.

*B. State and Federal Grants*

1. It is Town policy that, with the approval of the Town Manager, Departments may apply for Federal and State grants to support Town initiatives or projects. All grant contracts must be approved and signed by the Town Manager. A copy of the grant documents must be provided to the Accounting Division. Departments shall comply with all of the requirements presented in the grant.
2. The source of the grant funding determines whether a grant is a state or federal grant.
3. It is Town policy that all procurement associated with State and Federal grants comply with State and Local laws and regulations.
- 4.

**5. Operating Expenditures**

*A. Accounts Payables*

1. It is Town policy that the Accounting Division shall assure the timely payment of all original invoices and vouchers submitted and approved by authorized Town employees. In order to accomplish this, vendors are paid weekly.
2. It is Town policy that vendor invoices are only paid after verification of available funds for said purpose and upon evidence of compliance with procurement requirements established by State law, Town Bylaws and Administrative Policies and Procedures.

*B. Payroll*

1. It is Town policy that Town and Concord Public School employees shall be accurately compensated in a timely fashion for their work.

**6. Cash Management**

*A. Departmental Receipts*

1. It is Town policy that the Town Treasurer shall have the fiduciary duty for the collection, management, and disbursement of cash.
2. It is Town policy that the department that collects cash, checks and credit card payments for services performed be responsible for safeguarding the collection and remittance of receipts until this money is turned over to the Treasurer/Collector Division. All cash received shall be turned over to the Treasurer/Collector Division; and no money shall be retained for petty cash or for making change.
3. It is Town policy that the department shall turn over these receipts to the Treasurer/Collector Division at least weekly or when total receipts are greater than \$2,000 and/or cash is greater than \$100. Exceptions to this turnover policy can be made by the Town Treasurer. The department shall separately send a copy of the turnover sheet to the Accounting Division.
4. Upon receipt of a departmental turnover, the Treasurer/Collector Division shall verify the amounts of the turnover. Within a period of one business day, the Treasurer/Collector Division shall post the receipt and deposit the collected money into a Town bank account. The Accounting Division will then post the receipts to the General Ledger.

*B. Cash Disbursements*

1. It is Town policy that warrants shall be processed on a weekly basis and payroll payments shall be processed on a bi-weekly basis. Warrants shall be duly signed and approved by the Town Accountant and the Select Board. The Treasurer/Collector or her designee shall be responsible for the disbursement and mailing of all vendor checks and shall assure that all Town checks are delivered only to the designated vendor.

*C. Emergency Disbursements (Special Warrants)*

1. It is Town policy that only in extenuating circumstances will the Treasurer/Collector Division be allowed to issue a disbursement outside of the normal weekly warrant process. Following the issuance of a check by the Town Accountant, the Town Manger must approve the release of funds in advance of Select Board approval.

*D. Petty Cash Administration*

1. It is Town policy that Petty Cash accounts shall be authorized by the Treasurer for departments that need a small amount of cash to make payments required at the time of service or to manage cash change transactions. Petty cash can only be replenished by submittal of all documentation and receipts through the warrant process for review by the Accounting Division.

*E. Tailings (Uncashed Checks)*

1. It is Town policy to identify and research all Uncashed Checks (Tailings) as a part of the timely reconciliation of all bank accounts. If after 60 days from the date of issuance of a check and the check has not been cashed, either a letter shall be sent to the known address for the check recipient or a notice shall be posted on the Town website. If there is no response within 60 days, for checks that are \$100 or more and are not cashed, a notice shall be advertised in a local newspaper. After one year of the newspaper notice, funds from these unclaimed checks may be credited to the Town's General Fund.

*F. Reconciliation of Cash*

1. It is Town policy that the Treasurer/Collector Division and the Accounting Division reconcile all cash accounts as recorded in the Treasurer's Cashbook and as recorded on the General Ledger on a monthly basis. The Treasurer/Collector Division and the Accounting Division shall provide monthly reports documenting the reconciliation to the Finance Director.

**7. Reserves**

*A. General Fund*

1. It is Town policy to maintain Free Cash, the General Fund's unassigned fund balance as certified by the Massachusetts Department of Revenue (DOR), at a level between 5% and 10% of the ensuing General Fund Budget with the following stipulations:
  - a. Free Cash shall be used only to the extent that it can be replenished within a one-year period.
  - b. Free Cash can be used to provide relief to Town taxpayers by allocating a portion of Free Cash that is not more than 1% of the ensuing General Fund Budget to reduce the tax levy, if that allocation is expected to be replenished in the ensuing year.
  - c. If Free Cash falls below 5% of the ensuing General Fund Budget, Town Manager and the Finance Director shall develop a plan to bring Free Cash back up to the 5% level.
  - d. If Free Cash rises above 10% of the ensuing General Fund Budget, the Town Manager shall consider recommending using the excess Free Cash in the following ways:
    - i. Appropriate a portion of the excess Free Cash for a special non-recurring expenditure that would include a capital item that would otherwise be eligible to be funded through borrowing, and
    - ii. Appropriate a portion of the excess Free Cash to a General Fund Stabilization Fund.

*B. Enterprise and Revolving Funds*

1. It is Town policy to maintain unrestricted fund balance for its enterprise and revolving funds at a minimum level that would provide adequate resources to sustain operations through unexpected and unfavorable financial events. These financial events could result in an unexpected expenditure outlay or revenue loss.
2. For the enterprise funds, unrestricted fund balance is categorized into two groups: depreciation funds and undesignated funds. The purpose of depreciation funds should be to allocate resources for the maintenance of capital assets. By setting aside annual depreciation expense using a half-year, straight-line convention, depreciation funds monetarily recognize the gradual wear of capital assets.
3. Undesignated funds are the additional funds need to sustain operations through unexpected and unfavorable financial events. Insurance policies (Refer to the Risk Mitigation section) cover the Town for events related to property damage and liability claims. Since enterprise funds rely on fees for services to fund operations, loss of expected revenue from the customer base may have an impact on the enterprise. Since some enterprises (Light Fund, Water Fund, and Sewer Fund) have a stable customer base, there is not the need for a large minimum undesignated fund balance. Other enterprises (Beede Fund) are dependent on a market-driven customer base, and there is the need for a larger minimum undesignated fund balance to sustain operations if market conditions change.
4. According, it is Town policy to maintain a minimum undesignated fund balance for the enterprise funds as follows:
  - a. Light Fund: Two months of annual operating revenue,
  - b. Water Fund: Two months of annual operating revenue,
  - c. Sewer Fund: Two months of annual operating revenue, and
  - d. Beede Fund: Six months of annual operating revenue.
5. For the two revolving funds ( Solid Waste Revolving Fund and Recreation Revolving Fund), which do have a market-driven customer base but have flexibility in adjusting operations more rapidly because they do not have capital assets to maintain, it should be the Town's policy to maintain a minimum fund balance as follows:
  - a. Solid Waste Revolving Fund: Two months of annual operating revenue, and
  - b. Recreation Revolving Fund: Two months of annual operating revenue.
6. If an undesignated fund balance for an enterprise or revolving fund falls below these minimum levels, the Town Management should develop a plan to bring the respective fund balance up to the minimum levels.
7. It should be noted that these defined levels of fund balance are minimums and a greater amount is permitted in order for the enterprise or revolving fund to accumulate resources for an anticipated future event.

*C. Stabilization Funds*

1. It is Town policy that stabilization funds can be created to set aside funds to be used for a specific purpose at some later date.

*D. Encumbrances*

1. It is Town policy that a Department Head may request at the end of the fiscal year that the Town Manager set aside available funds from the department's General Fund appropriated account to be used for a specific purpose at some later date. Encumbered funds shall not be used for operating expenses in future years. Once these encumbered funds are approved and established, the Department Head may use these funds for the stated purpose in subsequent fiscal years.

*E. Reserve Fund*

1. It is Town policy that the Town Manager, with the certification as to fund balance by the Town Accountant, can make a request to the Finance Committee for a transfer from the General Fund Reserve Fund to another appropriated account in the event that the account incurs an expenditure which is extraordinary or unforeseen, per M.G.L. 40 § 6. The Finance Committee shall have the sole authority to approve such a transfer.

**8. Investments**

*A. Investments of Treasury Funds*

1. It is Town policy that the Town Treasurer may invest Treasury Funds as follows:
  - a. Massachusetts State Pooled Fund (in unlimited amounts and the pool is liquid) – The Massachusetts Municipal Depository Trust (MMDT), an investment pool for state, local, county and other independent governmental authorities, is under the direction of State Treasurer.
  - b. Commercial Bank Deposits or Certificates of Deposit, which are fully collateralized through a third party agreement (in unlimited amounts for up to three-year maturity).
  - c. Massachusetts list of Legal Investments, per M.G.L. 167 § 15A as updated each July 1<sup>st</sup>.
  - d. Other financial instruments as defined in M.G.L. 44 § 55.

*B. Investments of Trust Funds*

1. It is Town policy that the Town Treasurer may invest Trustee Funds as specified in the investment policy established by the Trustees of Town Donations, the entity that has fiduciary duty over these funds.

*C. Diversification*

1. Diversification shall be interpreted in two ways: in terms of maturity, as well as instrument type and issuer. The diversification concept shall include prohibition against over-concentration of maturities as well as concentration in a specific institution.
2. It is Town policy that with the exception of U.S. Treasury obligations or investments fully collateralized by U.S. Treasuries or agencies and state pools (e.g., MMDT), no more than 10 percent of the Town's investments shall be invested in a single financial institution.

*D. Ethics*

1. It is Town policy that the Town Treasurer (and other Finance Department staff) shall refrain from any personal activity that may conflict with the proper execution of the investment program or which could impair or appear to impair ability to make impartial investment decisions. Said individuals shall disclose to the Town Manager any material financial interest in financial institutions that do business with the town. They shall also disclose any large personal financial investment positions or loans that could be related to the performance of the Town's investments.
2. It is Town policy that the Town Treasurer shall not make a deposit in any bank, trust company or banking company that he/she is associated with as an officer or employee, or has been associated with as an officer or employee for any time during the three years immediately preceding the date of any such deposit.

*E. Relationship with Financial Institutions*

1. It is Town policy that financial institutions shall be selected first and foremost with regard to the safety of the Town assets.
2. It is Town policy that the Town shall only select brokers who are recognized, reputable dealers. The Town Treasurer shall require any brokerage houses and broker/dealers wishing to do business with the municipality to supply the following information to the treasurer:
  - a. Audited financial statements,
  - b. Proof of National Association of Security Dealers certification,
  - c. A statement that the dealer has read the municipality's investment policy and will comply with it, and
  - d. Proof of credit worthiness (minimum standards of at least five years in operation and a minimum capital of \$10 million).

**9. Capital Expenditures**

*A. Capital Assets*

1. It is Town policy that capital items are defined as assets such as structures, land, and equipment (including related plans, designs, and studies), which have a life expectancy of at least 2 years and a cost of at least \$10,000.
2. It is Town policy that in compliance with GASB #34, capital assets (other than land) are depreciable and should follow straight-line depreciation schedules in accordance with the Massachusetts Department of Revenue's useful life schedules.

*B. Capital Funding Target Level (General Fund – within the levy limit)*

1. It is Town policy that a target of 7% to 8% of the total budget net of the excluded debt levy be allocated for capital financing. Of the 7% to 8%, no more than 5% shall be for debt service within the levy limit. Capital Outlay from the Town Departments and the Concord Public Schools shall be at least 2% to 3% of the annual budget (not including excluded debt).

C. *Five-Year Capital Improvement Program (CIP)*

1. It is Town policy that the Town shall maintain and annually update a 5-year Capital Improvement Program to identify current and future capital needs. The CIP shall allocate resources to fund new needed capital projects and fund the repair and replacement of existing capital assets in effort to maintain the Town's physical infrastructure and avoid deferring maintenance for future years.

**10. Debt**

A. *Debt Structure*

1. It is Town policy that capital items that can be funded through borrowing include infrastructure, facilities, vehicles, equipment, and land, which have (1) an estimated cost of \$100,000 or more and (2) a useful life of at least 5 years.
2. It is Town policy that all borrowing whether tax-supported by the General Fund or revenue-supported by the Enterprise Funds shall be issued as General Obligation (GO) bonds, having the Town's pledge of full faith and credit for repayment.
3. It is Town policy that tax-supported borrowing can be used for the sustainability, improvement, or expansion of the Town's significant capital assets with debt service is paid for by the General Fund.
4. It is Town policy that the maximum level of indebtedness shall not exceed 5% of the equalized valuation of the Town per M.G.L. 44 § 10.
5. It is Town policy that the Town shall develop a 5-year debt capacity analysis inclusive of CPS, with estimated project costs updated annually.
6. It is Town policy that for tax-supported borrowing within the levy limit, the Town's goal is to structure the Town's debt in the following way:
  - a. The repayment schedule is at an accelerated pace in which of 60% of the principal is repaid within 5 years and 90% is repaid within 10 years. This goal reduces the cost of interest expense and frees up debt capacity for future borrowing.
  - b. The annual amount of debt services is approximately 5% of the annual General Fund expenditures net of excluded debt service. The purpose of this goal is to allocate sufficient funds for the Town's capital needs and prevent operating needs from "crowding out" the proper investment in capital.
7. It is Town policy that revenue-supported borrowing shall be reserved for capital assets associated with expansion of service. Debt service is paid through user fees and rates earned by the specific Enterprise Fund.
8. It is Town policy that excluded debt shall be used for capital items that cannot be funded through the debt plan within the levy (e.g., new schools construction, facility expansion, land acquisition, etc.). For all excluded debt proposals, the impact on property tax shall be calculated prior to the presentation at Town Meeting.
9. It is Town policy that the retirement structure of a specific bond shall not be greater than the useful life of the underlying capital assets.
10. It is Town policy that borrowing shall not be used for operating expenses or to fund other long-term liabilities such as pension or other post-employment benefit obligations.

*B. Debt Authorization*

1. It is Town policy that the Town shall publish a notice of the Town Meeting warrant article for a borrowing at least 7 days prior to an Annual Town Meeting and at least 14 days prior to a Special Town Meeting, per M.G.L. 44 § 10.
2. It is Town policy that all borrowing authorizations require a two-thirds majority vote by Town Meeting per M.G.L. 44 § 7. For borrowing authorizations outside the levy limit, Town Meeting must approve the borrowing by a two-thirds majority and the Town must approve it by a majority vote in a community-wide referendum per M.G.L. 44 § 8.

*C. Debt Issuance*

1. It is Town policy that the Town should retain a financial advisor and bond counsel for financial and legal guidance for debt issuance. Prior to the issuance of a bond, the Town shall provide an Official Statement containing legally required disclosure information pertaining to the financial and economic position of the Town (17 CFR § 240.15c2-12).
2. It is Town policy that with the guidance of Bond Counsel, the Town shall award the winning bond bid to the bidder with the lowest True Interest Cost (TIC).
3. It is Town policy that the Town shall spend the bond proceeds in a timely manner to avoid IRS arbitrage penalties. The Finance Department as well as the particular departments shall monitor the use of bond proceeds to ensure compliance with arbitrage regulations.

**11. Other Liabilities**

*A. Pension*

1. It is Town policy to allocate resources to fully fund the Town's portion of the Concord Contributory Retirement System by 2030. In order to do so, the Town shall contribute to the pension fund its share of the Annual Required Contribution (ARC) payment as determined by a biennial actuarial valuation report, certified by the Public Employee Retirement Administration Commission (PERAC), and reviewed by Contributory Retirement Board. This contribution may consist of (1) a General Fund appropriation increasing at a 3% annual growth rate, (2) the use the Town Pension Reserve Fund to supplement the required General Fund allocation as necessary, and (3) the full funding of the ARC associated with the Town's enterprise operations.
2. It is Town policy that management and investment of the pension fund are the responsibility of the Concord Contributory Retirement Board.

*B. OPEB*

1. It is Town policy to allocate resources to fully fund the Town's portion of Other Post-Employment Benefits (OPEB) by 2039. In order to do so, the Town shall contribute to the OPEB Trust Fund its share of the Net OPEB Obligation (NOO) as determined by an actuarial valuation report. This contribution may consist of (1) a General Fund appropriation increasing by \$250,000 annually until the General Fund's portion of the NOO is fully funded, and (2) the full funding of the NOO associated with the Town's enterprise operations.
2. Funds invested and reinvested in the OPEB Trust Fund by the Town Treasurer shall be consistent with the prudent investor rule established under M.G.L. 203C.

## **12. Accounting and Financial Reporting**

### *A. Financial Reporting*

1. It is Town policy that the Town's accounting practices shall conform to Generally Accepted Accounting Principles (GAAP) as set forth by the Government Accounting Standards Board (GASB), the Uniform Municipal Accounting System (UMAS), and the Massachusetts Department of Revenue (DOR) Informational Guideline Releases.
2. It is Town policy that a certified public accounting firm shall conduct an independent annual audit of the Town financial records. There are four types of opinions provided by the auditor of the independent annual audit: Unqualified Opinion (Clean Opinion), Qualified Opinion, Adverse Opinion, and Disclaimer of Opinion. It is Town policy that Town government shall maintain its financial records so that the auditor can render a Clean Opinion, the opinion in which the Town financial records have been maintained in accordance to GAAP. An opinion rendered by an auditor that is not a clean opinion shall be reviewed by the Finance Department and corrections shall be made in the next fiscal year.
3. It is Town policy that the Finance Department shall take steps to address Management Letter items (e.g., items that the independent auditor sees deficiencies) during the subsequent fiscal year.
4. It is Town policy that a completed audit by the Town shall be submitted to the Division of Local Services, per State law.
5. It is Town policy that whenever the total annual federal grants to the Town and CPS total more than the level that triggers a single audit, the Town is required to comply with the Single Audit Act for Audits of States, Local Governments, and Non-Profit Organizations.
6. It is Town policy to have a Financial Audit Advisory Committee (FAAC) to assist the Select Board, Town and Concord Public School financial management officials in the organization, implementation and review of the annual examination of financial reporting and control procedures and in the continuous review and improvement of fiscal accountability matters.

### *B. Reconciling Accounts*

1. It is Town policy that the Treasurer/Collector Division and the Accounting Division shall reconcile all cash accounts as recorded in the Treasurer's Cashbook and as recorded on the General Ledger on a monthly basis. The Treasurer/Collector Division and the Accounting Division shall provide monthly reports documenting the reconciliation to the Finance Director.
2. It is Town policy that the Treasurer Collector Division shall reconcile all receivable accounts on a monthly basis. The reconciliation shall show each receivable account by levy year for property and excise taxes and total balances for betterment, tax title, and lien accounts. A separate report shall be provided for any other receivables. Deferred revenue accounts for all funds shall be reconciled to the receivable accounts on a monthly basis.
3. It is Town policy that the Accounting Division shall reconcile the General Ledger accounts as follows:
  - a. Payable and payroll withholding accounts shall be checked periodically and not less than semiannually to determine that the balances are properly clearing.
  - b. Budgeted expenditure accounts shall be reviewed monthly to identify any unusual activity or predict potential budget shortages.

- c. Revenue and expenditure accounts shall be reconciled to the control accounts. This is performed automatically by the financial system but should be periodically checked to assure that there are no system errors.
  - d. All funds should be checked to be sure they are in balance.
  - e. Interfund transfers and receivable/payable accounts shall be reconciled where applicable.
  - f. Appropriation balances shall be reconciled to the tax recap and Town meeting votes.
  - g. All accounts shall be reviewed analytically from time to time for reasonableness and to identify unusual activity.
- C. *Monitoring Accounts*
1. It is Town policy that all expenditure budgets be reviewed on a monthly basis by department heads. The official record of expenditures is the Town's General Ledger as maintained by the Accounting Division and department heads or authorized employees must submit documentation to support any journal entry if an expenditure account on the General Ledger needs adjustment.
  2. It is Town policy that all revenue transactions be reviewed on a monthly basis by department heads. The official record of revenues is the Town's General Ledger as maintained by the Accounting Division, and department heads or authorized employees must submit documentation to support any journal entry if a revenue account on the General Ledger needs adjustment.
- D. *Year-End Closing*
1. It is Town policy that the Accounting Division shall complete the year-end closing process once the auditors have finished their field work and have given the Town approval to generate year-end financial statements and to submit documentation for Free Cash certification.
- E. *Regulatory Reporting*
1. *Free Cash Certification (Balance Sheet)*: It is Town Policy to file appropriate documentation with Massachusetts Department of Revenue's (DOR) Bureaus of Account for the certification of Free Cash after the close of each fiscal year. Certified Free Cash is available for appropriation at the subsequent Town Meeting. Please refer to *Section 7. Reserve Funds* for the Free Cash Policy.
  2. *Schedule A*: It is Town policy that the Accounting Division files *Schedule A*, the year-end statement of revenues and other financing sources, expenditures and other financing uses, changes in fund balances, certain balance sheet and other information with the DOR, by annual deadline of November 30<sup>th</sup>.
  3. *Tax Recapitulation Sheet*: It is Town policy that the Finance Administration Division, Assessing Division and Accounting Division work collectively to complete the Department of Revenue's *Tax Rate Recapitulation* form, a four-page form that assembles all information necessary to calculate tax rates for the municipality, by the end of November. Once the tax rate has been approved by DOR, the Accounting Division shall record a journal entry for the final overlay account (allowance for abatements and exemptions).
  4. *CPA Reporting*: It is Town policy that the Town completes and submits to the DOR three Community Preservation Act (CPA) reports annually: the CP-1 Form (Community

- Preservation Act Surcharge Report), the CP-2 Form (The Community Preservation Fund Report), and the CP-3 Database (The Online Community Preservation Projects Report).
5. *Cash and Receivable Reconciliation:* It is Town policy that the Accounting Division and the Treasurer/Collector Division submit an end-of year cash and receivable reconciliation to DOR.
  6. *Snow and Ice Reporting:* It is Town policy that the Accounting Division submits a snow and ice report signed by the Town Manager and the Finance Committee to the DOR by deadline of September 30<sup>th</sup>. This report is a statement of snow and ice expenditures and financing sources for the previous winter.
  7. *1099 Reporting:* It is Town policy that the Accounting Division shall issue *1099 Forms* by January 31<sup>st</sup>. The Accounting Division shall submit a 1099 file to both the IRS and the State. A 1099-MISC is issued for each person the Town has paid at least \$600 for rents, services, prizes and awards, or other income payments during the calendar year. A 1099-INT is issued for each person to whom the Town has paid \$10 or more of interest during (from tax abatement refunds, 53-G refunds, etc.) for the calendar year.
  8. *Annual Provider Information Form:* It is Town policy that the Accounting Division is responsible for generating this report and submitting this report to the State by August 1<sup>st</sup>. Massachusetts General Laws Chapter 62C § 47A requires that cities and towns report certain information on vendors. The Town is required to list all persons who furnished goods, services, or real estate space for \$5,000 or more during the preceding fiscal year under contracts or agreements. The listing shall contain the name, address, and social security or federal identification number. The Department of Revenue further requires that the Town submit the Tax ID number of all providers of goods and services to the Town.
  9. *Fixed Asset Reporting:* It is Town policy that the Accounting Division is responsible for fixed asset reporting. A capital asset is defined as having a value of \$10,000 or more and useful life is 2 years or more. GASB 34 requires the Town to account for capitalized infrastructure associated with Government Activities.

### **13. Risk Mitigation**

#### *A. Financial Risk*

1. It is Town Policy that the Town will contract with an independent auditing firm to examine the Town's financial statements, render an opinion, and provide a management letter. The Financial Audit Advisory Committee has the charge for reviewing the audited financial statements and management letter.

#### *B. Property Risk*

1. It is Town policy that that the Town shall contract for sufficient insurance coverage to protect Town property in the case of an unforeseen catastrophe or damage to Town property. Property Risk mitigation is the responsibility of the Town Manager's Office and policies and procedures for property risk mitigation are established by that department.

*C. Information Risk*

1. It is Town policy that the Town shall provide safeguards against cyber threats. Information risk mitigation is the responsibility of the Information Technology Department and policies and procedures for information risk mitigation are established by that department.

*D. Professional Liability Risk*

1. It is Town policy that the Town shall contract for sufficient professional liability insurance coverage to protect Town officials and members of Town boards and committees for decisions made during official duty.

**14. Procurement**

*A. Procurement*

1. It is Town policy that the purchase of goods, services, and construction activities are obtained at the best value. Best value is defined as the lowest price for purchases that have similar quality and a combination of lowest price and highest quality for other purchases. This policy is implemented through compliance with State procurement statutes and Town regulations that promote competition in the award of contracts: competition is ensured by requiring that the Town conduct a sealed bid or proposal process for items over a certain dollar threshold and by allowing the Town to participate in federal, state and regional competitively-bid purchasing agreements.

*B. Chief Procurement Officer and Delegation of Authority*

1. As set forth in Section 9F of the Town Charter, the Town Manager shall be responsible for the procurement of all supplies, materials and equipment and for the award of all contracts. Town Manager shall be appointed as the Chief Procurement Officer of the Town. Most of these duties and powers shall be delegated to the Finance Director and the School Finance Officer as allowed by M.G.L. 30B § 19 and specified in APP #36. The Town Manager shall alone retain the sole authority to award and execute contracts.

*C. Purchase Orders*

1. It is Town policy that purchase orders shall be used for all purchases of \$1,000 or more, unless otherwise exempted.

*D. Authorization*

1. *Purchase Orders between \$1,000 and \$4,999:* These purchases must follow the applicable State statutes and Town regulations and be approved by the appropriate Division Manager, Department Head, and Budget & Purchasing Director
2. *Purchase Orders between \$5,000 and \$34,999:* These purchases must follow the applicable State statutes and Town regulations and be approved by the appropriate Division Manager, Department Head, Budget & Purchasing Director and Finance Director.
3. *Purchase Orders of \$35,000 or more:* These purchases must follow the applicable State statutes and Town regulations and be approved by the appropriate Division Manager, Department Head, Budget & Purchasing Director, Finance Director and Town Manager

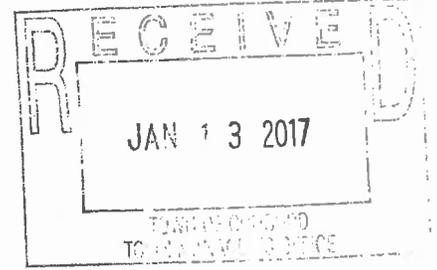
*E. Statutory and Regulatory Compliance*

1. *Goods & Services:* For the procurement of goods and services, the Town shall follow the Uniform Procurement Act, M.G.L. 30B.
2. *Building Design:* For building design, the Town shall follow the Designer Selection Law, M.G.L. Chapter 7 §§ 38 A½ - O.
3. *Building Construction and Repair:* For building construction and repair, the Town shall follow M.G.L. 149 §§ 44 A-M.
4. *Public Works Construction:* For roads, bridges, water and sewer systems, and other public works construction, the Town shall follow M.G.L. 30 § 39M.

entered 1/18/17

**Andrew Mara**

**From:** noreply@civicplus.com  
**Sent:** Friday, January 13, 2017 10:12 AM  
**To:** Andrew Mara; Laurel Landry  
**Subject:** Online Form Submittal: Electronic Green Card



**Electronic Green Card**

**Directions**

*Thank you for your interest in serving your town! Volunteering is easy with the Electronic Green Card – simply follow these steps.*

- 1) *Select which board or committee you want to serve on from the list. You may select more than 1.*
- 2) *Fill out the personal information, experience, and education sections.*
- 3) *Rank your top 3 committee/board preferences.*
- 4) *Click submit!*

Town Committees / Boards                      Natural Resources Commission

I would also be interested in helping on projects.      Yes

Name    Mary Ann Lippert

Email Address                                      [malippert@comcast.net](mailto:malippert@comcast.net)

Address    19 Cranberry Ln

City    Concord

State     MA

Zip Code    01742

Cell Phone Number                              978-808-9839

Home Phone Number                            978-369-5667

Work Phone Number                            *Field not completed.*

Place of Employment                           *Field not completed.*

Profession                                        Retired software engineer

Voting Precinct                                 2

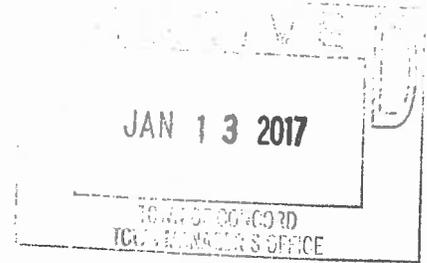
Title	Ms.
Gender	Female
Relevant Experience/Education	Many years of gardening experience
Relevant Degrees/Professional Certificates	<i>Field not completed.</i>
Please order your top 3 committee preferences below:	Natural Resources Commission
If you checked "I'd like to help on a project," please specify what kind of project you would be interested in working on.	I would like to work on the Natural Resources Commission subcommittee Conservation Restriction Stewardship Committee

Email not displaying correctly? [View it in your browser.](#)

Andrew Mara

entered 1/18/17

**From:** noreply@civicplus.com  
**Sent:** Wednesday, January 11, 2017 9:39 PM  
**To:** Andrew Mara; Laurel Landry  
**Subject:** Online Form Submittal: Electronic Green Card



## Electronic Green Card

### Directions

*Thank you for your interest in serving your town! Volunteering is easy with the Electronic Green Card – simply follow these steps.*

- 1) *Select which board or committee you want to serve on from the list. You may select more than 1.*
- 2) *Fill out the personal information, experience, and education sections.*
- 3) *Rank your top 3 committee/board preferences.*
- 4) *Click submit!*

Town Committees / Boards	Natural Resources Commission
--------------------------	------------------------------

I would also be interested in helping on projects.	No
--	----

Name	Neil S. Ryder
------	---------------

Email Address	<a href="mailto:neiryd8@gmail.com">neiryd8@gmail.com</a>
---------------	--

Address	96 The Valley Road
---------	--------------------

City	Concord
------	---------

State	MA
-------	----

Zip Code	01742
----------	-------

Cell Phone Number	978 489 8803
-------------------	--------------

Home Phone Number	978 318 1964
-------------------	--------------

Work Phone Number	n/a
-------------------	-----

Place of Employment	n/a
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Profession	Retired (previously pharmaceutical research manager)
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Voting Precinct	5
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Title	Mr.
Gender	Male
Relevant Experience/Education	Biologist; photography
Relevant Degrees/Professional Certificates	BSc and PhD in Biological Sciences
Please order your top 3 committee preferences below:	Conservation Restriction Stewardship Committee
If you checked "I'd like to help on a project," please specify what kind of project you would be interested in working on.	<i>Field not completed.</i>

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