

# Agenda

9:00 – 9:30	Registration and Coffee
9:30 – 9:45	M & S Manuals – What are they and when to purchase them
9:45 – 10:00	Contributory value of outbuildings
10:00 – 10:30	Linking Cama data to Tax Maps – What are the options
10:30 – 10:15	Quick Break
10:15 – 11:15	Attached Garages and Finished Area
11:15 – 11:45	How to print all PRCs and Cost sheets at one time (Pros & Cons)
11:45 – 12:00	Cleaning up 911 Address Fields and how they can help you
12:00 – 1:00	Lunch
1:00 – 1:30	Review of Current Use Calculator tool
1:30 – 2:30	Apex Tips and Shortcuts
2:30 – 3:00	How to deal with multiple houses on 1 parcel
3:00 – 3:30	Open question and answer

## Linking Cama Data to Tax Maps what are your options

Many Cities and Towns are taking advantage of adding Grand List and CAMA data to their digital tax maps. This allows users of the digital tax map programs to click on a parcel and have it show Owner information, Parcel Values, Sketches, and Photos of the parcel. Digital tax map programs can be hosted on the internet for all to view or they can be access from a computer within the City or Town office.

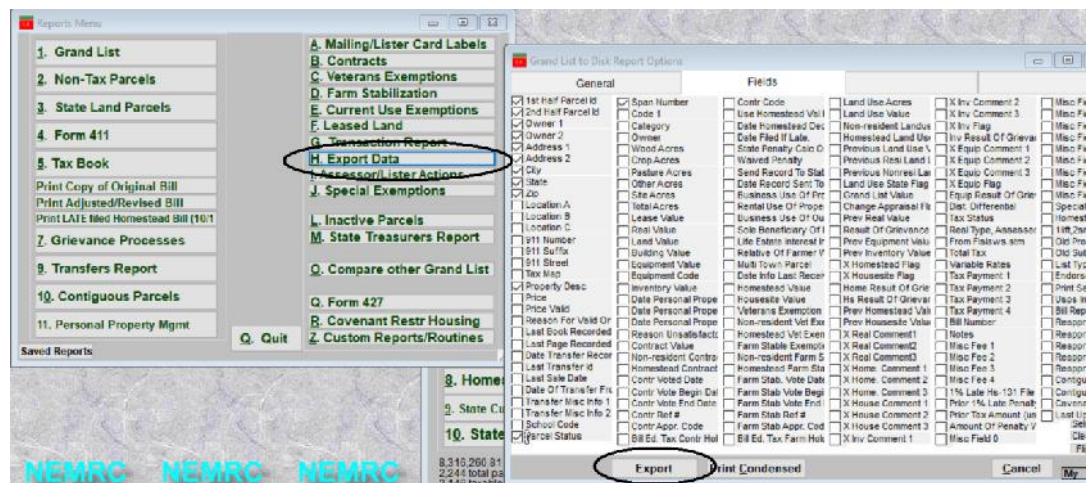
## Things to consider –

- What data would you like to share? IE: Names, Address, Building Sq ft, Photos
- Which program has that data you would like to include on the tax map? CAMA, Grand List, Tax admin etc.
- Do you want to link a Property Record Card from CAMA?
- What time period does the data reflect? (I recommend that you use data after you have had all of your Grievance Hearings).

1. The first step is to have a discussion with the people in your Town office to see what data they would be comfortable showing in this fashion.
2. Discuss with your tax mapper that this is something you would like to do. They will likely give you some input on file layouts etc.
3. Are you going to host on a public computer in the office or on the Towns Website for all to see?

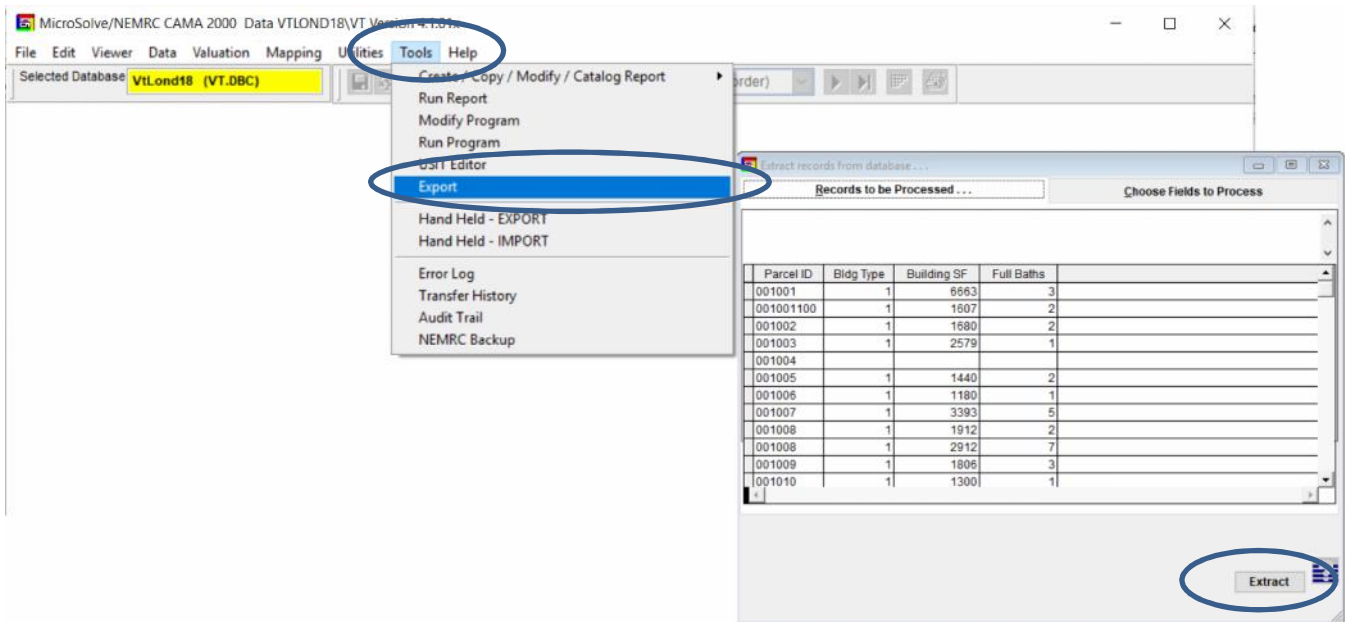
## Selecting Data:

1. If the data you would like to show on your Tax maps is found in the Grand list such as Owners, Address, Tax information then use the 'H' Export feature on the reports menu to select the specific fields you want to show. Remember some of that information is confidential such as 911 numbers and state payments. So you would not want to include that information. Below is an example of the export process in the Grand List. Here is the link to our website for more details on this process.  
[http://www.nemrc.com/support/grandList/LS\\_RH\\_GRAND\\_LIST\\_TO\\_DISK/](http://www.nemrc.com/support/grandList/LS_RH_GRAND_LIST_TO_DISK/)

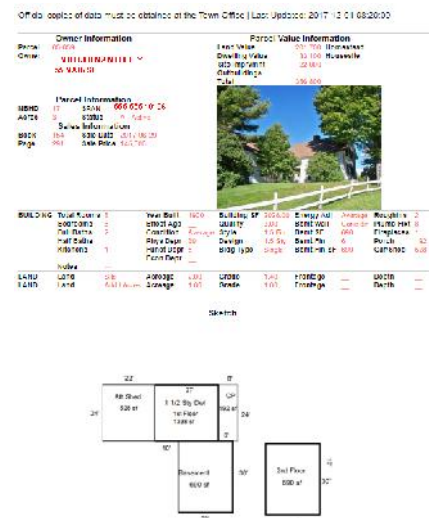


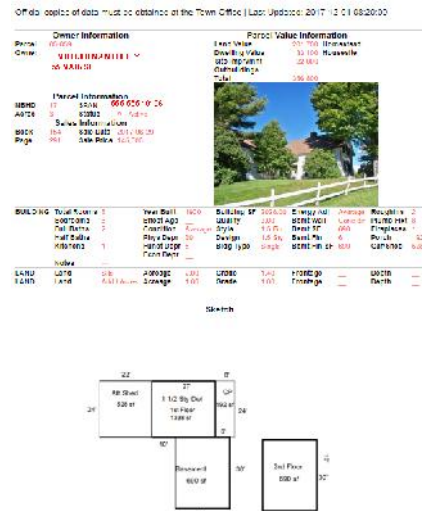
## Linking Cama Data to Tax Maps what are your options

- Exporting data from MSOL CAMA – If you want to include Building Type, Building Sq Ft, and Number of Baths then use the Export feature in CAMA. See below for an example. Go to our website at [www.nemrc.com](http://www.nemrc.com) click on the Microsolve label for detailed instructions on exporting data.  
<http://www.nemrc.com/support/cama/2016MsolCamaDocs/2016%20MSOL%20CAMA%20Doc1.pdf>



2a. Linking Property Record Cards to Tax maps. NEMRC can host all of your Property Record cards for you. Then when someone Clicks on a parcel on a tax map then the program will connect to your data on our server and bring up a copy of the Property Record Card. Again you decide how much data you would like the users to see. Below is an example of what the user may see.





## Detached – Attached - Built In – Basement Garages



- Inconsistency in determination of Garage Types
- The determination significantly affects value of the property.
- Must consider the construction type of the garage.
- Determine how the finished area is configured.
- Must consider amount of depreciation to be applied.



## Detached – Attached - Built In – Basement Garages

**Built-In Garages**

A built-in garage is built into the residence at the first floor or grade level, which has living area above.

The living area is both adjacent to and above the garage area.



2 Story with built-in garage



Split level with built-in garage



Bi-level with built-in garage



Detached – Attached - Built In – Basement Garages

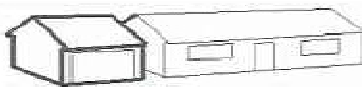
### Basement Garage

A basement garage is partially or mostly below grade, with its entrance level at the basement floor.

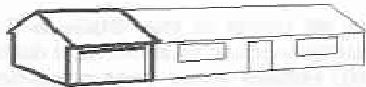


Detached – Attached - Built In – Basement Garages

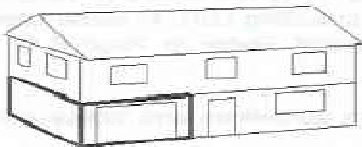
### Marshall and Swift Manual



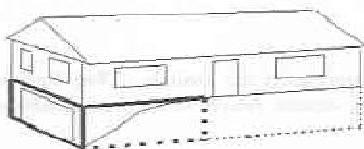
**DETACHED GARAGES** are freestanding buildings with independent structural systems (i.e., foundation, roof, etc.). The detached garage costs do not include any interior finish.



**ATTACHED GARAGES** share a common wall with the residence. The attached garage costs include interior finish for only that wall which is common.

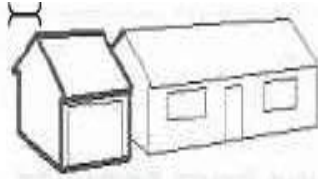


**BUILT-IN GARAGES** have living area both adjacent to and above. Costs include finish for all common surfaces.



**BASEMENT GARAGES** are used in conjunction with an unfinished basement cost. The Lump Sum Adjustment includes the excavation (the cost for which is included in the basement costs), overhead door, and finishes on common interior walls and ceiling.

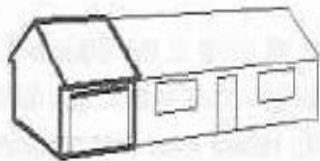
## Detached – Attached - Built In – Basement Garages



**DETACHED GARAGES** are freestanding buildings with independent structural systems (i.e., foundation, roof, etc.). The detached garage costs do not include any interior finish.



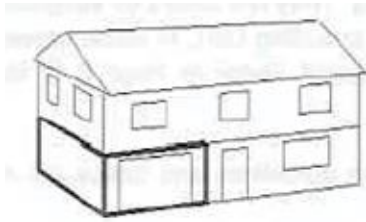
## Detached – Attached - Built In – Basement Garages



**ATTACHED GARAGES** share a common wall with the residence. The attached garage costs include interior finish for only that wall which is common.



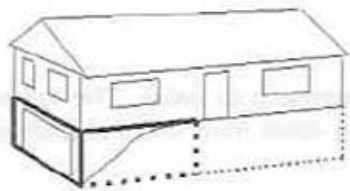
## Detached – Attached - Built In – Basement Garages



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## Detached – Attached - Built In – Basement Garages



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Detached – Attached - Built In – Basement Garages



Value As Basement Garage

Bsmt Wall:	2	Conc 8"	Bsmt FNA:	3	Rec Room
Bsmt SF:	1248.00		Bsmt Fin SF:	384	
Bsmt Garage:	3	Double			
Basement	Conc 8"	1,248.00	20.07	25.047	
Finished Basement	Rec Room	384.00	21.42	8.225	
Basement Garage	Double	1.00	2,661.00	2.660	

Value As Built In Garage

Bsmt Wall:	2	Conc 8"	Garage ID:	1	
Bsmt SF:	1248.00		Gar/Shd Type:	5	BuiltIn
Bsmt Garage:	0	No Data	Area:	520	
Bsmt FNA:	3	Rec Room	Siding:	4	VnlSide
Bsmt Fin SF:	384				
Basement	Conc 8"	1,248.00	20.07	25.047	
Finished Basement	Rec Room	384.00	21.42	8.225	
Garage/Shed #1:	Built/VnlSideNo	520.00	22.19	11.638	

Detached – Attached - Built In – Basement Garages

You make the Call ?



## Detached – Attached-Built In Garages



## Detached – Attached - Built In – Basement Garages





Detached – Attached - Built In – Basement Garages



Detached – Attached - Built In – Basement Garages



Detached – Attached - Built In – Basement Garages

## Finished Area in Attached Garages

Section #/Pg 3

Garage ID:	1	
Gar/Shd Type:	2	A/S
Area:		576
Siding:	6	WdSiding
Floor:	1	Concret
Finish:	6	Ful+Rec
Finish SF:		400

Lookup for Finish SF is based on SQFT, Siding Type, and Quality

Attached Garages can be created by APEX sketching.

Detached – Attached - Built In – Basement Garages

Finished Categories	
Factor 138	
Code	Name
0	No Data
1	No Fin
2	Ful Wall
3	GblWall
4	Ful+Min
5	Gbl+Min
6	Ful+Rec
7	Gbl+Rec
8	Ful+Apt
9	Gbl+Apt

Codes 1 – 3 Do not add to value of Attached Garage

Codes 4 & 5 use same value

Codes 6 & 7 use same value

Codes 8 & 9 use same value



## Detached – Attached - Built In – Basement Garages

Update Cost Tables

List / Description   Cost Table   Add Page(s)   Excel Table Link

Table Description: Attached Garage

Table Number: 28   Verify Table Structure

Description: Attached Garage   Categorical (If Any): 0

Pages: Quality   0

Rows: Sq.ft.   0

Columns: Siding   0

Verify All Table Structures

## Detached – Attached - Built In – Basement Garages

Table 28 Attached Garages

2016 Tables

Table	Quality		Row	SQFT		Siding Types						
	Page			0	1	Metal	Vinyl	Stucco	Wood	Shingle		
28	3	1	50	33.35	33.35	33.29	33.29	33.83	33.5	33.95		
28	3	2	200	33.35	33.35	33.29	33.29	33.83	33.5	33.95		
28	3	3	300	30.31	30.31	30.25	30.25	30.77	30.45	30.89		
28	3	4	400	27.25	27.25	27.19	27.19	27.7	27.39	27.82		
28	3	5	500	25.7	25.7	25.65	25.65	26.11	25.83	26.22		
28	3	6	600	24.14	24.14	24.1	24.1	24.52	24.26	24.62		
28	3	7	800	22.8	22.8	22.76	22.76	23.15	22.91	23.24		
28	3	8	1000	21.63	21.63	21.59	21.59	21.92	21.72	22		
28	3	9	10000	19.2	19.2	19.16	19.16	19.48	19.28	19.55		

Interpolation		
Benchmarks	Rates	SQFT
500	25.83	
	24.64	576
600	24.26	

600 - 500 = 100	Difference between Benchmarks
576 - 500 = 76	Difference between SQFT and Lower Benchmark
76 / 100 = .76	Percentage Between
25.83 - 24.26 = 1.57	Dollar Difference Between Benchmarks
1.57 * .76 = 1.1932	Percentage Dollar Difference Amount
25.83 - 1.1932 = 24.64	Subtract Difference from Lower Benchmark

## Detached – Attached - Built In – Basement Garages

Table 28 Attached Garages  
2016 Tables

				Finished Costs*		
				Minimal	Rec Room	Apartment
			Codes	4 & 5	6 & 7	8 & 9
Table	Page	Row	0	23	24	25
28	3	1	50	11.41	31.04	56.35
28	3	2	200	9.71	23.81	46.96
28	3	3	300	8.58	19.96	39.13
28	3	4	400	8.01	18.03	37.21
28	3	5	500	7.67	16.88	36.05
28	3	6	600	7.44	16.11	35.28
28	3	7	800	7.07	15.3	33.52
28	3	8	1000	6.7	14.49	31.75
28	3	9	10000	3.69	7.99	17.46

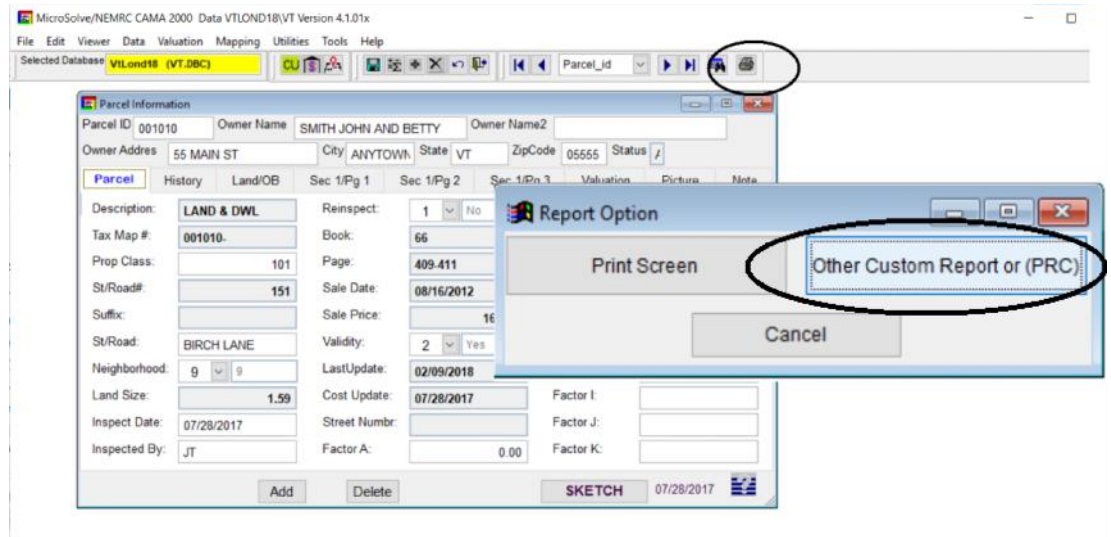
## Detached – Attached - Built In – Basement Garages

<b>ADDITIONAL FEATURES</b>			
Fixtures (beyond allowance of 8)		1,360.00	
Roughins (beyond allowance of 1)		550.00	
Porch #1:	WoodDck/NoWall/NoRoo	128.00	19.66
Porch #2:	WoodDck/NoWall/Roo/C	301.00	27.90
Basement	Conc 8"	1,000.00	21.25
Garage/Shed #1:	A/1S/WdSldng/No	576.00	24.64
Subtotal			183,428
<b>ADDITIONAL FEATURES</b>			
Fixtures (beyond allowance of 8)		1,360.00	
Roughins (beyond allowance of 1)		550.00	
Porch #1:	WoodDck/NoWall/NoRoo	128.00	19.66
Porch #2:	WoodDck/NoWall/Roo/C	301.00	27.90
Basement	Conc 8"	1,000.00	21.25
Garage/Shed #1:	A/1S/WdSldng/Full+Min/C	676.00	30.20
			17,397
<b>ADDITIONAL FEATURES</b>			
Fixtures (beyond allowance of 8)		1,360.00	
Roughins (beyond allowance of 1)		550.00	
Porch #1:	WoodDck/NoWall/NoRoo	128.00	19.66
Porch #2:	WoodDck/NoWall/Roo/C	301.00	27.90
Basement	Conc 8"	1,000.00	21.25
Garage/Shed #1:	A/1S/WdSldng/Full+Rec/C	576.00	37.16
			21,405
<b>ADDITIONAL FEATURES</b>			
Fixtures (beyond allowance of 8)		1,360.00	
Roughins (beyond allowance of 1)		550.00	
Porch #1:	WoodDck/NoWall/NoRoo	128.00	19.66
Porch #2:	WoodDck/NoWall/Roo/C	301.00	27.90
Basement	Conc 8"	1,000.00	21.25
Garage/Shed #1:	A/1S/WdSldng/Full+Apt/C	576.00	50.48
Subtotal			198,312

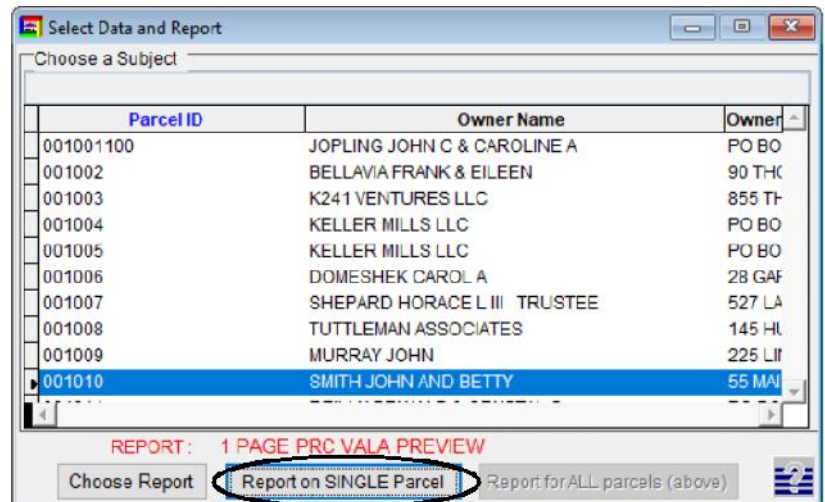
# Printing Property Record Cards & Cost Sheets All vs One at a Time

First let us begin with printing Property Records Cards. Below is an example of what a standard 1 page PRC may look like. You may print these off 1 parcel at a time, a range of parcels, or all parcels.

1. Printing 1 at a time can be done while you have a parcel displayed on the screen. Simply click on the 'Printer' icon on the tool bar. Then select the 'Other Custom Report or (PRC)' button. As seen below.



2. Next Click the button 'Report on SINGLE Parcel' or use the 'Choose Report' button to change to a different PRC layout.



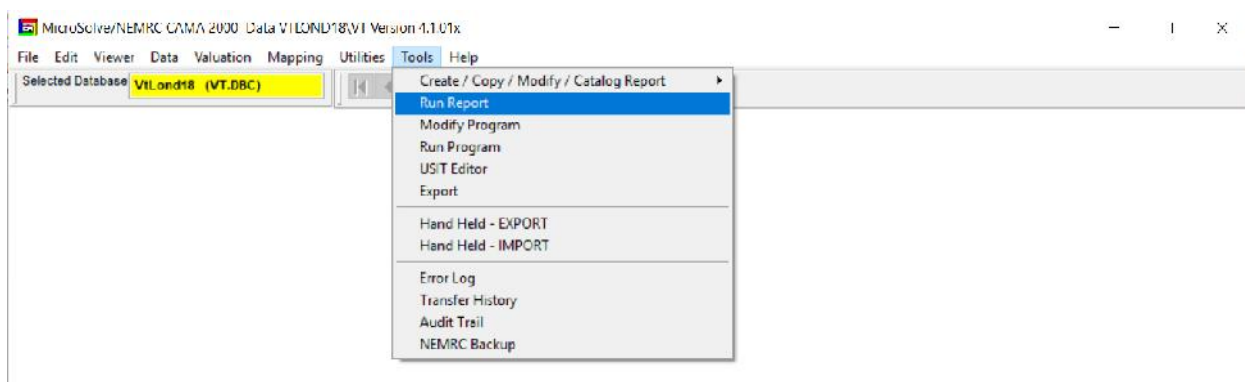
3. Here is a sample 1 Page PRC

The sample 1 Page PRC (Property Record Card) for parcel 001010, owned by SMITH JOHN AND BETTY, is displayed. The card includes sections for Owner Information, Parcel Value Information, Parcel Information, Sales Information, Building Details, Inspection, and Notes. The 'BUILDING' section provides a detailed breakdown of the property's features, including Total Rooms (6), Year Built (1990), Building SF (1300), Energy Adj (Good), Roughline (1), Bedrooms (2), Direct Age (28.0), Quality (7.75), Bath Well (Good), Plumbing (Plumb), Full Baths (1), Condition (Average), Style (1 Story), Bath SF (1300.00), Fireplace (0), Half Baths (1), Phys Depr (21), Design (One Story), Bath Fin (Minimal), Ponds (300), Kitchens (1), Funct Depr (0), Bldg Type (Single), Bath Fin SF (900), Car/Shed (0), and % Complete (0). The 'INSPECT' section shows the inspection status as 'Complete' and 'No' for 'APPT SCHED'. The 'NOTES' section contains a note about the property's location and condition.

# Printing Property Record Cards & Cost Sheets All vs One at a Time

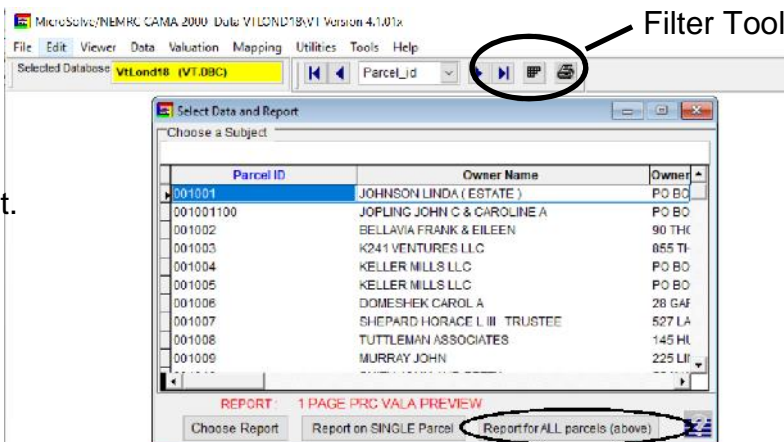
How to Print a Range of PRCs or All PRCs at one time.

1. You can not have any parcels open when you use this feature. Simply go to 'Tools' and select 'Run Report' from the menu. CAUTION: Running Property Record Cards on all parcels can take an enormous amount of time. We strongly recommend that you run them in batches using the Filtering feature.



2. We strongly urge you to use the 'Filter' tool located on the tool bar to set up batches of parcels to print.

Now you see a list of all of your Parcels. Use the 'Choose Report' Button to select a different PRC or Select the 'Report for All parcels' button to begin printing All PRCs.



## Pros and Cons

### Pros to printing individual PRCs

Printing 1 prc at a time – That prc can be attached to an email or linked to a digital Tax map file.

You can change the to a different PRC Layout for a specific parcel if you would like.

Printing small batches/ranges of parcels is a better idea.

### Con to printing all PRCs

It takes a good amount of time possibly 6 hours or more depending on how many parcels you have in your town.



# Printing Property Record Cards & Cost Sheets All vs One at a Time

Printing Cost Sheets One at a time, in a range, or All at once.

It is important to remember every time you use the Costing tool it is revaluing the Parcel or Parcels you selected. Therefore the value will change if someone edited a parcel without running the Costing tool once they were done.

Best Practices for Running Cost.

1. Do a backup of your data first. (The backup feature is located under the 'Tools' Menu)
2. Open the parcel you want to run the Cost tool.
3. Look at 'Valuation' Tab first as seen on the screen below. Note at least what the Cama Total, Housesite, and Homestead values are before your run cost. This way you will have the ability to see if the value changed when you ran an new cost sheet.

Cost Tool

MicroSolve/NEMRC CAMA 2000 Data VT LOND18/VT Version 4.1.01x

Selected Database: VTLond18 (VT.LBC)

Parcel Information

Parcel ID: 001010 Owner Name: SMITH JOHN AND BETTY Owner Name2: ZipCode: 05555 Status: 2

Owner Address: 55 MAIN ST City: ANYTOWN State: VT

Parcel: History Land/Ob Sec 1/Pg 1 Sec 1/Pg 2 Sec 1/Pg 3

OTVal ID: 1 CAMA Sitimp: 15000 Misc Adjust: Housesite: 2 Yes

Period: CAMA Outbld: 21000

Prior Dwell: CAMA Total: 212800 Homestead \$: 212800

Prior Land: CAMA Ratio: Homestead: 2 Yes

Prior Siteim: Comp Value: Homestead \$: 212800

Prior Outbld: Comp Ratio: Select Value: 0 NoCosts

Prior Total: Regr Value: SPAN: 357.110.10661

Prior Ratio: Regr Ratio:

CAMA Dwell: 121300 Other Value:

CAMA Land: 55500 Other Ratio:

Add Delete SKETCH 07/29/2017

Running Cost for a Range or All Parcels

Best Practices

1. Do a backup of your data first. (The backup feature is located under the 'Tools' Menu)
2. Before opening a parcel select 'Valuation' from the menu bar. Then select 'Cost Approach' from the next menu, and then 'Run Cost Approach' from the following menu as seen on the left below.
3. Use the 'Filter' Tool to set up a range of parcels you want to run 'Cost' on at this time see image below on the right side. This Highly Recommended.
4. Click on the 'Run All' button at the bottom.

Filter Tool

MicroSolve/NEMRC CAMA 2000 Data VT LOND18/VT Version 4.1.01x

File Edit Viewer Data Valuation Mapping Utilities Tools Help

Selected Database: VTLond18

Valuation

Cost Approach

Run Cost Approach

Income Approach

Feedback

Regression/SPSS

Statistics

View/Modify Cost Tables

Update M&S Tables

8/VT Version 4.1.01x

Utilities Tools Help

Parcel ID

Cost Valuation

Choose Subject

Parcel ID	Owner Name	Owner
001001100	JOPLING JOHN C & CAROLINE A	PO BO
0010002	BELLAVIA FRANK & EILEEN	90 TH
0010003	K241 VENTURES LLC	855 TH
0010004	KELLER MILLS LLC	PO BO
0010005	KELLER MILLS LLC	PO BO
0010006	DOMESHEK CAROL A	28 GAF
0010007	SHEPARD HORACE L III TRUSTEE	527 LA
0010008	TUTTLEMAN ASSOCIATES	145 HL
0010009	MURRAY JOHN	225 LI
001010	SMITH JOHN AND BETTY	55 MA
001011	REH I Y BRYAN P & CRYSTAL S	PO BO

REPORT Itemized Property Costs PREVIEW

Choose Report Run Cost Run All

# Printing Property Record Cards & Cost Sheets All vs One at a Time

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## Pros and Cons

### Pros to printing individual Cost Sheets

- You have the chance to check the value before running cost.
- It only affects the one record you are currently viewing
- It is easier to reconcile changes that may have been made prior to you running cost.

### Cons to printing all Cost Sheets at once.

- You run the risk of having multiple parcels change value without you knowing. (Although a review of your 'Change of Appraisal' report will show you which parcels had a change in value.)
- Running Cost in small batches is better as you will have fewer parcels to reconcile at one time.

### How to safely run all Cost sheets at one time.

Contact NEMRC support we will set up a test file for you that will show you all the values as they are at this point. Then we will take that test file and run cost across all parcels. Next we compare the values from the first file "Before" cost had been run to the file "After" cost had run. After that we will give you a report of all parcels that have a change in value. Then you can look at that list and identify why the parcel is changing in value. Doing this process you will not affect your current data.

# 911 Street Drop Down

NEMRC 1 of 1

A 911 street drop down list has been created. This will help you clean up your street names as needed. The program will build the drop down list using your existing 911 street information. Then you may go through the list and correct any inconsistencies that you find. The following guide walks you through this process.

1. Click the Find button next to 911 field. This will sort all of your 911 locations alphabetically.

2. Scroll through the list and find any street that is not spelled correctly or is inconsistent. Decide if you are going to use punctuations along with abbreviations or if you will spell out the words Street, Road, and Lane etc.

3. Double click the record that needs to be corrected. In this example we will select the record where the word 'Street' is spelled out. Then the one with the period after the 'St.'

4. Once the record is on the 'Parcel Maint' screen click the drop down and choose the correct street name spelling.

5. After all of the incorrect spellings have been removed from the program they will be removed from the drop down list after you exit the software and come back in again.