



**Town of Concord**  
Board of Assessors  
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## **The Assessment Process-FY08**

October 2007

### **INTRODUCTION**

This guide is to help you understand your property record card with the assessed valuation proposed by the Board of Assessors for the Fiscal 2008 tax year. The tax year runs from July 1, 2007 through June 30, 2008. The assessment date is January 1<sup>st</sup> preceding the beginning of the tax year; in this case it is January 1, 2007. State law requires that the assessed valuation established for a property should represent fair market value as of that date.

Fair market valuation is based on sales that occurred in calendar 2006, the calendar year that precedes the valuation date. Standards of assessment practice set by the Department of Revenue (DOR) require a median assessment to sale price ratio of plus or minus 10% of 100% of market value for these sales. There was little change in sale prices from 2005 to 2006. Note that 2007 sales activity will be reflected in the FY09 Interim Year Adjusted values and may not be used for FY08.

### **WHAT IS A REVALUATION?**

The DOR requires communities to value all property each year. Every third year is a complete revaluation ("reval"). Both a reval and an interim year adjustment (the two years in between the triennial revaluations) include a detailed analysis of the appropriate sales data as a basis for adjustment to property values. The goal is to keep the values at 100% of market value as closely as possible and avoid an excessive swing in the assessments in one year. A reval year includes intense examination by the DOR of

all the community's assessment policies and procedures.

### **WHAT CHANGES HAVE BEEN MADE FOR FY2008?**

Many of the changes are explained below as each section of the property record card is explained. The CAMA (Computer Aided Mass Appraisal) system is used to calculate the values. CAMA tables with the factors used to calculate the values are updated each year based on the sales analysis. The factors are adjusted so that the median assessment to sale price ratio is within 10% of 100% of fair market value. The computer model created is then applied to the properties of the entire town to arrive at a new value for each property. For FY08 there were adjustments to many factors in the tables.

### **WHY DOES EVERY PROPERTY GO UP (OR DOWN) IN DIFFERENT PROPORTIONS?**

The characteristics of your property will determine how the adjustments to the factors will affect your valuation. Items such as location, style, size, quality of construction, age and condition of the house, and lot size in the properties that were sold in 2006 are analyzed to derive multipliers which are then applied to all properties town-wide. The relative importance of these characteristics in the marketplace determines whether an owner's valuation changes.

Field review is done to check the application of these characteristics for consistency and uniformity. Properties with renovations or

new construction in FY2006 will usually show an increase in their valuation.

### **WHEN MY NEIGHBOR'S HOUSE SELLS, WILL THEIR PRICE DETERMINE MY ASSESSMENT?**

A single sale does not establish the market value of all the properties in that area. It is only by examining ALL of the arms-length sales (a willing buyer and a willing seller acting in an informed manner in the open market) that the Board of Assessors can begin to discern the characteristics of the market. If the sale of your neighbor's property is an arms-length sale and if it occurred in the appropriate year, it will be included in the analysis of all sales and will be part of the data that determines the multipliers to be used to arrive at the new valuations.

### **HOW WILL THIS NEW VALUATION AFFECT MY TAX BILL?**

The increase in the town-wide total tax levy, required to fund the budgets approved at the 2007 Annual Town Meeting is 4.7%. This increase will affect all property owners. However, the changes in your bill will also depend on changes in the assessed value of your home. The Board of Assessors does not determine how much the Town will spend for the many services we receive, but apportions the share of these costs among all property owners in town as fairly as possible.

The actual tax rate is set after the values are finalized, the Selectmen vote on the rate, and the calculation is approved by the DOR. The FY2007 tax rate was \$10.56 per \$1,000 of valuation. The Finance Department is estimating that the tax rate for FY2008 will be about \$11.00 per thousand. The Fiscal 2008 tax year began on July 1, 2007, and two quarterly estimated bills have been issued. The new valuations are the basis for the third and fourth quarter bills due on February 1 and May 1, 2008. These two bills will take into account the estimated taxes you have already paid.

### **HOW CAN I GET MORE INFORMATION?**

Printouts with detailed characteristics for each property are available at the Town House, the Main and Fowler Branch Libraries, and the Harvey Wheeler Building. Maps of the proposed newly-defined market areas are available at the Town House. This same detailed information is also available on the Town's website, [www.concordma.gov](http://www.concordma.gov) under the Assessors Division. Additionally, there is a computer terminal at the Town House from which you can obtain copies of property cards for \$1.00 per copy. At this location you can also access Geographical Information System (GIS) maps of particular parcels or parts of town. GIS access is also available through the Town's website.

### **WHAT HAPPENS IF I DISAGREE WITH MY ASSESSMENT?**

If you disagree with your assessment after receiving your third quarter tax bill, you may file an abatement application with the Board of Assessors. Forms are available at the Assessing Office and on the Town's website. Also in these same locations is a brochure entitled "Hints on Filing an Abatement Application." By law all abatement applications must be received in the Assessing Office no later than the third quarter payment due date, February 1, 2008, or postmarked by that same date. Applications received after that date or postmarked later than February 1, 2008, cannot by law be considered by the Board of Assessors.

### **HOW TO READ YOUR PROPERTY RECORD CARD**

The rest of this document provides an explanation of the information contained on your property record card with an explanation of how the various important numbers are derived. A sample property record card is attached with the areas labeled to correspond with the following explanations. The most significant factors are (1) the size and location

of the land, and (2) the size, style, construction quality and condition of the structure(s).

### **SIDE 1**

The information on the front side of the card is legal and historical data about ownership, past sales of the property, previous assessments, inspection history, and current land valuation details.

#### **Area 1 – Current Owner**

Ownership information as of the most recent sale date known to the Board of Assessors.

The Record of Ownership section immediately below shows a history of ownership and sales. The column following the “Sale Date” is headed “q/u” identifying the sale as “qualified” or unqualified.” All sales are reviewed in detail to identify arms-length transactions that can fairly be used to represent the market (for both the interim year adjustments and the triennial certification). If a sale is deemed not to be an “arms-length” transaction, it is marked “U,” and the column headed “V.C.” (verification code) shows a letter code describing the reason for the disqualification.

#### **Area 2 – Current Assessment**

This area summarizes the valuation generated elsewhere on the card for land, structures, outbuildings and extra features. Usually, the “Appraised Value” and the “Assessed Value” will be the same. In some instances, such as for agricultural land, the “Appraised Value” is the value of the property before the applicable discount. The “Assessed Value” is the taxable value, LESS the total labeled “Exempt” and “Exm Land,” which is the tax exempt portion of the property. If the parcel has multiple cards, each building will be described on a separate card. The land lines on each card will be unique to that particular building. The summary of assessed value is the same on each card.

#### **Area 3 – Previous Assessments**

This section shows the assessment history for the previous three fiscal years.

#### **Area 4 – Building Permit Record and Visit/Change History**

This section lists the recent building permit activity and record of visits to the property.

#### **Area 5 – Land Line Valuation**

The Department of Revenue (DOR) requires property values to be divided into two parts, building and land. The land is assigned a “Use Code” according to the various classes provided by the DOR. These codes include single family residences, condos, multi-family residences, vacant land, commercial, industrial, exempt properties and personal property.

#### **Building Lots**

Lot values are derived from the market-based data. Since there are too few vacant land sales in Concord to draw conclusions about the value of developed land, a methodology called “land residual” is used. Using this method, the cost-based value of the structure(s) is taken from the sale price, resulting in a remaining value for the land. The square foot base rate is developed based on zoning districts or on the typical lot size of a given area. The following table lists standard lot values:

<u>Square Feet</u>	<u>Lot Price</u>	<u>\$/Sq. Ft.</u>
10,000	\$258,500	\$25.85
20,000	304,000	15.20
40,000	350,000	8.75
80,000	375,000	4.69

When the base lot area is identified, market data (i.e., land residuals) are plotted to develop a curve known as the “land curve.”

The curve is intended to reflect market activity which typically indicates that land is not bought and sold on a square foot basis; rather, the square foot price decreases as the acreage increases. The curve also attempts to establish the extent to which a building lot which is undersized for its area will receive a higher price per square foot, but a lower total lot value.

The value of a building lot is then differentiated by location in the town. Concord is a diverse community with many different neighborhoods. To determine the value of land in Concord the Board of Assessors divides the town into several, not necessarily contiguous, Market Areas. Each Market Area groups properties together that behave similarly in the market place. Each grouping should be large enough to insure that the number of qualified sales per area is a meaningful sample. The degree to which market analysis shows variation by location is represented by the "Market Area Adjustment" factor. The Market Area code is found in the column labeled "ST. Idx," and the adjustment factor associated with that Market Area is in the column labeled "Adj."

There are 12 Market Areas used for residential properties. The streets listed below are examples from the various FY08 Market Areas.

<u>Market Area</u>	<u>Adj.</u>
21 Annursnac Hill/Conantum	0.90
22 Bedford St./Old Bedford Rd./ Virginia Rd.	0.94
23 Old Marlboro Rd./Blueberry /Hunter's Ridge/ORNAC	1.05
24 Concord Center/Elm St./ Author's Ridge	1.80
25 Lowell Rd./Strawberry Hill, Gar- field/Fairhaven Hill/Mattison Dr.	1.05
26 Monument St./Estabrook Rd.	2.75
27 Plainfield Rd./White Pond area	1.04
28 Southfield Rd./Sudbury Rd./ Baker Ave./Cambridge Tpk./ Macarthur/Adams/Park	1.28
29 Thoreau Hills	0.80

30 West Concord	1.00
31 Nashawtuc Hill Area	2.80
32 East of Concord Ctr/Lower Monument St.	2.50

Concord is so diverse, however, that in some years sales show there are different land values within some Market Areas. These unique areas are identified from the qualified sales and an additional factor is applied to that area called a Site Index. This is a number by which the land value is multiplied to adjust for the difference associated with a sub area within a Market Area. As with a Market Area factor, a Site Index factor may increase or decrease the land value in a sub area. The Site Index code is in the column headed "S.A." and the actual factor is in the column headed "I. Factor." The following table lists a few residential Site Indices, which are different for different property classifications.

<u>Site Index</u>	<u>Land Value Multiplier</u>
1	0.80
2	0.85
3	0.90
4	0.95
5	1.00
6	1.15
7	1.20
8	1.40
9	1.60
K	1.75
L	1.90
R	2.10

### **Excess Land**

If there are additional lines in the Land Line Valuation Section, they may reflect additional building lots or "excess land." Excess Land is that portion of the parcel that is over and above the requirements for a building lot as defined by the zoning districts. All excess land is valued at \$60,000 per acre modified by the market area adjustment factor. This price is also a result of the sales analyses undertaken by the Board of Assessors.

In the example card, the first line of 80,000 square feet is valued as follows:

$$\begin{aligned} \$4.69 \times 1.05 &= \$4.92 \\ \$4.92 \times 80,000 \text{ sq. ft.} &= \$394,000 \\ &(\text{values are rounded to } 100) \end{aligned}$$

In cases where there are unusual circumstances unique to a certain parcel, a further multiplier called a Condition Factor is used. These, too, can be either negative (e.g., railroad, easement) or positive (e.g., river view, vista).

In summary, land value is determined by considering the influence of location within the town and within the Market Area, along with any unusual influences requiring the use of a Condition Factor.

## **SIDE 2**

The second side of the Property Record Card shows all of the details used in valuing the structure, including outbuildings (e.g., shed) and extra features (e.g., fireplace) valued separately. A diagram of the principal structure with the measurements used for the replacement cost calculation is also shown. Abbreviations used in the sketch are explained in the Building Sub-Area Summary Section at the bottom of the card.

There is a lot of information on this card, but there are four elements that can be considered the most important contributors to the structure value.

- A. Effective Area -- used for replacement cost of building
- B. Style – determines base rate per square foot to build that style of building in eastern Massachusetts, as adjusted for Concord based on the market analysis
- C. Grade -- quality of construction
- D. Dep Code – normal physical depreciation based on the current condition of the structure given the actual year built (AYB).

### **Area 6 – Construction Detail**

Each construction detail has a code and a description. The principal elements are described below.

**Style** – For single family structures, there are ten basic styles of houses. Each style has a corresponding “base rate” which is the current estimated new construction cost per square foot for this region of the country. This information is obtained from the published construction industry data commonly used for this purpose, modified by the Concord sales analysis and discussions with local builders and architects. The styles and base rates are listed below:

<u>Code</u>	<u>Style</u>	<u>Base Rate</u>
01	Ranch	\$110
02	Old Style	153
03	Colonial	138
04	Cape Cod	136
05	Bungalow	105
06	Conventional	153
07	Contem/Modern	122
08	Raised Ranch/Spl Lvl	110
60	Century (F,R,V)	200
100	Custom	200

**Grade** – This element is a measure of the construction quality – the types of materials used and the quality of workmanship. The grade of a house generally does not change except as a result of major renovations. The exception to this is during a revaluation or system upgrade where there are significant changes to this and other tables. The grade factor is a significant contributor that modifies the unadjusted base rate. The grades and their corresponding weights are:

<u>Code</u>	<u>Grade Factor</u>
01	0.65
02	0.80
03	1.00
04	1.10
05	1.20
06	1.35
07	1.50
08	1.65
09	1.80
10	1.95
11	2.10

## Area 7 – Sketch

The diagram of the principal structure shows outside dimensions. The different areas are identified by codes that are further described in the bottom left section of the card. In some cases a diagram will not appear but a box with the code and square foot area will be used. The different areas are stacked, so an area label may not apply to the entire sketch.

## Area 8 – Building Sub-Area Summary

Each part of the structure identified in the sketch will appear in the bottom left section, showing the Living Area, Gross Area, and Effective Area. Only the Effective Area is used in the assessment calculation. Primary living areas count as 100% of the gross area; all other spaces count at less than 100%. The principal sub-area types and effective area percentages are:

<u>Code</u>	<u>Description</u>	<u>Percent</u>
BAS	First Floor	100%
DCK	Deck	10
EAF	Attic expansion, finished	35
EAU	Attic expansion, unfinished	25
FAT	Attic, finished	20
FGR	Garage	40
FBM	Basement, finished	35
FEP	Porch, enclosed	60
FCP	Carport	20
FOP	Porch, open	20
FSP	Porch, screened	45
FHS	Finished ½ story	50
FQS	Finished ¾ story	80
FST	Utility	50
FUS	Finished upper story	100
PTO	Patio	5
SFB	Base, semi-finished	60
STP	Stoop	10
UAT	Attic, unfinished	10
UBM	Basement, unfinished	20
UST	Utility, storage	45

**Size Adjustment Factor** – This factor does not display on the card but is used in the calculation of value of the building. It is based on economics of scale and market inclination. Typically, if all else is equal, the

smaller the structure, the greater the cost per square foot, and vice versa. However, this factor is also affected by the market indications and what is desirable to current buyers. This factor increases the square foot price at the low end and reduces it at the high end. The baseline used is the median home size in Concord of 2,700 sq. ft. of effective area.

## Area 9 – Cost/Market Valuation

This box, in the middle of the card to the left of the sketch, shows the calculation of the depreciated building cost. The Adjusted Base Rate is derived by multiplying the Base Rate, as adjusted for certain elements under the Construction Detail section, by the size adjustment factor and the Grade Factor. The Adjusted Base Rate is multiplied by the Effective Area, and flat value amounts for certain items under the Construction Detail, such as bedrooms and bathrooms, are added to the total. This results in the Replacement Cost New (RCN).

Actual Year Built (AYB) and Effective Year Built (EYB) – The EYB is derived from the AYB according to the Dep. (Depreciation) Code. Very old structures may have been renovated over the years. Newer structures might have deteriorated beyond their normal wear and tear. This value is a judgment of the relative “age” of the structure for depreciation purposes. It is further refined based on the observed condition of the improvements, resulting from a field review. The condition is identified alphabetically and is linked to a depreciation table for consistency. Depreciation is a curve with minimum percents for each level of condition below which no property would normally ever fall below, displayed as Dep %. Depreciation Codes are:

<u>Code</u>	<u>Description</u>
P	Poor
F	Fair
A	Average
G	Good
VG	Very Good
E	Excellent

On the sample card the depreciation is Good, which results in normal physical depreciation of 14% based on 1968, the year of construction.

Sometimes unusual circumstances require a further discount for Functional Obsolescence (something significant is wrong with the structure that is too costly to fix) or for Economic Obsolescence (an external influence that has a negative effect on the property). These discounts are rarely used.

Appraised Value – Multiplying the RCN by the Overall % Condition (100% - Dep %) arrives at the valuation of the structure (rounded) as of January 1, 2007. A more detailed cost report showing the actual formula used is available in the Assessors' office.

#### **Area 10 – Outbuildings (L) and Extra Features (B)**

This section lists the additional structures on the parcel or extra features within the building. The Units column is either the size in square feet or the quantity of the described feature, and the Unit Price is either its cost per square foot or the unit value. For outbuildings, the year (Yr) is the year the structure was built. For extra features (e.g., fireplaces), the year should be the same EYB as the primary structure.

#### **Area 11 – Appraised Value Summary**

This section on the front of the card on the right totals the Appraised Bldg. Value, XF, OB, and Land to arrive at the total parcel value.

## **A NOTE ON THE VALUATION OF CONDOMINIUMS**

There are 711 residential condominium units in town. Condominium valuation differs from the “market adjusted cost approach” employed for the more than 4,600 single family residences. Generally, condominium units will not have a land assessment. Since the land is held in common, all of the market value of the condominium must be reflected in the per square foot price applied to the effective area. The calculation of value is based on location, unit size, bed/bath count, grade, construction detail, condition, etc., similar to single family residences as described above. There are a handful of exceptions where condos will include a land valuation, in cases where the Master Deed provides exclusive rights to part of the land.

Condominium valuation is also based on the sales approach to value. Individual units are matched to similar units that have sold and factors adjusted accordingly.

Condominiums in converted houses cannot be compared to single family or two-family buildings, but must be valued based on sales of similar types of property. The creation of a condominium generates a new form of ownership which adds value to the building.

*The Concord Board of Assessors*

*Connie Johnson, Chair  
Carrie Flood, Vice Chair  
Wm. Bruce MacAlpine, Clerk  
Ray Hanselman  
Robert Menger*

CURRENT OWNER		UTILITIES		STRI/ROAD		LOCATION		CURRENT ASSESSMENT	
Level	Public Water	Gas	Septic	1 Paved	2 Suburban	Code	Description	Appraised Value	Assessed Value
1	2	4	6			1010	RESIDENTIAL	533,400	533,400
						1010	RES LAND	396,500	396,500
						1010	RESIDENTIAL	23,000	23,000
SUPPLEMENTAL DATA									

Other ID: SERIAL NO: 1

GIS ID: 2

ASSOC PID#

RECORD OF OWNERSHIP		BK-VOL/PAGE		SALE DATE		SALE PRICE		F.C.	
Yr	Description	Code	Number	Yr	Code	Amount	Comm. Int.	Yr	Code
2008		1010		11/17/2006	U	1		2008	1010
2008		1010		08/01/1970	U	1		2008	1010
Total: 952,900									

EXEMPTIONS		OTHER ASSESSMENTS	
Year	Type/Description	Amount	Code
Total: 952,900			

This signature acknowledges a visit by a Data Collector or Assessor

ASSESSING NEIGHBORHOOD	
NBHD/ SUB	STREET INDEX NAME
23/A	TRACING
	BATCH

NOTES	
Appraised Bldg. Value (Card)	526,900
Appraised XF (B) Value (Bldg)	6,500
Appraised OB (L) Value (Bldg)	23,000
Appraised Land Value (Bldg)	396,500
Special Land Value	0
Total Appraised Parcel Value	952,900
Valuation Method:	C
Adjustment:	0
Net Total Appraised Parcel Value	952,900

**VISIT/CHANGE HISTORY**

Permit ID	Issue Date	Type	Description	Amount	Insp. Date	% Comp.	Date Comp.	Comments	Date	Type	IS	ID	Cd	Purpose/Result
06-494	08/21/2006	RF	Roofg/Sldg/Win	13,950	07/16/2007	100		RE-ROOF USE	7/16/2007	CN			11	Measure/Bldg Permit
05-330	06/28/2005	RF	Roofing,sldg	13,195	07/16/2007	100		REPLACE ROOFING,	2/15/2006	LM			14	Field Review
									9/2/2004	SC			11	Field Review
									2/6/2003	EH			41	Change Source Info

**LAND LINE VALUATION SECTION**

B Use Code	Use Description	Zone	D Frontage	Depth	Units	Units	Unit Price	Acres	Factor S.A.	Factor C.	ST Idx	Adj.	Notes-Adj	Special Pricing	Adj. Unit Price	Land Value
1	1010 Single Fam	AA			80,000	SF	60,000.00	1.00	5	1.0000	1.00	23	1.05		63,000.00	394,000
1	1010 Single Fam	AA			0.04	AC		1.00	0	1.0000	1.00	23	1.05			2,500

