Agenda

9:00 – 9:30	Registration and Coffee
9:30 – 10:15	Exporting data/filtering and using exported data.
10:15 – 10:30	Quick Break
10:30 – 12:00	A deeper look into how Depreciation and Effective age works within the program.
12:00 – 1:00	Lunch
1:00 – 1:30	Audit Trail – How to use it to track your changes
1:30 – 2:30	Your Land Schedule where is it stored and how the software uses it for valuations.
2:30 – 3:15	Presentation by NEMRC Information Technology Staff.
3:15 – 3:30	Best practices for keeping CAMA and the Grand list in sync.

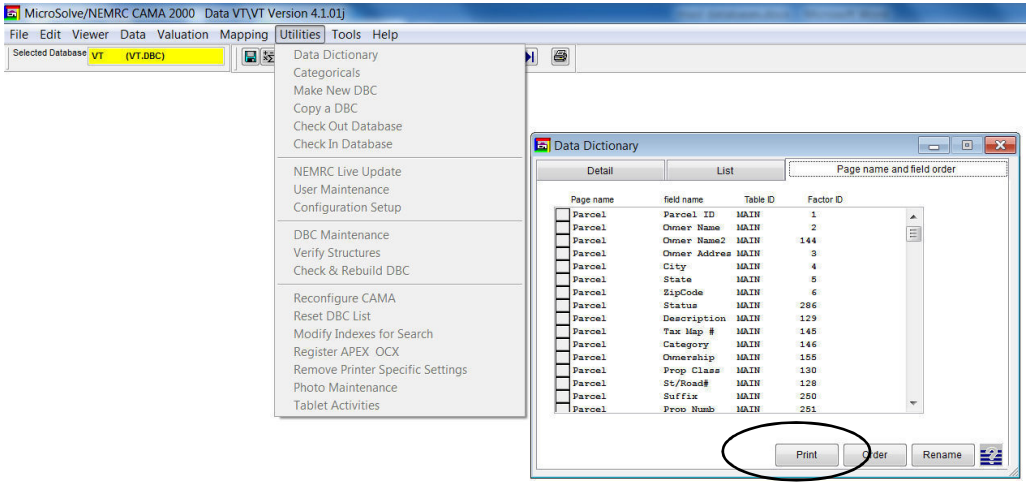
Exporting Data, Creating Reports, Setting Filters, and Audit Trails

Other helpful documents can be found at:

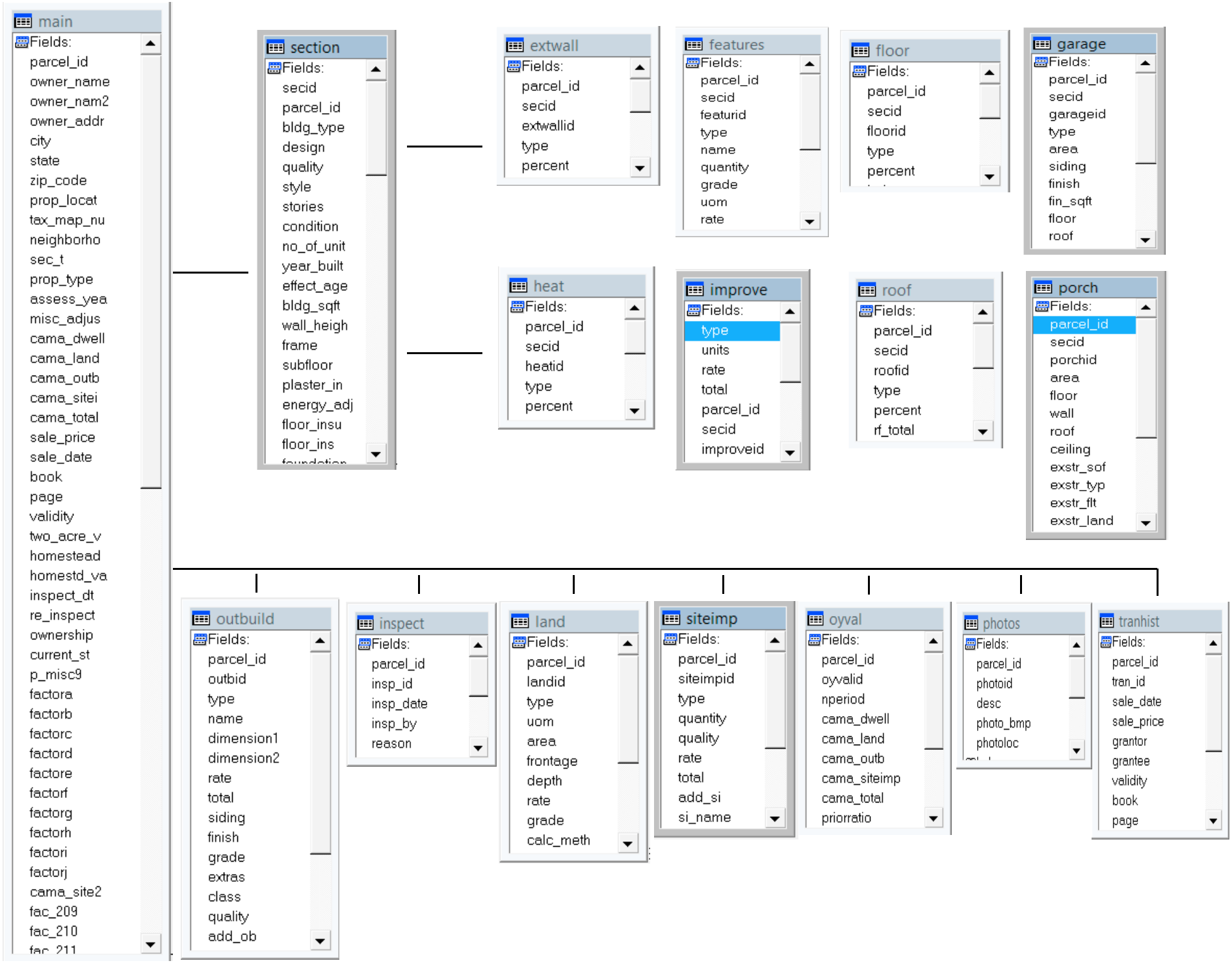
http://www.nemrc.com/support/cama/

In order to successfully create reports, export data, use the filter, or audit features of the MSOL CAMA program you must understand how the MSOL CAMA software stores your data. This document is designed to show you how to interpret your data so you can create better reports, exports and filtering.

1. **Database** – The MSOL CAMA program is comprised of many databases that keep track of all of the attributes of a given parcel. For example, Heat types, Garage information, Land information, ect. Refer to the illustration on the next page to see all of the databases that are used in the MSOL CAMA software. Also note that each of these databases is linked together by the parcel id associated with your parcels. Each database has a various set of "Fields" to store specific information about a parcel. For Instance, the "Fields" in the "Floor" database on the next page are 'Parcel id', 'Sectid', 'Floorid', 'Type', and 'Percent'. Now these field names are self-explanatory however you may find some database names that are not this easy to define. For this reason you must refer to the 'Data dictionary'.
2. **Data dictionary** – This explains what fields have been defined to store data along with which database those fields are stored. The data dictionary also shows you what type of data is stored within a field and how many characters or numbers will fit in that field. Refer to the illustration on page 3 for a sample of the data dictionary used in the MSOL CAMA program. End users of the MSOL CAMA may print a copy of the data dictionary by going to the 'Utilities' menu option then select 'Data Dictionary' from the drop down menu. Once the Data Dictionary window appears as seen below click the 'Print' button. **DO NOT SELECT ANY OTHER BUTTONS ON THIS SCREEN AS IT CAN AFFECT YOUR DATA.** A copy of the data dictionary is available on the website listed at the top of this page.



MSOL DATABASES



Label that appears on Data Display Screen.

Field Name assigned by programmers.

What Database this field can be found.

What Tab on the Data Display screen this field can be found.

VT DATA DICTIONARY FACTOR LIST

Microsolve CAMA (s)

facid	label	field_name	type	len	categ	table_id	frame name	page_id	fac_order
1	Parcel ID	PARCEL_ID	C	25	.F.	MAIN	Parcel	NoPage	1
2	Owner Name	OWNER_NAME	C	40	.F.	MAIN	Parcel	NoPage	2
144	Owner Name2	owner_nam2	C	40	.F.	MAIN	Parcel	NoPage	3
3	Owner Addres	OWNER_ADDR	C	40	.F.	MAIN	Parcel	NoPage	4
4	City	CITY	C	35	.F.	MAIN	Parcel	NoPage	5
5	State	STATE	C	10	.F.	MAIN	Parcel	NoPage	6
6	ZipCode	ZIP_CODE	C	11	.F.	MAIN	Parcel	NoPage	7
286	Status	PARCSTATUS	C	1	.F.	MAIN	Parcel	NoPage	9
129	Description	FACTORH	C	40	.F.	MAIN	Parcel	Page1	10
145	Tax Map #	tax_map_nu	C	40	.F.	MAIN	Parcel	Page1	11
146	Category	prop_type	N	3	.F.	MAIN	Parcel	NoPage	12
155	Ownership	ownership	N	3	.F.	MAIN	Parcel	NoPage	13
278	Validity	validity	N	3	.T.	TRANHIST	History	Page2	52
279	Book	book	N	12	.F.	TRANHIST	History	Page2	53
280	Page	page	N	12	.F.	TRANHIST	History	Page2	54
281	Parcel ID	parcel_id	C	25	.F.	INSPECT	History	Page2	55
282	Insp ID	insp_id	C	3	.F.	INSPECT	History	Page2	56
283	Inspect Date	insp_date	D	8	.F.	INSPECT	History	Page2	57
284	Inspected by	insp_by	N	3	.T.	INSPECT	History	Page2	58
285	Reason	reason	C	30	.F.	INSPECT	History	Page2	59
29	Parcel ID	PARCEL_ID	C	25	.F.	LAND	Land/OB	NoPage	60
22	Land ID	LANDID	C	3	.F.	LAND	Land/OB	Page3	61
199	Calc Method	calc_meth	N	3	.T.	LAND	Land/OB	Page3	62
23	Land Type	TYPE	N	3	.T.	LAND	Land/OB	Page3	63

QUESTIONS:

1. How many databases are used in the MSOL CAMA program?

2. Using the illustration on page 2 of this document how many fields does the ‘Heat’ database contain?

3. List the fields that are in the ‘Heat’ database.

4. What database can you find the ‘Tax map number’ field?

5. What tab is the ‘Tax map number’ field located when you are on the ‘Data Display’ screen?

6. What is the ‘Field Name’ that the programmer assigned to the ‘Tax map field’?

MicroSolve Residential Depreciation Tables

The MicroSolve computer assisted mass appraisal (CAMA) system can calculate physical depreciation on residential improvements in several ways. The following will describe how the user can utilize table lookups based on age (or effective age) and condition, or use direct input of physical depreciation.

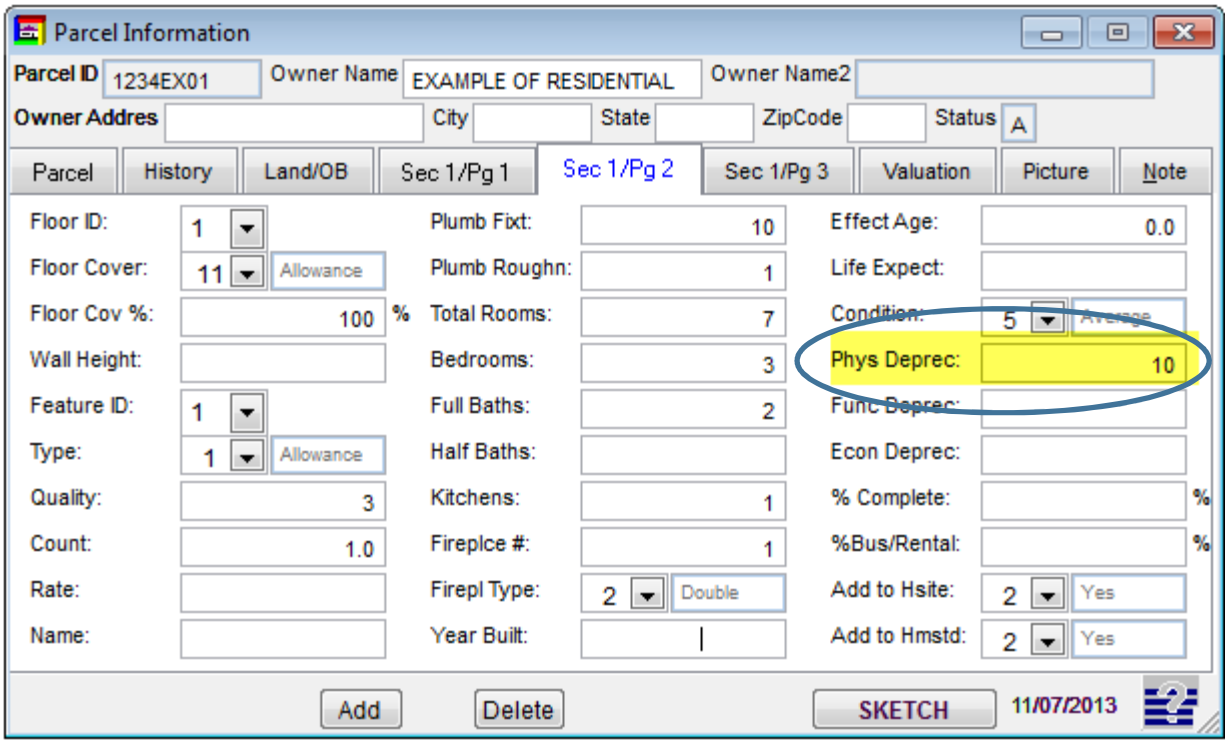
Depreciation tables can be developed for use with residential, mobile homes and camps.

Physical Obsolescence:

Physical obsolescence or depreciation comes from the "lowered physical condition of a property, or shortened life span as a result of ordinary use, abuse, and action of the elements" (Glossary of Property Appraisal and Assessment). This is expressed as a percentage of the Replacement Cost New (RCN) of the structure.

Direct Input:

One approach is to directly input the depreciation to be applied to the structure. Shown on the screen below, the Physical Depreciation of 10 percent has been input. This means that 10 percent of the RCN value will be removed.

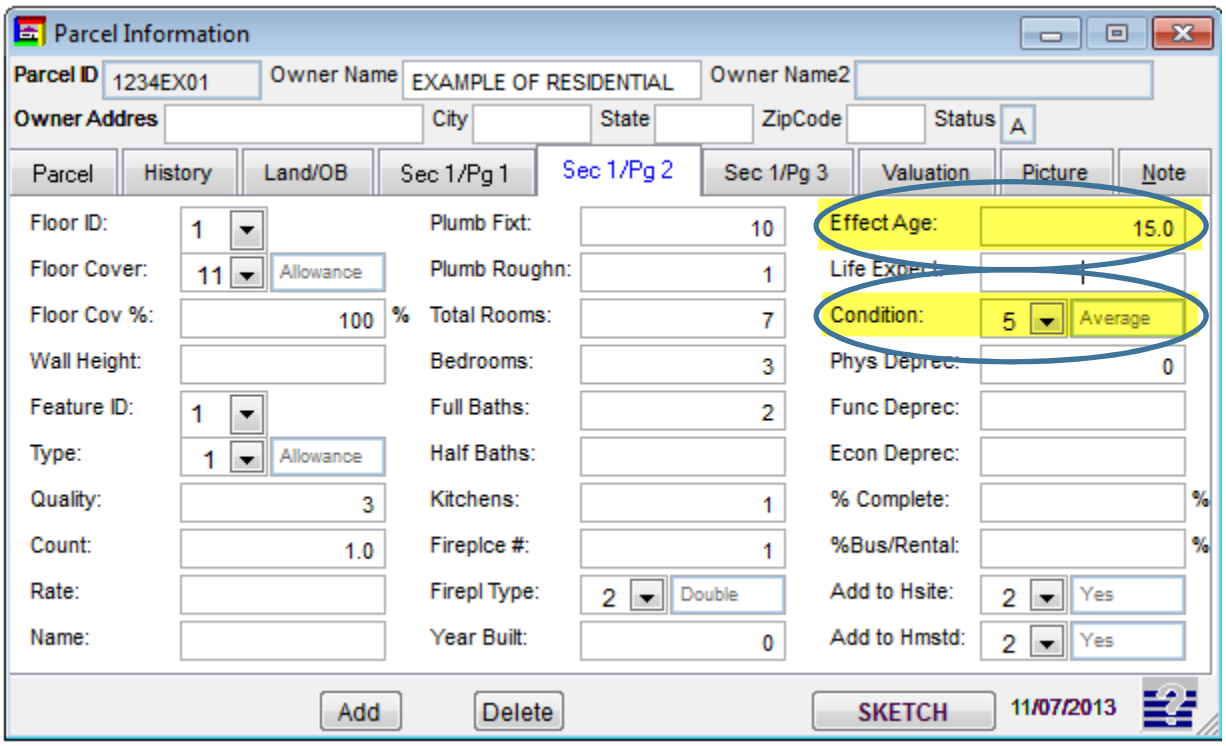


This percentage has been input or "forced" by the user. In this circumstance, there is no table lookup to determine the amount of physical depreciation to be applied to the building. This percentage will remain until it is deleted from the record.

Table Lookup: Effective Age Input

Another approach is to develop a depreciation table to be used for physical depreciation. This table should be based on the age, or effective age of the building and the condition of the building. Effective age reflects the condition and utility of a structure relative to its actual age.
For example, a house built 150 years ago has typically had many improvements over time to modernize it to current living standards. An updated heating system, updated wiring, new roofing, improved insulation and updated windows are examples of improvements that would change the effective age of a structure.

In the CAMA system, if Physical Depreciation is left blank, and the Effective Age has been entered, and a depreciation table has been developed and input, then the system will determine the depreciation based on the Effective Age and Condition of the structure.



REPLACEMENT COST NEW			228,513
Condition	Average	Percent	
Physical depreciation		15.00	-34,277
Functional depreciation			
Economic depreciation			
REPLACEMENT COST NEW LESS DEPRECIATION			194,200

The result of the table lookup will then fill the Physical Depreciation field on the data file as shown below. This result will remain, regardless of changes in the Effective Age or Condition, until the Physical Depreciation is removed and the Cost value is re-calculated.

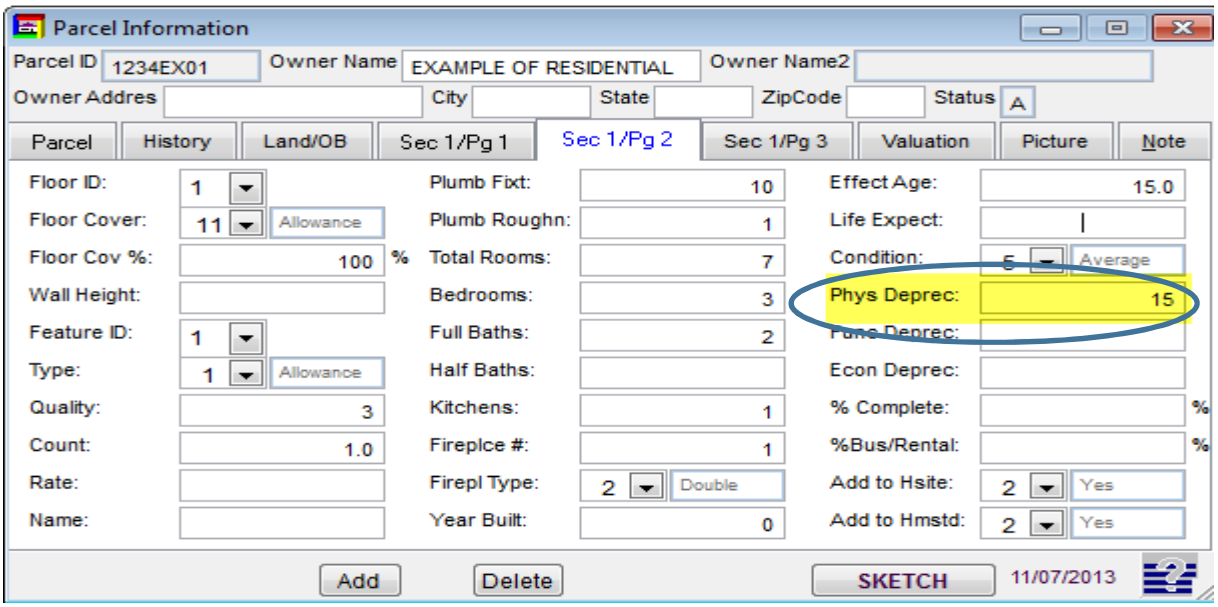
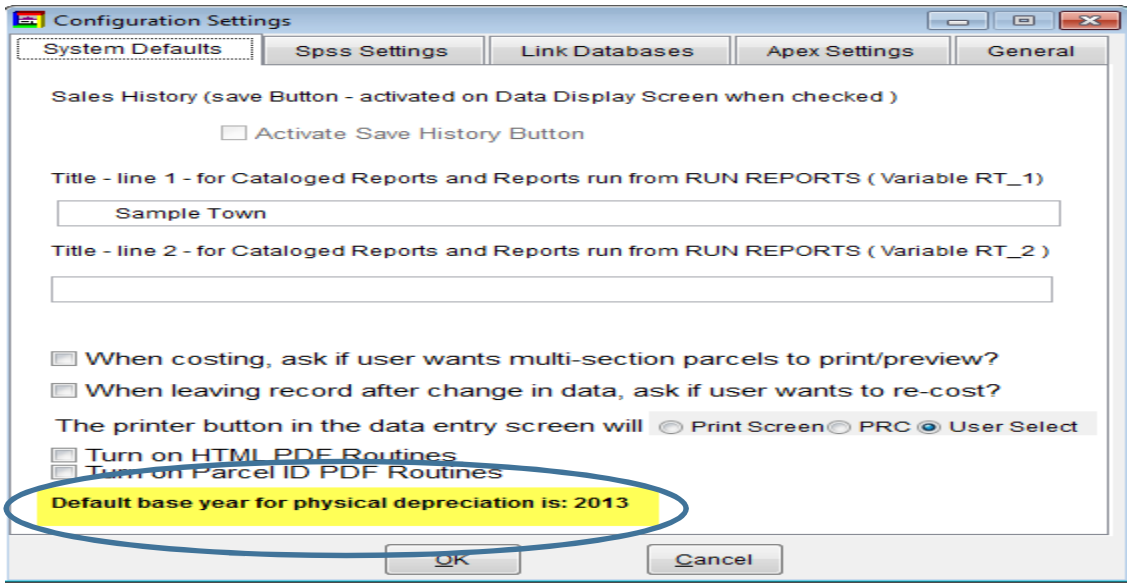


Table Lookup: Effective Age Calculated

The Effective Age can be calculated for the structure based on the Year Built (actual age) and the Base Year. The Base Year is the year of the last completed reappraisal. It is stored internally in the CAMA system and can be seen from the Configuration Settings screen. This setting must be changed for any Town completing a reappraisal if depreciation table lookups are to be utilized. Contact NEMRC to make this system change.



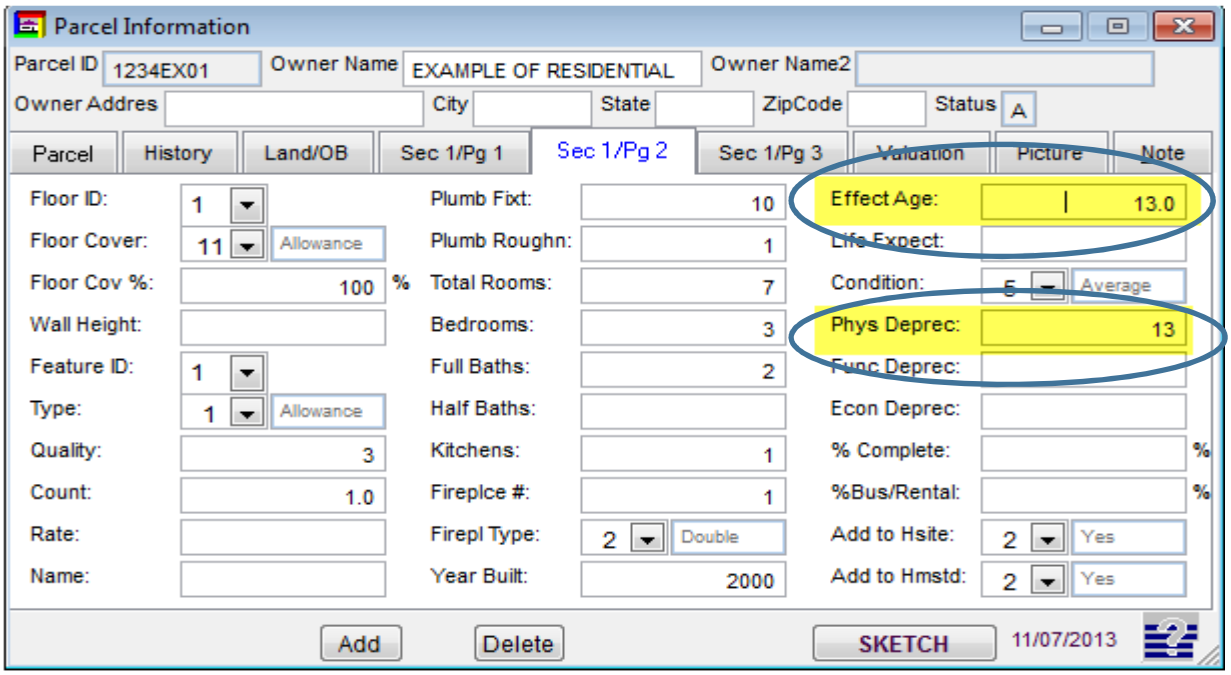
If there is no data in the field of Physical Depreciation, and the Effective Age field is blank, the system will calculate the actual age of the structure using the Base Year. In the example below, the structure was built in 2000. The Base Year for depreciation is the year 2013. Thus, the actual age and Effective Age of the building is 13 years as indicated from running the Cost System.

Sale Price:	316,500	**Book:**		**Validity:**	Yes
Sale Date:	03/15/2006	**Page:**			
Bldg Type:	Single	**Quality:**	3.00	AVERAGE	
Style:	1.5 Fin	**Frame:**	No Data		
Area:	1760	**Yr Built:**	2000	**Eff Age:**	13
# Rms:	7	**# Bedrm:**	3	**# Kitchns:**	1
# 1/2 Bath:	0	**# Baths:**	2		

From the depreciation table lookup, the system used 13 percent physical depreciation to adjust the Replacement Cost New (RCN) of the building and calculate the Replacement Cost New Less Depreciation (RCNLD).

Condition	Average	Percent	
Physical depreciation		13.00	-29,707
Functional depreciation			
Economic depreciation			
REPLACEMENT COST NEW LESS DEPRECIATION			198,800

The new Effective Age and Depreciation are then stored on the record for that parcel.



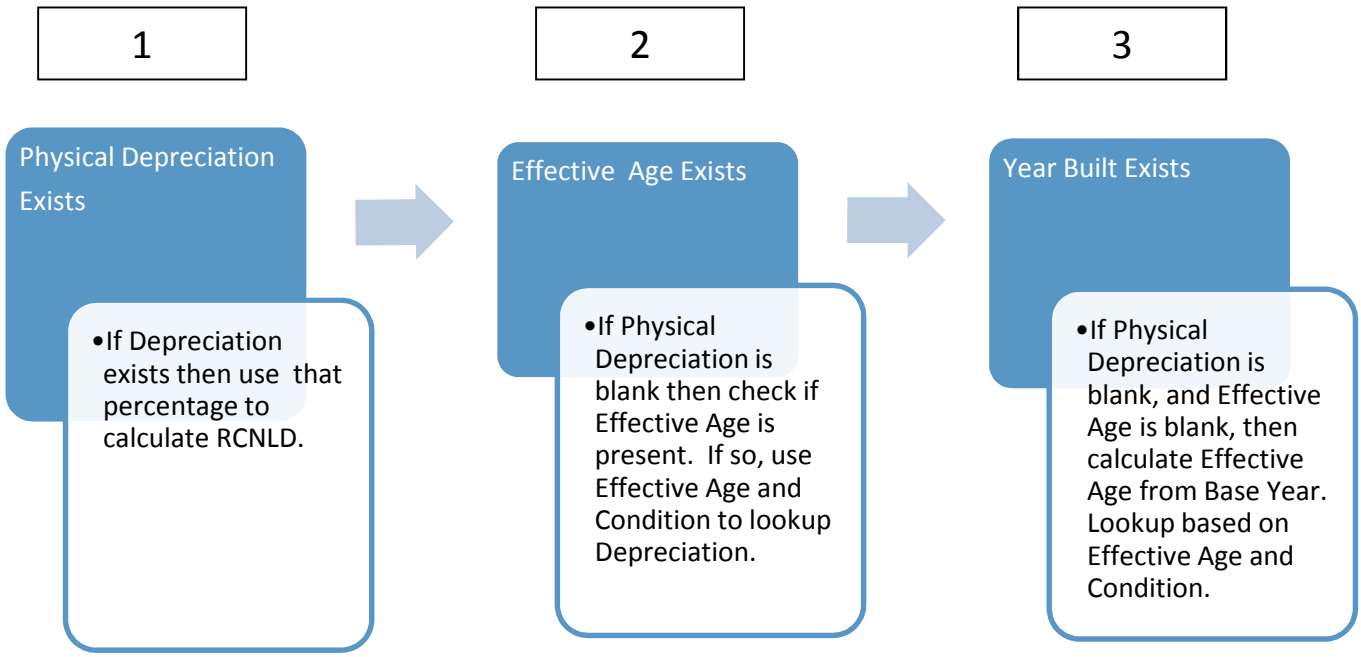
Depreciation Table:

A depreciation table can be developed and input for residential buildings, mobile homes, and camps. An example of a residential table is shown below. The column heading of 0 represents the Effective Age for the building. The Condition codes are represented by the columns marked from 1 through 9.

A building with an Actual or Effective Age of 15 years and a Condition of Average (5) would have a depreciation of 15 percent based on this table.

Table	Page	Row	0	1	2	3	4	5	6	7	8	9
40	1	1	1	15	9	3	0	0	0	0	0	0
40	1	2	2	16	12	9	5	1	0	0	0	0
40	1	3	3	17	14	10	7	3	0	0	0	0
40	1	4	4	18	15	11	8	4	1	0	0	0
40	1	5	5	19	16	12	9	5	2	1	0	0
40	1	6	6	20	17	13	10	6	3	2	1	0
40	1	7	7	21	18	14	11	7	4	3	2	0
40	1	8	8	23	19	15	12	8	5	4	3	1
40	1	9	9	24	20	16	13	9	6	5	4	2
40	1	10	10	25	21	17	14	10	7	6	5	3
40	1	11	11	26	22	18	15	11	8	7	5	3
40	1	12	12	27	23	19	16	12	9	8	6	4
40	1	13	13	28	24	20	17	13	10	9	6	4
40	1	14	14	29	25	21	18	14	11	10	7	5
40	1	15	15	30	26	23	19	15	12	10	7	5
40	1	16	16	31	27	23	19	15	12	10	7	5
40	1	17	17	32	28	24	20	16	13	11	8	6
40	1	18	18	33	29	25	20	16	13	11	8	6
40	1	19	19	34	30	26	21	17	14	11	8	6
40	1	20	20	35	31	26	22	17	14	12	9	7
40	1	21	21	36	32	27	22	18	15	12	9	7
40	1	22	22	37	33	28	23	18	15	12	9	7
40	1	23	23	39	34	28	23	18	15	12	9	7
40	1	24	24	40	34	29	24	19	16	13	10	8
40	1	25	25	41	35	30	25	19	16	13	10	8

Summary



Questions

1). Using the depreciation table, what is the depreciation for a dwelling that is 20 years old in average condition?

2). If the base year is 2016, what is the calculated Effective Age for a property built in 2000?

3). For the CAMA system to calculate depreciation from a table lookup, what field must be blank?

4). Depreciation is selected from a table lookup based on what two fields?

5). For the CAMA system to determine depreciation based on the Year Built, what fields must be blank?

6). Depreciation tables can be input to calculate depreciation for what types of construction?

NEMRC

FUND ACCOUNTING

New England Municipal Resource Center Ltd.

Effective Age Calculator
Unit-in -Place

Building Components

(Accumulated from M&S)

Basic Structure : Long Lived Items	%
Excavation/Foundation/basement	15
Framing	20
Rough-in Electrical/Plumbing	15
Total Percentage	**50**

Short Lived Items	
Windows/Exterior Doors	3
Heating/Cooling System	7
Exterior Cover	5
Interior / Painting /Decorating	12
Appliances and Cabinets	13
Plumbing Fixtures	5
Floor Covering	3
Light Fixtures and Hardware	2
Total Percentage	**50**

Building Components

(Accumulated from M&S)

Basic Structure : Long Lived Items

	%		Actual Age		
Excavation/Foundation/basement	15	X	100	=	15
Framing	20	X	100	=	20
Rough-in Electrical/Plumbing	15	X	100	=	15
Total Percentage	**50**				50

Short Lived Items

	%		Actual Age		
Windows/Exterior Doors	3	X	10	=	0.3
Heating/Cooling System	7	X	40		2.8
Exterior Cover	5	X	50	=	2.5
Interior / Painting /Decorating	12	X	15	=	1.8
Appliances and Cabinets	13	X	10	=	1.3
Plumbing Fixtures	5	X	10	=	0.5
Floor Covering	3	X	40	=	1.2
Light Fixtures and Hardware	2	X	10	=	0.2
Total Percentage	**50**				10.6
			Effective Age		**60.6**

Base Year is 2016

Simplified Version

	Years	Percent	Eff Age
Basic Structure	100	50.00%	50
Heating and Flooring	10	10.00%	1
All others	5	40.00%	2
Effective Age			53
Say			**50**