

2023 Vermont Listers Residential Data Collection Training

**Division of Property Valuation and
Review Vermont Department of Taxes**

Course Training Materials

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I. INTRODUCTION

- A. Instructors and Students
- B. Course Hours and Schedule
- C. What You Can Expect from This Course
 - 1. How to collect relevant real property data consistently and completely as part of a complete municipal reappraisal or annual grand list maintenance using a Marshall & Swift based system. Day 4 will consist of working with your CAMA vendor to input data you've collected.
 - 2. Approached from 2 views. Most of you are listers. You will be, at different times, both supervisors and data collectors. We will try to present from both views.
- D. Goal
 - 1. Teach students how to accurately and consistently collect and input data using standardized methodology regarding quality, condition and all other relevant attributes.



II. REAPPRAISAL

A. Mass Appraisal – “The process of valuing a universe (all properties in town/city) of properties as of a given date (April 1), in a uniform order, utilizing standard methodology, employing a **common reference** for data (Marshall & Swift – NEMRC Microsolve), and allowing for statistical testing.” (PAV p. 277)

1. Cost System – this means you will use the most recent cost available as of the date of reappraisal and stay with those costs until a new reappraisal.

B. Why a reappraisal is done

1. Ordered by State – A town will be ordered to reappraise if the CLA (Common Level of Appraisal) is below 85% or above 115% and/or COD (Coefficient of Dispersion) is above 20. CLA is an administrative function done by PVR for the purpose of equalizing grand lists. It includes a calculation for use value, as well as exemptions and utilities. CLA measures the level of appraisal and COD measures how equitably properties are appraised. LOA (Level of Appraisal/Assessment) measures only a portion (category or type), neighborhood, or lesser time frame than the CLA.
2. Inequity of tax burden – Between different values of the same type of property = Vertical Inequity. The town may opt to reappraise without an order.
3. Inequity of tax burden amongst classes of properties = Horizontal Inequity. The town may opt to reappraise without an order.
4. Stale property information – very few towns/cities have zoning for interior modifications (ex. basement finish), and some have no zoning at all. Very few do updates of a portion of the town each year. This leads to inequity. Data quality check or rolling inspection process may help measure and/or prevent this.

If the town believes a reappraisal may be needed, the town may perform their own statistical analysis to determine if a reappraisal is needed. If you do not have experience in appraisal and statistical analysis you should hire a contractor.

C. Types - There are 4 types of Reappraisals – Complete, Partial, Statistical and Rolling. Depending on the market and data quality within the town one type of reappraisal may be more appropriate than another type at different times.

1. **Complete reappraisal** - Revaluation of all town properties including interior property inspections, development of new pricing schedules, adjustments and factors. Goal must be to implement new values for all properties to reflect 100% of fair market value.

*Alternative Reappraisals: Depending on the market and required data quality study within the town one type of reappraisal may be more appropriate than another type at different times. The following are alternative reappraisal types:

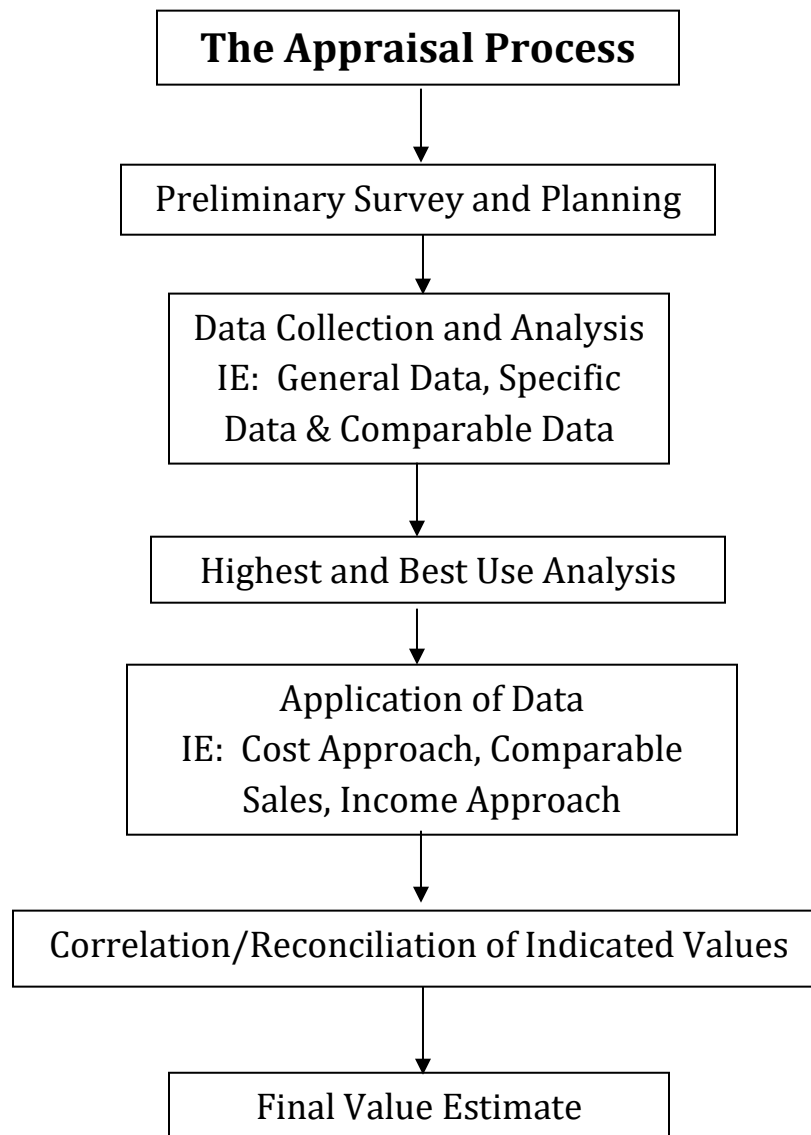
2. **Statistical Update** - A statistical update is a revaluation of all town properties but, unlike a complete reappraisal, does not require inspections except to confirm validity of data for a sample of properties. The goal must be to implement new values for all properties to reflect 100% of fair market value. If building permits are not required in your municipality and there is no program of systematic re-inspection of all property, this is likely not an acceptable method of establishing equitable values as any inequities that currently exist within the grand list may be magnified using a statistical update.
3. **Partial reappraisal** - A reappraisal activity that by design is targeted to either less than all properties in a town or adjustments to a limited number of factors that will result in a change of value but will generally not result in bringing the entire municipality to 100% market value. The goal of a partial reappraisal is to improve the appraisal equity among categories / types / neighborhoods of property within a town by bringing them to approximately the same level of appraisal. Properties in the subset should be valued at fair market value **and then adjusted to the level of appraisal of the portion of the jurisdiction that has not been reappraised.**
4. **Rolling reappraisal** - A type of complete reappraisal. What differentiates a rolling reappraisal from a complete reappraisal is that the rolling reappraisal is conducted and implemented over a period of not more than three years. In any year of the reappraisal, the revalued properties should be valued at fair market value, **and then adjusted to the level of appraisal of the portion of the**

jurisdiction that was not subject to the revaluation. (Data collection over a multiple year period but only to be implemented in the final year does NOT constitute a Rolling or Statistical Reappraisal).

D. Grand List General Maintenance - Revaluation activity on individual parcels intended to reflect changes not covered by the above definitions (i.e. permit or other changes). General maintenance does not constitute a revaluation activity subject to 32 V.S.A. §5406 (c) certification.

E. Appraisal Process

The following chart shows graphically the process followed in each appraisal assignment:

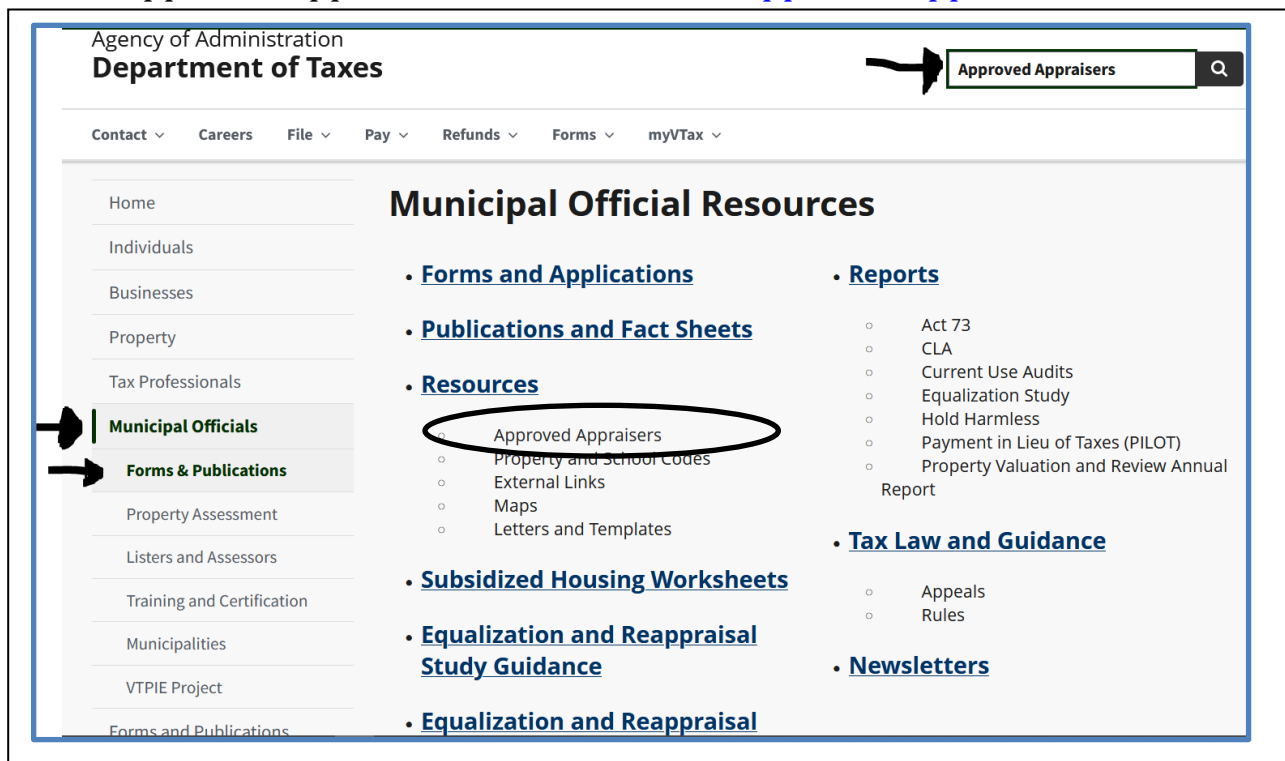


In mass appraisal most of the steps are accomplished at the same time as the reappraisal, but even when using existing base data, you must consider all approaches and apply the data for each appraisal.

*chart source – Property assessment Valuation – Page 34

F. Steps to Reappraisal

1. Reappraisal order or decision to reappraise.
2. Town Listers review data (sales analysis) to determine whether a full reappraisal is necessary or whether an alternative type of reappraisal would be acceptable. Listers should also review the reappraisal reserve fund, if any, and present a plan to the Selectboard to pay for the reappraisal, providing the balance the town will need to cover.
3. Town sends out RFP's (Request for Proposal) to companies on our approved list of appraisers and potential contractors respond. When possible, we recommend the listers initiate this process to find the best fit to collaborate with the for the project. If the town does annual, or regular analysis as noted in '2' above, the RFP process can begin prior to an order being issued. See the list of 'Approved Appraisers' on our website. [Approved Appraisers](#)



4. Detailed Compliance Plan (RA-308, required with 150 days of a reappraisal order) is submitted for review and approval by the Director of PVR.
5. Interviewing and selection of contractor.
6. Town and Company negotiate terms of contract and ultimately signs contract agreement.
7. Preliminary meetings with public and/or written notice to taxpayers of reappraisal process.
8. Appraisal company typically does preliminary work first including:
 - a) Land sales analysis - detailed research and analysis of land sales.
 - b) Development of land schedule, land grades & neighborhoods.
 - c) Sales analysis - improved sales (with houses or other improvements).
 - d) Detailed research of improved sales.
 - e) Develop & calibrate model.
 - f) Development of depreciation schedules through sales analysis.
9. Data collection & entry (this may begin during or before research process & continue until complete).
10. Review of values & testing / finalization of models & schedules.
11. Value finalization & grand list (preliminary) abstract produced.
12. Value notification & grievance process.
13. Final Grand List.
14. CLA Recalculation based on RA-310 and 411 (for tax rate purposes only).
15. The 3 Prong Test.

H. Grievance Process

1. Optional preliminary notification of values / informal meetings/may include public meeting. This does NOT constitute official grievance and must be followed with the statutorily required notice of value(s).
2. Lodging the abstract (preliminary) grand list, issue official notification of values, informal period until hearings begin to answer questions and gather appeal applications in preparation for Grievance Hearings.
3. Official formal grievance process.
4. Result of grievance.
5. BCA Hearings.
6. State Board or Court Hearings.

Reappraisal & Equalization Analysis - LEVEL OF APPRAISAL / ASSESSMENT CALCULATION

	CATEGORY	PARCEL	SALE DATE	SALE PRICE	LISTED VALUE	ASSESS RATIO	ABS DEV FROM MEDIAN	
	R1	30306	06/18/2021	\$300,000	\$229,500	76.50%	22.85	
	R1	20201	11/09/2021	\$99,500	\$95,300	95.78%	3.57	
	R1	20202	10/24/2021	\$90,900	\$96,300	105.94%	6.59	
	R1	30307	08/20/2021	\$125,000	\$57,700	46.16%	53.19	
	R2	45674	04/22/2021	\$230,000	\$228,500	99.35%	00.00	
	R2	54321	03/27/2022	\$189,000	\$165,200	87.41%	11.94	
	R2	42413	08/03/2021	\$220,000	\$180,200	81.91%	17.44	
	R2	45679	09/09/2021	\$110,000	\$87,000	79.09%	20.26	
	R2	45453	05/19/2021	\$215,000	\$140,700	65.44%	33.91	
	R2	12121	04/01/2021	\$190,000	\$190,600	100.32%	.97	
	R2	89806	06/16/2021	\$354,000	\$355,600	100.45%	1.10	
	R2	45671	06/29/2021	\$471,000	\$472,300	100.28%	.93	
	MHL	45673	08/13/2021	\$60,000	\$63,200	105.33%	5.99	
	V1	11113	08/01/2021	\$152,000	\$148,000	97.37%	1.98	
	V1	23232	08/21/2021	\$150,000	\$127,800	85.20%	14.15	
	V2	11116	06/12/2021	\$64,000	\$66,400	103.75%	4.40	
	V2	12128	08/31/2021	\$145,000	\$144,800	99.86%	.51	
	V2	23269	06/12/2021	\$209,000	\$131,200	62.78%	36.57	
	WOOD	11115	08/31/2021	\$59,500	\$50,700	85.21%	14.14	
	MISC	29287	04/29/2021	\$25,000	\$40,800	163.20%	63.85	
	MISC	64632	02/13/2022	\$25,000	\$33,700	134.80%	35.45	
	MISC	90967	05/01/2021	\$30,000	\$30,900	103.00%	3.65	
	MISC	78790	07/08/2021	\$49,900	\$57,600	115.43%	16.08	

**	SUM	\$3,563,800	\$3,194,000	57,600/49,900= Individual Ratio 3,194,000/3,563,800 =89.62 LOA Total Listed Value / Total Sale Price = LOA
	LOA		89.62%	
	MEDIAN		99.35%	
	COUNT		23	
	TOTAL DEV		369.52	
	AVG DEV		16.07	
	COD		16.17	

- *Individual Ratio= Listed Value/Sales Price = highlight cell/highlight cell (then copy command down entire column)
- *Level of Appraisal = Median
- *Copy categories to individual worksheets (pages in spreadsheet) by clicking on Insert and then Worksheet, then go to the bottom tabs and right click to rename the tab.
- *Then highlight all sales info for that category and copy to the second worksheet (page).
- *Then set up your calculations for that page of information similar to this.
- *Median- type in =Median (highlight ratio cells).
- *Count- type in =Count (highlight any column with values)
- *Add a column for Absolute Deviation from the Median- in first cell of this column type in =ABS (highlight your ratio cell-Median cell)
- *Put a dollar sign in between the letter of the cell and the number (for Median) to tell it to repeat this cell.
- *Then you can copy this formula using copy and paste all the way down the column.
- *Calculate a Sum of absolute deviations =SUM (highlight cells) for deviation.
- *Calculate an Average Deviation =sum of deviations/count
- *COD =Average Absolute Deviation/Median*100

Coefficient of Dispersion **Uniformity of Assessment**

0.00 - 9.90%

Excellent

10.00 - 19.90%

Reasonable (closer to 20 should be monitored by town)

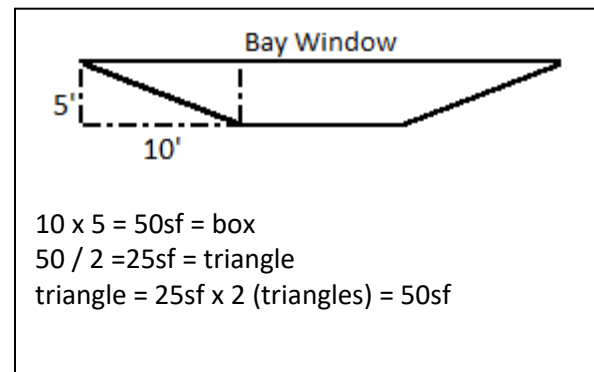
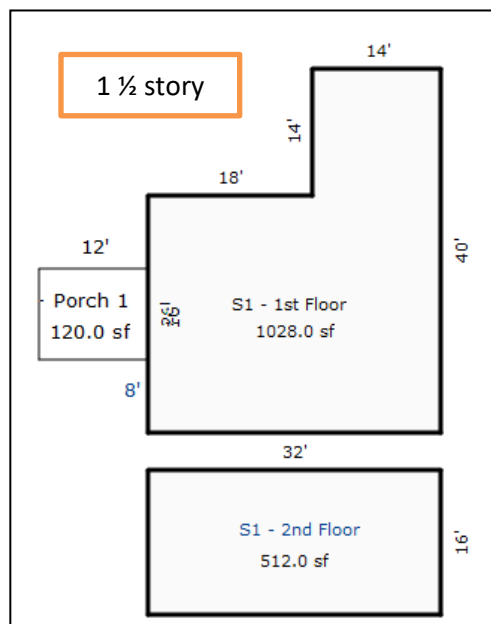
*20.00% and above**Exceeds statutory benchmarks & triggers Reappraisal Order*

- The relative difficulty of the assessment problem is an important factor to be considered in the comparison of coefficients of dispersion between areas and among classes of property. It is reasonable to expect a higher degree of equality in those areas with homogeneous properties to be assessed. Conversely, a lesser degree of uniformity is to be anticipated in those areas with a greater variety of properties. Land is a good example of this.

III. DATA COLLECTION

A. Duties of a Data Collector

- 1. Inspects properties** – If you can't envision yourself going through other people's homes, this is not a job for you. In the absence of interior inspection for some parcels, you must develop a comprehensive method of gathering data (video walk-through, questionnaire, etc.).
- 2. Measures buildings, decks, outbuildings etc.** – Use 100' and 25' tapes. There are many different types of manual tapes such as steel, plastic, cloth and fiberglass as well as sonar measuring devices, and angle measuring device.
- 3. Draw sketch and calculate square feet** (make sure sides equal before leaving property).



- 4. Photographs** – Do as instructed by supervisor. Best to take front and back of house. Take from angle to show sides as well. Pictures of significant outbuildings or all if instructed. Pictures of land if instructed.
- 5. Depreciation Estimates** – Three types which total to “accrued depreciation” – “... the loss in value from reproduction or replacement cost new due to all causes except depletion, as of the date of appraisal.” (IAAO PAV pg. 219) Appraisal date is 4/1 of the year the reappraisal is being completed. Very important to value a property as it exists on that date. Make notes if major changes under way. Depletion deals only with land. Land value is reflected by a grading system specific to the land. Talk with supervisor about how each will be handled.

- a. **Physical Depreciation**– “...the loss in value due to wear and tear in service and the disintegration of a reproducible property from the forces of nature.” (IAAO PAV p. 260) All structures suffer this as soon as last nail is driven.
- b. **Functional Depreciation**– “...the inability of a structure to perform adequately the function for which it is currently employed.” (PAV pg. 260) Results from changes in demand, design and technology.
- c. **Economic Depreciation/Obsolesce** – An influence which comes from off the property and affects all buildings on the property. (PAV 260)



6. **Estimate the Quality and Condition of Property** – data collector's judgment of quality and condition are the most important value drivers in all systems. This will be discussed in depth with specific breakdown sheets for each.
7. **Estimate land grade** – make notes of positive or negative influences observed. Discuss methods with supervisor beforehand.
8. **Complete Data Collection Card Before Leaving Property** – Ensure all information is complete before leaving. If necessary, go back. We will review the Data Collection card line by line later in this course.

B. Qualifications for Doing Data Collection

1. **Professionalism** – You are engaging in this activity as your method of making a living. It involves specific learning and knowledge. Your first impression must project that knowledge.
2. **Appearance** – Both car and self. Clothes and language should be clean and presentable to the public you are meeting. Act appropriately.
3. **Personality** – Be polite and respectful.
4. **Public Relations** -You are probably the only representative of the revaluation firm/municipality the owner will see. In many cases, fewer than 10% of property values are appealed, even to the listers. Honesty and truthfulness are required. At the same time, long

conversations are not expected, whether about taxation or personal interests you may seem to share with property owner. Word spreads fast. Municipal employees or other people when/where you're doing data collection are always watching you. Even in convenience stores. Importance of public relations CANNOT be overstated.

5. **Ideally some experience in real estate or the building trades.** If not, become a student and get general knowledge about construction, real estate and specific knowledge about the program the town is using.
6. **Accuracy / Consistency** – knowledge and consistency will show up in the result of the equity of the project. Accuracy and completeness are vital as they affect both value and public relations. Ex. - Important to put porches, etc. on diagram where they are/or orientation of house to road. Incorrect location on the diagram will not affect value but may lead to owner having doubts about data and therefore value being correct. Additionally, if there are items that are not valued, it is important to capture all structures and ponds reflecting “no value” to complete the listing record and verify you viewed the item. Therefore, it is important to be consistent in your data collection process. Take your time, do not rush.

C. **Commonly asked field questions**

1. **Question “What’s my value?”**

a) Answer “I am only data collecting; values will be established by the company/town later in the process.”

2. **Question “What do I do if I don’t like the value?”**

b. Answer “You will be notified of your value with the grievance process - pay attention to the time frames closely”.

3. **Question “Will my Taxes go Up?”**

c. Answer “It is too early to say until the Grand List is finalized as rates are determined by the total value of the town.”

IV. APPRAISAL THEORY AND PRINCIPLES

A. Approaches to Value – any appraisal or estimate of value should consider all three approaches to value.

1. Market Approach – Comparable sales approach. Usually used by “fee” appraisers or by listers when defending an appealed value. Always looking for market value with any approach. Adjustments are made to sold properties (comps) to make them resemble the subject – the one being appraised.

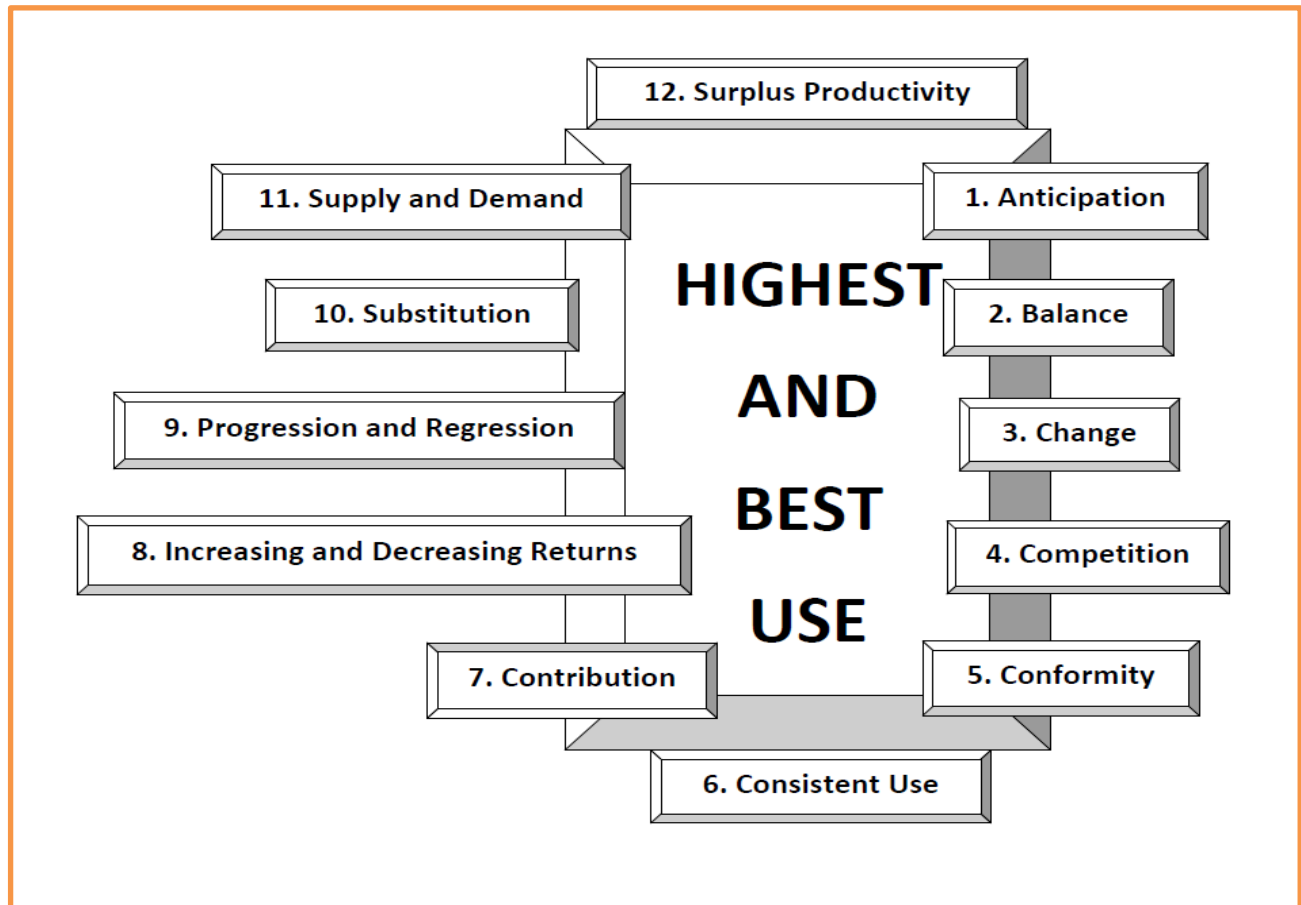
❖ Mass Appraisal process uses the Market approach when developing a model, reviewing, and defending values.

2. Income Approach – Present worth of future benefits. This approach estimates value based on the net income of the property. When buying a property, you are purchasing the income stream for that property. More applicable to commercial property, but if property is rented, try to get information on rent/month and what’s included for utilities. Get expenses from the owner.

3. Cost Approach (Marshall & Swift) – Use a manual or computer program to generate a replacement or reproduction cost new of an improvement (adjusted to local time and place), subtract depreciation, add for land and site improvement value. The model is developed when the cost is adjusted (calibrated) and oriented to current market conditions. In addition, the land schedule and site improvement values are derived from the market. When these steps are accomplished, the total value derived from the cost system should represent Market Value. Reproduction is the exact duplication of the subject (brick for brick). Replacement is the cost of producing something with the same utility as the subject but using modern materials and workmanship.

(We are using Replacement Cost).

B. Appraisal Principles – IAAO (International Association of Assessing Officers) has 12 Appraisal Principles.



There are 12 Appraisal Principles centered around “Highest & Best Use:”

1. **Anticipation** – Market Value is the present worth of anticipated future benefits to be derived from the property.
2. **Balance** – Market value is reached when the four agents of production – labor, management, capital and land – attain a state of equilibrium.
3. **Change** – Market is value and never constant because economic, social and government forces are at work to change the property and its environment.
4. **Competition** – When substantial profits are being made competition is created.
5. **Conformity** – Maximum value is reached when a reasonable degree of economic and social homogeneity is expected in the foreseeable future.

6. **Consistent Use** – A property must be valued with a single use for the entire property.
7. **Contribution** – The value of an agent of production (or a property component) depends upon its contribution to the whole.
8. **Increasing / Decreasing Returns** – When successive increments of one agent of production are added to fixed amounts of the other agents, future net benefits (income or amenities) will increase up to a certain point (point of decreasing returns), after which successive increments will decrease future net benefits.
9. **Progression / Regression** – Progression indicates that the value of a lesser object is enhanced by association with better objects of the same type. Regression indicates that when there are dissimilar properties within the same general classification and in the same area, the better property will be adversely affected.
10. **Substitution** – Market value tends to be set by the cost of acquiring in equally desirable and valuable substitute property, assuming no costly delay is encountered in making the substitution. **This principle is the basis of the Three Approaches to Value – Cost, Comparable Sales and Income.**
11. **Supply / Demand** – Market value is determined by the interaction of the forces of supply and demand.
12. **Surplus Productivity** – The net income remaining after the cost of the agents of production – labor (wages), coordination (management), and capital (improvements) – has been paid and is considered surplus productivity.

(Definitions from PAV Pages 15-21)

The number of principles depends on appraisal organization. Some principals are more important than others. Do HIGHEST AND BEST USE first. Reasons for covering these principals are that they are used in appraisals, and you need to understand the principals to better understand approaches to value and depreciation.

The following are most commonly utilized in a town-wide reappraisal process – (although all are part of the appraisal/reappraisal process):

1. **Substitution** – “...value tends to be set by the cost of acquiring an equally desirable and valuable substitute property, assuming that no costly delay is encountered....” (PAV p.20) Substitution is the basis for 3 approaches to value.



2. **Consistent Use** – Value an entire property with one Highest and Best Use. Improvements may have little, no, or may even a negative value if not consistent with Highest and Best Use. (Ex. land as commercial value with residential home).
3. **Contribution** – “...value of ...a property component depends upon its contribution to the whole.” (PAV p.28) Something is worth what it adds to the value of the property. Ex. Sheds, garages, over-sized kitchens in normal value homes, in-ground pools (aboveground pools not taxed). Extensive cost of septic system, long driveway or bridged access. Basis for adjustments in the Market/Comparable Sales Approach. **Cost may not equal value therefore depreciation may be needed.**

C. Highest and Best Use –

Not an appraisal principle, but so important the principles are pictured surrounding Highest and Best Use. “...that use which will generate the highest net return to the property over a period of time.” (PAV p. 60) Must be legal, probable, complementary (gas stations on 3 corners of intersection, fast-food restaurant would be complementary use for fourth corner) most profitable for the entire property. Typically, for established residential neighborhoods, it is how the property is being used – residentially.



Any of the above can lead to questions on individual properties or the contributory value of different items on properties (Ex. Sheds and pools). Ask your supervisor about guidelines and always make notes about what may present problems with valuation. Pictures of barns or other major outbuildings will help.

D. Grand List

- ❖ **Fair Market Value** – ... “the price which the property will bring in the market when offered for sale and purchased by another, taking into consideration all the elements of the availability of the property, its use both potential and prospective, any functional deficiencies, and all other elements such as age and condition which combine to give property a market value” “.... In determining estimated fair market value, the sale price of the property in question is one element to consider but is not solely determinative” 32 VSA §3481(1) (A). What does this mean to a data collector? Important to note any items of functional deficiency, age, and condition. (Ex: 1 bath for 4-bedroom house or walk-through bedroom to get to another room. Wear and tear items etc.) **Importance of viewing, considering and documenting everything you see that may affect value cannot be overstated!**

V. ACT 60/68 AND TAXATION

A. General Information

1. Why Act 60 came into being (1997) – Amanda Brigham case at a Vt. Supreme Court. Legislature enacted Act 60 statewide education property tax to give students anywhere in VT substantially equal educational opportunities.
2. Act 60 was amended to become Act 68 by the 2003 Legislature. Additional changes in a technical corrections Act 76 bill passed in February 2004.

The screenshot shows the Vermont Department of Taxes website. The header includes the text "Agency of Administration Department of Taxes" and a navigation bar with links: Contact, Careers, File, Pay, Refunds, Forms, and myVTax. A left sidebar lists various categories: Home, Individuals, Businesses, Property, Tax Professionals, Municipal Officials, Forms and Publications, Tax Law and Guidance, Data and Statistics, and Help. The main content area is titled "Search for 2022 HS-122 Form". It features a "Site Search" button, a search input field with the text "2021 HS-122 Form", and a "Search" button. An orange box highlights the search input field with the text "In SEARCH Type in '2023 Form HS-122'". Below the search field is a link "About searching". The "Search results" section lists two items: "1. 2021 Instructions HS-122, HI-144" and "2. 2021 Form HS-122".

3. Education Rates and Terms
 - a. **Homestead Rate** (set by legislation) - Adjusted by spending per student and then adjusted by CLA.
 - b. **Nonhomestead Rate** (set by legislation) - Adjusted by CLA only, not spending adjustment.
 - c. **Common Level of Appraisal (CLA)** – Generally, this is the relationship between the listed value of a property and it's FMV. CLA is an administrative function done by PVR for the purpose of equalizing grand lists. It includes a calculation for use value (trailing), as well as utilities and exemptions. PVR does an annual study using 3 years of sales in each school district to determine

this ratio, expressed as a percentage. Ex. A property is listed in the Grand List at \$80,000. Its actual FMV (sale price) is \$100,000. If this is the only property in town, the CLA is $80,000/100,000 = .80$ or 80% (total listed value/total sale price = CLA).

- d. **Co-efficient of Dispersion (COD)** – “...the average absolute percentage deviation from the median.” The lower the COD, the more equitable appraisals are within the town (people pay their fair share).
- e. **Level of Appraisal (LOA)** - May be only a portion or neighborhood of the town or lesser time frame than CLA (calculated as total listed value / total sale price = LOA for that portion or neighborhood).
- f. **Homestead** – The principal dwelling owned and occupied by a Vermont resident individual as the individual’s domicile. A homestead includes the entire parcel of land surrounding the dwelling, determined without regard to any road, river or stream that intersects the land. A homestead does not include buildings or an improvement detached from the home and used for business purposes and does not include that portion of a principal dwelling used for business purposes if the portion used for business purposes includes more than 25 percent of the floor space of the building or **any** rental use. The value of outbuildings and other improvements not used for business purposes are included in the value of the homestead, e.g., swimming pools, tennis courts, landscaping. See 32 VSA § 5401(7) and Reg. § 1.5401(7) for details and examples. If property owners have questions, they should contact their local listers. If there appears to be commercial use or rental use of a property, the data collector should make detailed notes of such, remembering that all his/her records are public information.
- g. **Housesite** – That portion of a homestead that includes the principal dwelling and as much of the land surrounding the dwelling as is reasonably necessary for use of the dwelling as a home, but in no event more than two acres per dwelling unit; and in the case of multiple dwelling units, no more than two acres per dwelling unit up to a maximum of ten acres per parcel.

Data collectors should note when outbuildings appear to be on the first two acres for Housesite purposes.

Assume all residential properties are homestead properties, whether lived in year-round or not for data collection purposes. It is recommended that all residential properties be assigned both homestead and housesite values.

INCLUDE: (IN HOUSESITE & HOMESTEAD)

(INCLUDE IN HOUSESITE ONLY IF ON THE FIRST TWO ACRES & NO BUSINESS USE)

- ❖ Water and sewer/septic
- ❖ Landscaping
- ❖ Tennis court
- ❖ Attached and detached garages/structures not used for commercial purposes (business or rental).

NOT INCLUDED: (IN HOUSESITE & HOMESTEAD)

- ❖ Detached buildings – if **any portion** is used for business / commercial purposes (farm = business).
- ❖ Principal Dwelling – that portion used for business / commercial purposes (consider the 25% rule for those principal dwellings where commercial use is minimal). All Rental portion is excluded.
- ❖ If a housesite is a portion of a parcel that is larger than two acres, value only the two-acre housesite. It should be valued as if it is a separate parcel. Housesite includes two acres, homestead includes entire parcel.
- ❖ Second dwelling and individual site improvements (water & sewer) for the second dwelling are included in homestead if not rental but **never** included in housesite.

VI. LAND

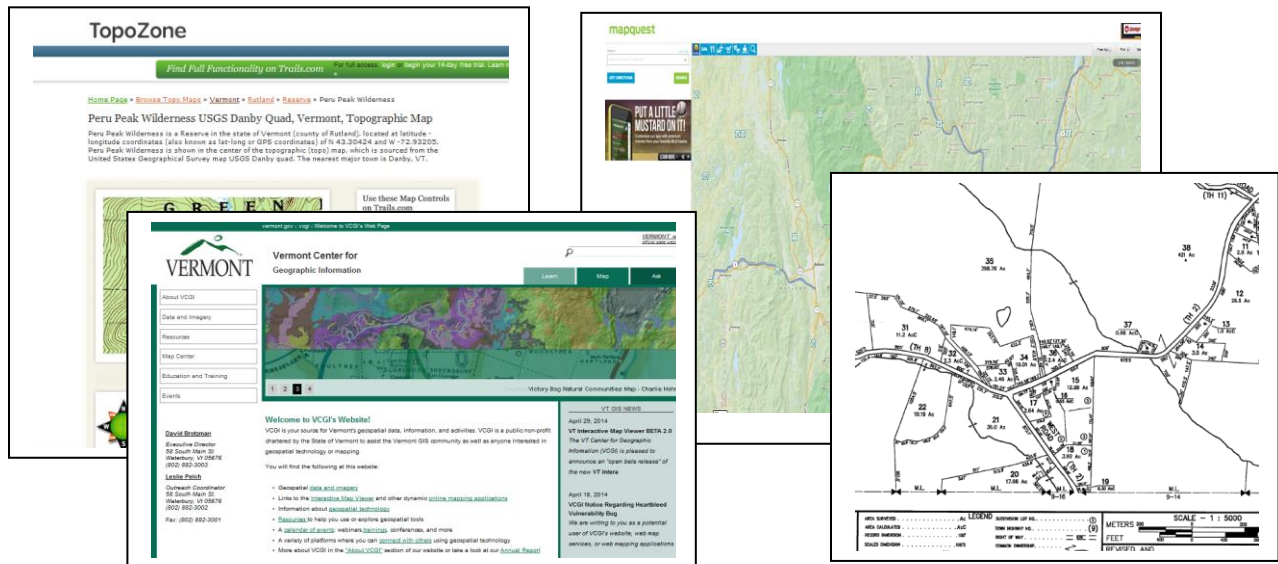
A. Land Description

1. Maps – Most data collectors will need to understand how to read various maps. Must be able to find the neighborhood they are working in and then understand where each property is located. Always drive the town and the neighborhood before starting work. This will allow data collectors to know the location of different property types, values, and influences. Some towns will want data collectors to verify property maps with owners. Occasionally, data collector will find buildings partially or entirely on neighbor's land. Appraise to owner of land. The Lister/Assessor will refer to the most accurate source of information when determining the acreage:
 - a) Deed (If clear measurements and markers are described in the deed).
 - b) Survey done by registered surveyor and recorded in town clerk's office (where no obvious errors are found).
 - c) Property map. Topographic and flood plain maps are helpful also.

***The key to order of preference is to find the best, most accurate source.**

Mapping References Online vcgi.vermont.org

(aerial)



www.EPA.gov – EPA.gov/enviromapper (contaminated sites)
www.topozone.com (topography)
www.terraser.com (aerial)
www.nwi.fws.gov (wetlands)
www.fema.gov/hazard/map/flood (flood maps)
earth.google.com (aerial)

2. The Blessing of 911

- a) Numbered from South to North & East to West
- b) Even Right / Odd on Left from a starting point
- c) Street Names & Road Signs



3. Definitions

- a) Contiguous – Adjoining, in contact with. Ensure the same deed name.
Ex. John Jones owns a parcel abutting a parcel also owned by John Jones and purchased in more than one deed is still one parcel. Does not matter if it crosses town boundary.

A parcel is defined as “all contiguous land in the same ownership, together with all improvements thereon.” 32 VSA, section 4152(a) (3). Act 68 legislation has further defined the meaning of a “PARCEL” in the Homestead definition as “A homestead includes the entire parcel of land surrounding the dwelling, determined without regard to any road, river or stream that intersects the land. 32 VSA section 5401(7)

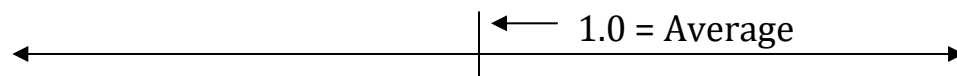
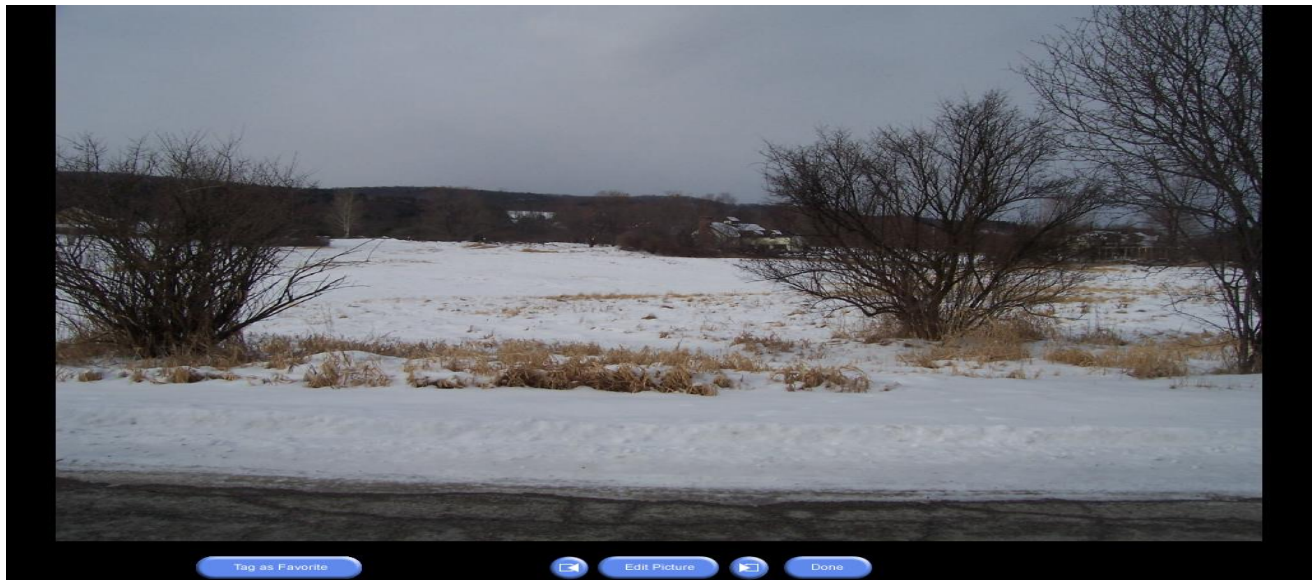
- b) Square Foot – $200 \times 200 = 40,000$ sq ft. Acre - 43,560 sq. ft. in one acre. Roughly 200 ft by 200 ft or the size of a football field – 50 yards by 100 yards. (To determine portion of acre total SF/43560 = Acreage.)
- c) Site – Typically the 2 acres surrounding a residential/vacation improvement. This may fluctuate in some towns, so be sure to check with supervisor.
- d) Front Footage – Distance a parcel abuts river, lake or highway. Steep ledge or swampy area can make actual front foot not equal to effective front foot. Make notes if actual does not equal effective.
- e) Notes are VERY IMPORTANT!

B. Land Grading

1. Multipliers/ Percentages - It is important to understand that this is specific to each town.

- a) Average – 1.0. Parcel does not overly excite potential buyer either positively or negatively.
- b) Enhancing - Excites potential buyer positively. Grade adjustment will be above 1.0 and is usually in .05 or .10 segments such as 1.05, 1.1, 1.15... This is the equivalent of multiplying an average value by the factor or adding the same percentage to an average value, ex. 1.1 equals average $(1.0) + 10\%$ (plus 10 percent).
- c) Detrimental - Effects potential buyer negatively. Grade adjustment will be below 1.0 and is usually in .05 or .10 segments such as such as .95, .9, .85.... This is the equivalent of multiplying an average value by the factor

or subtracting the same percentage to an average value, ex. .9 equals average (1.0) - 10% (minus 10 percent).



- Base Value from land schedule multiplied by land grade factor.
- Most important to know is how average was defined for the town.
- What are the attributes to make average in your town?

Land Values					
	Acres	Full (Site inclusive) Value	Acres	(Without site) Residual	
	1	26250			
	2	33000			
	3	39750	1	6750	
	4	46500	2	13500	
	5	53250	3	20250	
	6	60000	4	27000	
	7	66750	5	33750	
	8	73500	6	40500	
	9	80250	7	47250	
	10	87000	8	54000	
	11	87825	9	54825	

2. **Factors** (ALL FACTORS ARE DERIVED FROM MARKET RESEARCH AND INDIVIDUAL TO EACH TOWN)

a Neighborhood Factors

1. Land Sale Values will indicate neighborhoods (ex. Base 10ac - 50,000-one neighborhood, sales show 100,000 - multiplier is 2.0 for that neighborhood).
2. High Quality Verses Low Quality Structures. A good reason for driving both town and neighborhood before starting project (may affect neighborhood).
3. Zoning – Can influence use of land, hence affecting value, either positively or negatively. May be strictly enforced or not. Some towns still do not have zoning.

Base Land Value from land schedule multiplied by neighborhood factor then multiplied by land grade factor equals specific land value.

Ex. 2ac land schedule = 33,000 x 1.25 Neighborhood Multiplier = 41,250 x 1.0 grade = 41,250 (41,300 rounded)

LAND PRICES	Size	Nbhd Mult	Grade	Depth/Rate	
SI Bldg Lot	2.00	1.25	1.00		41,300
Total	2.00				41,300
TOTAL PROPERTY VALUE					41,300



Very important to understand how your land schedule, neighborhoods and grading works.

- b. Individual Property Factors/ Enhancing-Detrimental – Can be (these will be combined to develop an overall physical grade for the property). Get general guidelines from supervisor.

1. **Utilities**

- a. Electric – Distribution versus transmission line. Placement can affect land grade of subject either positively or negatively.
- b. Gas – Underground natural gas, not LP (Liquid Propane).
- c. Both/None – Property has both electric and natural gas or neither.



d. The view – this may be economic obsolescence to the building.

2. Road

- a. Paved
- b. Gravel
- c. Town vs. private road



d. Right of Way – Ensure dedeed. Does it affect the value of either the property it accesses or the property it crosses? (Data Collector should note ROW and observed possible effect)

3. Access

- a. This refers to access or potential access onto property. Degree of difficulty or ease to enter property. Varies from driving from road onto property with no site work to major site work required (ex. – bridge / blasting required or simple culvert and driveway).
- b. Landlocked – No legal access. Can be accessed with court or selectboard laying out ROW for access to property. Town zoning may prohibit creation of a landlocked parcel. Can transfer existing landlocked parcels even if zoning is in place.

4. Topography

- a. Level
- b. Rolling
- c. Sloping / Above or Below Road
- d. Steep / Above or Below Road



5. View

- a. Spectacular
- b. Good
- c. Average – what is average for the town
- d. Detrimental (depending on what the view is and the extent of the view – this may also be economic obsolescence to the building)

6. Soil Drainage (if you cannot determine - assume moderate)

- a. Good
- b. Moderate
- c. Poor
- d. Swampy
- e. Septic Laws – Many people still think of the 10 acre “loophole” of Act 250. This no longer exists. (<http://dec.vermont.gov/about-dec/a-z/land-topics>)

7. Shape (maps are most helpful)

- a. Enhancing
- b. Detrimental
- c. No Influence

8. **Water Influence** (may include brooks, rivers, lakes or ponds)

- a. Enhancing
- b. Detrimental
- c. No Influence

9. **Other**

- a. Positive or Negative off-site influence on subject property value (Ex. Shooting range, junk cars next door, factory smells). Another reason to drive the town and neighborhood before starting work (may be accounted for in view or external obsolescence, but always make notes of where you accounted for it).
- b. Broadband access-availability of high-speed internet

C. Data Collection for land (these data fields will vary depending upon your CAMA provider)

a. Calculation method

- ❖ #1 Site
- ❖ #2 Acreage
- ❖ #3 Square Foot
- ❖ #4 Frontage & Depth
- ❖ #6 CU Site
- ❖ #7 CU Acreage
- ❖ #8 CU Square Foot
- ❖ #9 CU Frontage & Depth

b. Type

- ❖ #1 Building Lot
- ❖ #2 Woodland
- ❖ #3 Cropland
- ❖ #4 Pasture
- ❖ #5 Other
- ❖ #6 Total
- ❖ #7 Additional Site

c. Area

- ❖ Area in feet or acres

d. Grade

- ❖ Land grade as applicable

Data Collectors should discuss with supervisor how raw land should be coded versus improved land. Typical coding for “improved” land.

Example of a 10 Acre Parcel on data collection sheet**For Improved Land**

- ❖ Example: Land ID#1 – 1 - site / 1 - building lot / 2.0 - acres / 1.25 – grade
- ❖ Example: Land ID#2 – 2 – acreage / 5 – other / 8.0 – acres / 0.90 – grade

—OR—

For Raw Land

- ❖ Example: Land ID#1 – 2 – acreage / 6 – total / 10.0 – acres / 1.00 - grade

*Note - “Total” includes a 2-acre site value.

NEMRC Microsolve Software Data Collection Sheet

Entire Data
Collection sheets
are in the
Appendix

Parcel ID:
Owner 1:
Owner 2:
Address 1:
Address 2:
City/State/Zip:

Sale Date: _____ Sale Price: _____

Notes:

Parcel Data

Neighborhood Code: _____

Inspection Date: ____/____/____

Inspected By: _____ Re-inspect: 1-No 2-Yes

Owner Signature _____

Date _____

Interior Inspection _____ Refused _____

Closed after 2 Attempts _____

Outbuildings

ID	Type	Area	Siding	Finish SqFt	Class	Quality	% Good	H S
1								
2								
3								
4								
5								
6								
7								

Land/Site Imp/Outbuilding Data

Land ID	Calc Code	Land Type	Area	Grade	FF	Depth
1						
2						
3						

Calculation Code: 0-No Data 1-Site 2-Acreage 3-Square Ft
4-Frontage & Depth 5-No Data

HS = include in Homestead

Proval CAMA Software Data Collection Sheet

PARCEL#	PROPERTY OWNER				LOCATION			
YEAR BUILT	REMODELED	NBGH static improving declining blighted			CLASS			
LAND								
WATER well private well shared spring common none	ROAD public privat paved unpaved CLASS 1 2 3 4	ACCESS grade above below	ELECTRIC off grid public generator solar wind	DRIVEWAY shared paved gravel earth long steep	VIEW average good panoramic pastoral water	TOPO level high rolling swampy	LANDSCAPE average good superior pond stone work pool	Comme
BUILDING INFORMATION								
Style R RR Split Cape Frmhse Log Contemp A Frame Hawk Camp Mobile Manufactured	Story Basement LL 1 2 3 Attic Foundation Prd Concrete Concrete Blk Stone Piers Slab	Roof Gable Flat Gambrel Dormer Shed Doghouse Roof Cover Asp Shingle Wd Shingle Stand Seam Chan Metal Old Metal	Siding Wd Clap Vinyl Wd Vert Log Log Face T11 Wd Shake Asb Shin Windows Economy Standard Premium	Basement Walk-Out Finished % Unfinished Heating Type Oil HW Oil HA Propane HW Propane HA Electric Radiant Wood Stove Space No Heat	Construction Frame Log Post & Beam Brick Masonry Interior Walls Wood Panell Sheet Rock Flooring Wood Tile Vynl Carpet	Electric Adequate 100+ Inadequate 60-		
Comments: _____								

AssessPro/Patriot CAMA Software Data Collection Sheet

LAND SECTION (First 7 lines only)

Use Code	Description	LUC Fact	No of Units	Depth / PriceUnits	Unit Type	Land Type	LT Factor	Base Value	Unit Price	Adj	Neigh	Neigh Infl	Neigh Mod	Infl 1	%
10	RESD 1		0.26		SITE ACRE	SITE	1.0	0	85,000.	2.85	MG				

VII. SITE IMPROVEMENTS

A. Site Improvements (ALL VALUES ARE DERIVED FROM MARKET RESEARCH AND INDIVIDUAL TO EACH TOWN)

1. Water – With private systems, find out if there is sufficient water of acceptable quality (ask owner - What source of water? Is quality and quantity, OK?).

- ❖ Municipal
- ❖ Drilled Well
- ❖ Spring- owned / deeded / shared
- ❖ Default values should be adjusted to the local market

Data Collector will record:

Quality

- ❖ #1 Low Cost
- ❖ #2 Below Avg
- ❖ #3 Avg
- ❖ #4 Good
- ❖ #5 Excellent

Quantity

- ❖ #1 Minimal
- ❖ #2 <Typical
- ❖ #3 Typical
- ❖ #4 >Typical
- ❖ #5 Extensive

2. Sewer - With private systems, find out if the system seems to be functioning properly. Any problems? **Make notes** (ask owner - What is sewer source? Is it functioning OK as far as you know?)

- ❖ Municipal
- ❖ Private
- ❖ Conventional-500 Gallon is metal, 1,000 gallon is poured concrete
- ❖ Mound System
- ❖ Other – Composting/Electric/Gas
- ❖ Default values should be adjusted to the local market

***What happens when utilities are shared (i.e. parcel with benefit of utility that does not rest on the parcel it benefits)**

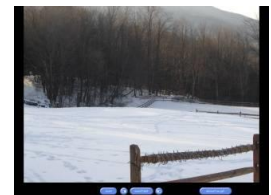
Data Collector will record:

Quality

- ❖ #1 Low Cost
- ❖ #2 Below Avg
- ❖ #3 Avg
- ❖ #4 Good
- ❖ #5 Excellent

Quantity

- ❖ #1 Minimal
- ❖ #2 <Typical
- ❖ #3 Typical
- ❖ #4 >Typical
- ❖ #5 Extensive



Remember cost does not
equal value ex. \$20,000
Septic System

3. Landscaping – Get guidelines for quality and quantity from supervisor. May be included in land grade for site.

Data Collector will record:

Quality

- ❖ #1 Low Cost
- ❖ #2 Below Avg
- ❖ #3 Avg
- ❖ #4 Good
- ❖ #5 Excellent

Quantity

- ❖ #1 Minimal
- ❖ #2 <Typical
- ❖ #3 Typical
- ❖ #4 >Typical
- ❖ #5 Extensive

Extensive Landscaping



Default values should be adjusted to the local market

(If nothing unusual is noted assume water, sewer & landscaping are Average/Typical).

4. Ponds

Data Collector will record:

Quality

- ❖ #1 Low Cost
- ❖ #2 Below Avg
- ❖ #3 Avg
- ❖ #4 Good
- ❖ #5 Excellent

Quantity

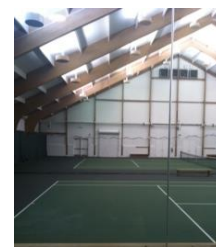
- ❖ #1 Minimal
- ❖ #2 <Typical
- ❖ #3 Typical
- ❖ #4 >Typical
- ❖ #5 Extensive



5. Other

- ❖ Specialty items/ Tennis Courts, Pools etc.
 - ❖ Value provided by Supervisor or Marshall Swift
- (Find out from supervisor if they want these items entered here or elsewhere)
- This is where you will enter a name and flat rate value.

Tennis Court



❖ After each site improvement add to Homestead/ Housesite

- ❖ #1 No
 - ❖ #2 Yes
- ❖ Be consistent and label each ID# the same each time. Ex. ID #1 is always Water.

Microsolve Site Improvement Data Collection Card

Impr ID	Type Code	Quality	Quantity	HS /HM
1				/
2				/
3				/
4				/

Type Code: 1-Water 2-Sewer 3-Landscape 4-Pond

Quality Code: 1-Low 2-BelowAvg 3-Avg 4-Good 5-Excellent

Quantity Code: 1-Min 2- <Typ. 3-Typical. 4- >Typ. 5-Extensive

Proval Site Improvement Data Collection Card

LAND								Comments:
WATER well private well shared spring common none	ROAD public privat paved unpaved CLASS 1 2 3 4	ACCESS grade above below	ELECTRIC off grid public generator solar wind	DRIVEWAY shared paved gravel earth long steep	VIEW average good panoramic pastoral water	TOPO level high rolling swampy	LANDSCAPE average good superior pond stone work pool	

AssessPro/Patriot Site Improvement Data Collection Card

PROPERTY FACTORS						
Item	Code	Description	%	Item	Code	Description
Z				water		
o				Sewer		
n				Electri		
Census:				Exmpt		
Flood Haz:						
D				Topo	4	ROLLNG
s				Street		
t				Gas:		

Full Data Collection Cards for all vendors are in the appendix

VIII. OUTBUILDINGS

A. Outbuilding Types – These come from Section 17 of Marshall Valuation Service (Commercial-Brown Book). There are 37 possible building types. The following are the most commonly used:

- ❖ **#1 Light Commercial Utility** – Multi-purpose structure generally equipped with minimum electrical and or water services for general storage use, garages, etc.
- ❖ **#2 Equipment Building** – Light Commercial Equipment Shop Bldg – Enclosed, unfinished interior, concrete or asphalt floors, cabinets. Wiring, outlets, space heaters.



- ❖ **#3 Material Storage Building** – Enclosed, either wainscoting or interior walls. Electrical. No heat or plumbing.



- ❖ **#6 Material Shed** – Material Storage Shed – Open one side. Concrete or asphalt floor. No or minimal lights, no heat.



- ❖ **#9 Equipment Shed** – Light Commercial Equipment Shed – Open front. Concrete or asphalt floor. Electrical and water. Space heaters.



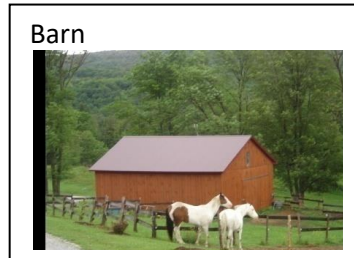
- ❖ **#10 Material Shelter** – Material – Commodity Shelters – Roof, no walls. Concrete or asphalt floor. No

electrical except possible security light. Possible use lean-to shed.

- ❖ **#11 Tool Shed** – Toolshed Buildings – Enclosed, inexpensive frame or block walls. Typically, unfinished interior with dirt, asphalt or cement floor. Few or no outlets. No heat. Typical use is mostly lawn sheds.

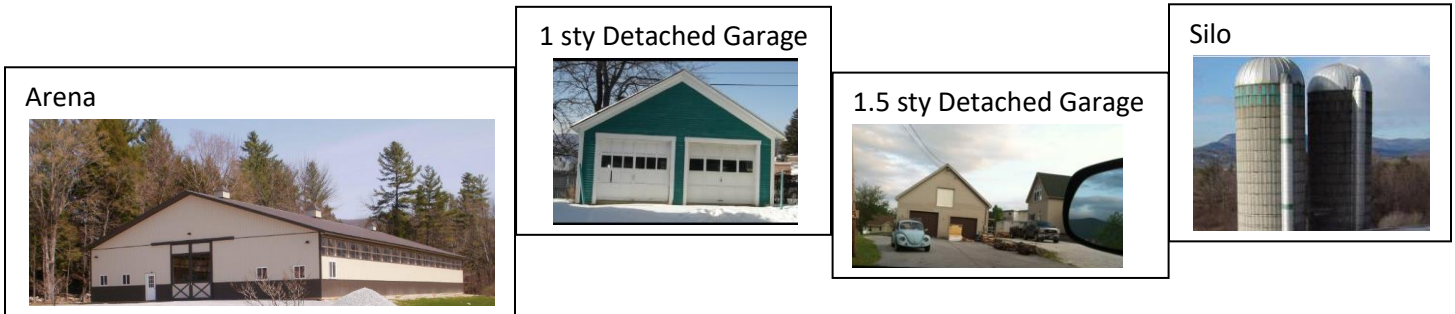


- ❖ **#13 Dairy Barn** – Dairies (Milking Parlor) – Enclosed, with metal, wood, or even brick walls. Interior finish varies. Electrical and plumbing. No heat.



- ❖ **#14 Milk House** – Enclosed. Finished interior walls. No heat.
- ❖ **#15 Hay Loft** – Wood floors and supports for hay storage. No electrical or heat included.
- ❖ **#16 Barn** – General Purpose – Enclosed. Floors from cement, plank or dirt. Some have electrical. No heat. If more than one story add Hay Loft
- ❖ **#17 Freestall Barn** – Enclosed. Open stalls for cattle. Concrete or dirt. Wiring and electrical but no heat.
- ❖ **#18 Stable** – Enclosed. Ranges from good brick or block with lighting and water to boards on post and beam without plumbing. No heat.
- ❖ **#19 Arena** – Enclosed. Ranges from good facility with viewing area, restrooms and kitchen to unfinished, with dirt floors and minimal electrical. No heat.
- ❖ **#23 Farm Equipment Shed** – Enclosed, with metal, wood or block walls. Asphalt or concrete floor. Unfinished interior with some cabinets. Electrical, water. No heat.
- ❖ **#24 Farm Utility Shed** – Enclosed, with metal, wood, block or even brick walls. Dirt, asphalt or wood floors. Electrical, water, no heat.

- ❖ **#29 Silo** – Concrete stave silo only. All other types of silos should be done using Name and Rate fields in Outbuildings.
- ❖ **#35 Detached Garage/Shed, one story** – M&S Detached Garage costs.
- ❖ **#36 Detached Garage/Shed, one and a half story**- M&S Detached Garage costs and **#10 Material Shelter** (attached)
- ❖ **#37 Detached Garage/ Shed, two story** – M&S Detached Garage costs.

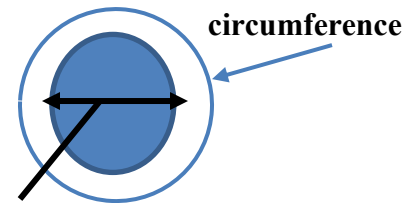
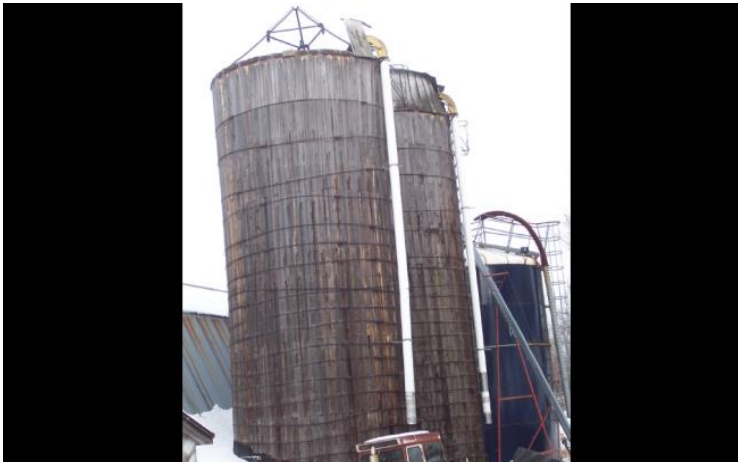


****Common outbuildings such as sugar houses, yurts, connex/storage boxes do not have Marshall and Swift cost tables defined. Because of this, it is necessary to develop a method of valuation utilizing the other available outbuilding options to achieve a reasonable estimate of Fair Market Value.**

B. Outbuilding Area

- ❖ **Ground Floor Area** of the Outbuilding. If the outbuilding has a 2nd floor, use Hayloft (#15), with the actual hayloft area. If using Silo (#29), enter diameter here or utilize a flat rate. If using Detached Garage (#36 or #37); **enter only the ground floor area.**

Marshall & Swift Residential Book page D – 6



Radius
equals 1/2 the diameter

Diameter calculations

Diameter = Radius x 2

= Circumference x .3183

C. Outbuilding Siding (most commonly used)

- ❖ #1 Plywood or T1-11
- ❖ #2 Hardboard or Masonite or Asbestos
- ❖ #3 Metal
- ❖ #4 Vinyl
- ❖ #5 Stucco
- ❖ #6 Wood
- ❖ #7 Shingle (wood)
- ❖ #9 Log
- ❖ #10 Brick Veneer
- ❖ #11 Veneer
- ❖ #17 Stone

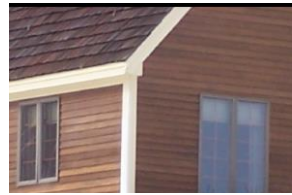
T1-11



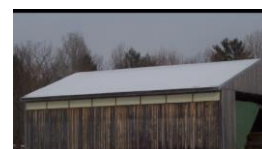
Vinyl



Wood



D-Pole Structure



D. Outbuilding Class (most commonly used)

- ❖ #3 C (Masonry Frame, like concrete block)
- ❖ #4 D (Typical wood frame, with sills)
- ❖ #5 D-Pole (Pole Frame)
- ❖ #6 S (Light steel frame)



D Type Structure

Outbuilding Quality

- ❖ #1 Low Cost
- ❖ #2 Fair
- ❖ #3 Average
- ❖ #4 Good
- ❖ #5 Very Good
- ❖ #6 Excellent

E. Outbuilding Percent Good

- ❖ 100% minus Depreciation. This includes depreciation for all reasons – physical, functional, completeness of construction, and external/economic. Many times, the functional depreciation is the most important. Get guidance from supervisor. This can be especially important when dealing with farm buildings when the Highest and Best Use is non-farm.

Remember – cost does not necessarily equal “market value”

F. Outbuilding Name

- ❖ Enter the name (description) of the structure you want to enter as a flat rate
- ❖ This allows you enter a depreciated value under rate for special circumstances: such as a gazebo, pools, tennis court, etc.



- G. Rate** – Two ways to calculate – Use only if “Name” is used as described above. Use a contributory value. This is not depreciated further.

- ❖ Area would be 1 and rate would equal the total value of the name or
- ❖ Area would be area (square footage) of structure and rate would be the Sq. Ft. Cost.
- ❖ You must add a separate Outbuilding ID or it will be overwrite existing outbuilding.

H. Add Outbuilding to Homestead/ Housesite

❖ #1 No

- ❖ *Put no for homestead/housesite if business use including active farm.
- ❖ *Put no on housesite only if obviously outside the two acres and not business / rental use.).

❖ #2 Yes

I. Silo Height - (only if Silo type is used)

MAKE GOOD NOTES OF ANTHING YOU THINK WOULD AFFECT PROPERTY VALUE POSITIVELY OR NEGATIVELY.

To use name & rate fields as indicated in “H”.

MicroSolve CAMA 2000 System

File Edit View Data Valuation Mapping Utilities Tools Help

Selected Database: StandVT (VT.DBC)

Parcel ID: 00000041 Owner Name: UNDERWOOD MONTY W & S Owner Name2:

Owner Address: 17 ALBERT ST City: ADAMS State: MA ZipCode: 01220

Parcel	Land/OB	Sec/Pg 1	Sec/Pg 2	Sec/Pg 3	Valuation	Picture	Note
Land ID:	1	Quality:	1	Low Cost	Finish:		\$
Calc Method:	1	Site	Quantity:	1	Minimal	Class:	0 No Data
Land Type:	1	Bldg Lot	SI Name:		Quality:	0 No Data	
Area:	2.00	Rate:	0.00	% Good:			
Grade:	1.00	Add to Hsite:	0 NoData	Name:	Gazebo		
Frontage:		Add to Hmstd:	0 NoData	Rate:	2000.00		
Depth:		Outbl ID:	1	Add to Hsite:	2 Yes		
Rate:		Type:	0 No Data	Add to Hmstd:	2 Yes		
S-Imp ID:	1	Area/Diam:	1	Silo Height:			
Type:	1	Water	Siding:	0 NoData			

Add Delete SKETCH

Main (VIMain) Record: 37/39 Record Locked 12:57:17 pm

Start Inbox - Micros... Microsoft Pow... 2 Windows E... Somerset - NE... MicroSolve C... Microsoft Wor... My Apps 12:57 PM

IX. IMPROVEMENTS INSPECTION

A. Building Types (This will determine which cost table section will be used)

- ❖ **#1 Single** – Most homes encountered by data collectors will be of this type. Built as a one-unit house. Includes older structures, which have been modified to become multi-unit dwellings.
- ❖ **#2 Multi-Family** – Built as such (Ex. unit to unit complex). Typically, newer apartment houses. Most data collectors will not do these until experienced.

Single Family – one story



Single Family – two story



Multi Family – row house



Multi Family – row house



- ❖ **#9 Mobile** – Manufactured or Mobile Homes include doublewide (steel beam undercarriage and is usually put on cement block piers), but not modular (wood floor joists and may easily be put on full basement). Watch quality grade as this may vary. The qualities of mobile homes are much better now than some of the earlier ones.

Doublewide Mobile Home



Mobile Home



- ❖ **#10 Camp** – Lightly built structures. In many cases lack insulation, interior finish and central heat. It's up to the data collector to pick type correctly. Sometimes will have difficulty between good camp and fair quality house, although both (good camp and fair quality house) will have comparable cost tables applied.

Camp



B. Quality - Most important determination of value!

Residential Grade Factors

Foundation Type:

1. Piers or rubble
2. Frost wall or full stone / slab
3. 8" concrete or block / good granite
4. 8" reinforced concrete
5. 10" reinforced concrete or 12" block
6. 10" concrete with interior bearing wall

Poured Concrete



Cement Block



Stone



Stone



Foundation Corners



Foundation Corners

1. 4 corners / square
2. 4 corners / moderately rectangular
3. 4-6 corners / rectangular
4. 6-8 corners / irregular
5. 8-12 corners / irregular
6. More than twelve corners

Exterior Walls

1. 2x4 construction / low quality cover
2. 2x4 construction / t-111 minimal quality cover (asbestos)
3. 2x6 construction / wood, aluminum or vinyl siding, vert. Brd. / low-cost log structure
4. 2x6 construction / good quality wood or vinyl siding / average quality log / average quality post and beam
5. 2x6 construction / vertical grain wood or wood shingle / large tapered-log structure / good post and beam
6. 2x6 construction / redwood siding or better quality / cut stone / select brick

Exterior Trim

1. No trim
2. Minimal trim
3. 3/4 trim, moderate
4. 5/4 trim, good
5. 5/4 trim, extensive
6. 5/4 trim, elaborate / custom ornamentation



Fenestration

1. Minimal / low quality-one window or less per side
2. Minimal / minimal windows-one wall with no windows
Above are non-insulated glass
3. Average / at least one window per room/ storms
4. Insulated glass/ good quality/1 to 2 windows per room
5. Insulated glass/ good quality/ most rooms have 2 windows
6. Insulated glass, custom windows/ full wall of glass



Roof

1. Shed roof/minimal pitch/inexpensive metal or rolled roofing

2. Truss frame or rafters / minimal pitch/ inexpensive metal or asphalt shingle /minimal eaves
3. Truss or minimal rafters/medium pitch/ asphalt shingle
4. 9-12 pitch / hips or valleys / cedar shingles or architectural grade asphalt shingles
5. 12-12 pitch / hips or valleys / standing seam or cedar shakes
6. 12-12 pitch / hips and valleys/ copper standing seam or slate

Floor Structure

1. 2x6 floor joisting / logs / bouncy?
2. 2x8 floor joisting / logs – 2' centers or less / bouncy?
3. 2x10 floor joisting / on 16" centers / logs-adequate
4. 2x10 floor joisting / on 12" centers, glue lams
5. 2x12 floor joisting / on 16" centers, glue lams
6. 2x12 or glue lams floor joisting / on 12" centers



Floor Cover

1. Inexpensive carpet, vinyl, or uncovered plywood
2. Inexpensive carpet, vinyl, or linoleum / softwood
3. Combination of carpet, vinyl, and minimal hardwood / softwood
4. Combination of carpet, good vinyl, and extensive hardwood
5. Combination of high-quality carpet, hardwood, and ceramic tile
6. Combination of high-quality carpet, hardwood (parquet or inlay), ceramic or quarry tile

Interior Walls

1. Less than 8' height-minimal cover
2. 8' height, drywall, enamel paint / inexpensive paneling
3. 8' height, painted some inexpensive wallpaper or paneling
4. 8' height, good quality paint, high-grade wallpaper, some tile or hardwood paneling
5. 9' height, good quality paint, high-grade wallpaper, extensive wood paneling
6. 9+' height, plaster over gray board, wallpaper, extensive wood paneling

Hardware

1. Hollow-core doors, low-cost door and faucet hardware, minimal closet space
2. Hollow-core doors, inexpensive door and faucet hardware, minimal closet space
3. Medium grade doors with standard hardware, average faucet hardware, adequate closet space
4. Wood paneled doors with higher quality door hardware and faucet fixtures, walk-in closets / better than adequate
5. Hardwood paneled doors with expensive hardware, good quality faucet fixtures/better than chromed, ample walk-in closets
6. High grade hardwood doors with excellent hardware, gold plated or custom-made faucet fixtures, ample walk-in closets throughout

Electric

1. Minimal outlets and low-cost lighting fixtures
2. Minimal outlets and average lighting fixtures
3. Adequate number of outlets, luminous fixtures in kitchen and bath
100-amp service or less for the above grades
200-amp service for the below grades
4. Good amount of convenience outlets, track or recessed fixtures in kitchen and bath
5. Custom and well positioned outlets, high quality fixtures throughout, good track or recessed fixtures in kitchen and bath
6. many custom and well positioned outlets and high-quality fixtures throughout, many track or recessed fixtures in kitchen, bath, and dressing areas

Heating

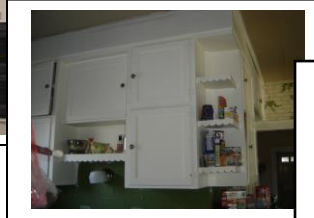
1. Wood stove / wood furnace or none
2. Wall vented units or electric baseboard
3. Central forced hot air
4. Baseboard or radiator hot water / full HVAC system
5. Hot water radiant floor system / full HVAC system
6. heat pumps or geothermal system



Kitchen

1. Poor quality and minimal cabinets, laminated counter with limited space / usually close to 6' of counterspace
2. Stock low quality veneer cabinets, laminated counter tops with minimal splash, minimal adequacy/ usually about 8' to 9' 0f counterspace
3. Adequate amount of prefinished veneer cabinets, laminated or ceramic tile counter with adequate splash, usually about 10' to 14' of counterspace

4. Ample cabinetry with wood-veneer finish, laminated or ceramic tile or simulated marble countertops, usually about 16' to 20' of counterspace
5. Solid wood cabinets, island workspace, built-ins, Corian or similar quality countertops / usually more than 20' of space
6. custom solid wood cabinets, island workspace with second sink, many built-ins, marble, or granite countertops / very spacious workspace



Bathrooms

1. Low-cost white fixtures
2. Competitively priced white fixtures
3. Average quality white or colored fixtures
4. Good quality white or colored fixtures (sweatless)
5. Good quality fixtures, double vanities and other extras, custom layout, separation of functions
6. High quality fixtures, many extras, good deal of tile work

Plumbing Fixtures

1. 5 fixtures
2. 6 fixtures
3. 8 fixtures
4. 11 fixtures
5. 14 fixtures
6. 17 fixtures

Note: plumbing fixtures can include any of the following

- A. Hot water heater
- B. Laundry sink
- C. Kitchen sink
- D. Shower stall
- E. Toilet
- F. Tub
- G. Tub with shower over
- H. Bathroom sinks
- I. Wet bar

Rough ins: washing machine hook-ups and outside faucets do not count as plumbing fixtures

GENERAL QUALITY TRIGGERS:

ROOF TYPE, ROOF LINES & PITCH / HOUSE DESIGN & SHAPE / FENESTRATION & ORNAMENTATION

Low Quality House	Fair Quality House	Average Quality House	Good Quality House
Foundation <u>A continuous concrete perimeter foundation and piers based on a moderate climate.</u>	<u>A continuous concrete perimeter foundation and piers based on a moderate climate.</u>	A continuous concrete perimeter foundation and foundation or piers under interior bearing wall, based on a moderate climate.	A continuous <u>reinforced</u> concrete perimeter foundation and foundation or piers under interior bearing wall, based on a moderate climate.
Floor Structure	Wood Structure and subfloor on first and upper floors.		
Floor Insulation	Not included in the basic residence cost.		
Floor Cover <u>Inexpensive carpet and asphalt or vinyl composition tile floor cover is used.</u>	<u>Carpet and asphalt or vinyl composition tile floor cover is used.</u>	Carpet, hardwood, vinyl composition tile or sheet vinyl floor cover is used.	Carpet, hardwood, sheet vinyl floor or vinyl tile cover is used. <u>No vinyl composition tile.</u>
Floor Cover Allowance is not included in the basic residence cost. The Floor Cover Allowance is weighting of those floor coverings typically to			
Exterior Wall <u>Minimum fenestration with inexpensive sash with little or no trim.</u>	<u>Moderate fenestration with inexpensive sash is typical. Front elevation may have inexpensive trim.</u>	Standard aluminum sash or wood sash is typical of the fenestration at Average Quality.	<u>Good fenestration using good-quality sash. Some ornamental trim.</u>
Roof Rafters or prefabricated trusses with <u>plywood or other inexpensive sheathing with a light weight composition shingle or a built-up with gravel roof cover. Roof slope is usually less than 4 in 12 with no eaves.</u>	Rafters or prefabricated trusses with <u>plywood or other inexpensive sheathing with a light weight composition shingle or a built-up with small rock roof cover. Roof slope is usually less than 4 in 12 with minimal eaves.</u>	Rafters or prefabricated trusses with exterior-grade plywood or wood sheathing with a medium-weight composition shingle or a built-up with small rock roof cover. Roof slope is usually 5 in 12 or less.	<u>Wood rafters and sheathing with hips and valleys. Good-quality cedar shingles are included in the basic residence cost.</u>

Entire Quality Sheet is included in the appendix of this document

Quality & Condition

GRADE	LOW	FAIR	AVERAGE	GOOD	V.GOOD	EXCEL.	TOTALS		CONDITION
CAMA #	1	2	3	4	5	6			
FOUNDATION TYPE									
FNDATION CORNERS									
EXTERIOR WALLS									
EXTERIOR TRIM									
FENESTRATION									
ROOF									

C. Style (for Single Family building type) – non-NEMRC Microsolve systems may have different names and story heights. Refer to Marshall & Swift story height description pages 4, 5, and 11.

- ❖ **#1 - 1 Story** – One level of living area. Medium roof slope. Attic space limited and not intended for living area.
- ❖ **#2 - 1.5 Unfinished** – Two levels of possible living area, with only the first floor finished. Steep roof. Possible dormers. Upper floor space, when finished, will probably be 40 – 60% of first floor space. Marshall Swift does not have 1 ¼ story. Per Marshall Swift “enter base floor square footage only”. If this is used, you need to know how to run reports to check each year for reinspection.
- ❖ **#3 - 1.5 Finished** – Same as above, but with finished second floor.
Measure upstairs to height of 4-5 feet. Per Marshall Swift “enter total above grade square footage (both floors). The key is to be consistent and always use the same effective second floor area. It is helpful to establish a set reference, such as a shoulder height, to measure effective height consistently. To measure the square footage of a finished half story with clipped ceilings, only include those areas that have a minimum clearance of 5 feet or greater. Square foot method in M&S Residential Cost Handbook page 4.
- ❖ **#4 - 2 Story** – Two levels of living area having about same size. Medium slope roof. Attic space limited and not designed for living area.
- ❖ **#5 - 2.5 Story / Unfinished** – Three levels of possible living area. Steep roof, etc., as 1.5 (above).
- ❖ **#6 - 2.5 Story / Finished** – Same as above, but with all 3 levels finished.
Measure upstairs to height of 4-5 feet (useable space, refer to #3 above).
- ❖ **#7 - Bi-level (Raised Ranch)** – Two levels of living area. Bottom level is usually partially below-grade and is partially unfinished. Measure basement finish and note it as such. Split entry.



- ❖ **#8 - Split Level** – Three levels of finished living area – lower, intermediate, and upper. Lower is under upper (kind of makes sense....) and intermediate is to the side. Connected by half-stairways. **Total all 3 levels for square footage used in cost approach.** May also have unfinished – or finished – basement under intermediate level. This should be added as whichever it is.
- ❖ **9 - 3 Story (Exceptional Home)** – Three levels of finished living area, all approximately the same size. Only found at Exceptional Home level of quality.

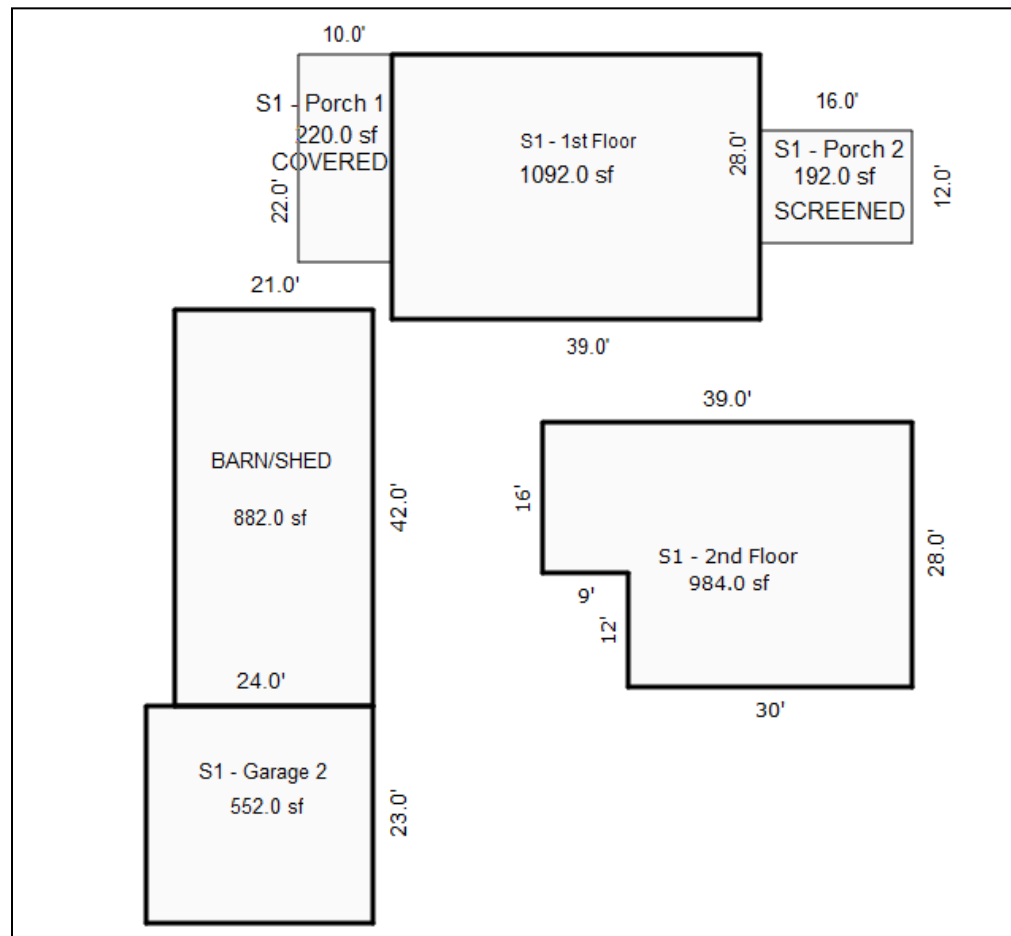
Exceptional Homes tables are for quality grades 6+ to 12.

IF MIXED STORY HEIGHTS CHOOSE HIGHEST STORY HEIGHT

D. Building Square Footage

- ❖ **Total-** above grade- finished area (GLA). Use 4- or 5-inch graph paper and measure. Especially upper floors if different than lower floor size. (Enter in the APEX Sketching Program as Gross Building Area.)

***Stairs are to be included in GLA while cathedral area is not included in second floor GLA.**

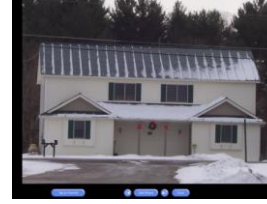


E. Design –For use in Market Approach. (Does not affect cost)

- ❖ #1 Bi-Level
- ❖ #2 Camp
- ❖ #3 Cape Cod
- ❖ #4 Chalet
- ❖ #5 Colonial
- ❖ #6 Contemporary
- ❖ #7 Apartment house
- ❖ #8 Duplex
- ❖ #9 Log
- ❖ #10 Mobile home - Mobile Homes are entered as one-story under style but labeled as mobile for type.
- ❖ #11 Modular – Typically built off-site and assembled on-site. Can be multi-story and equal to average quality dwellings. Many/most are on full basements. Do as standard dwelling and reflect appropriate quality.
- ❖ #12 Double wide – Have steel frame which stays with structure. Typically, on piers of some kind which may or may not be on a slab. Can value as mobile type with higher quality or single type with lower quality. Be consistent.
- ❖ #13 Town house
- ❖ #14 Ranch
- ❖ #15 Salt box
- ❖ #16 Split level
- ❖ #17 1.5 Story
- ❖ #18 Victorian
- ❖ #19 A-Frame
- ❖ #20 Condo
- ❖ #21 Res/Comm
- ❖ #22 2 Story
- ❖ #23 1 Story
- ❖ #24 2.5 Story
- ❖ #25 3 Story



Duplex



Bi-level



Camp



Log



Victorian



Ranch



Mobile Home Single



Mobile Home Double



Saltbox



2.5 Story



2 Story



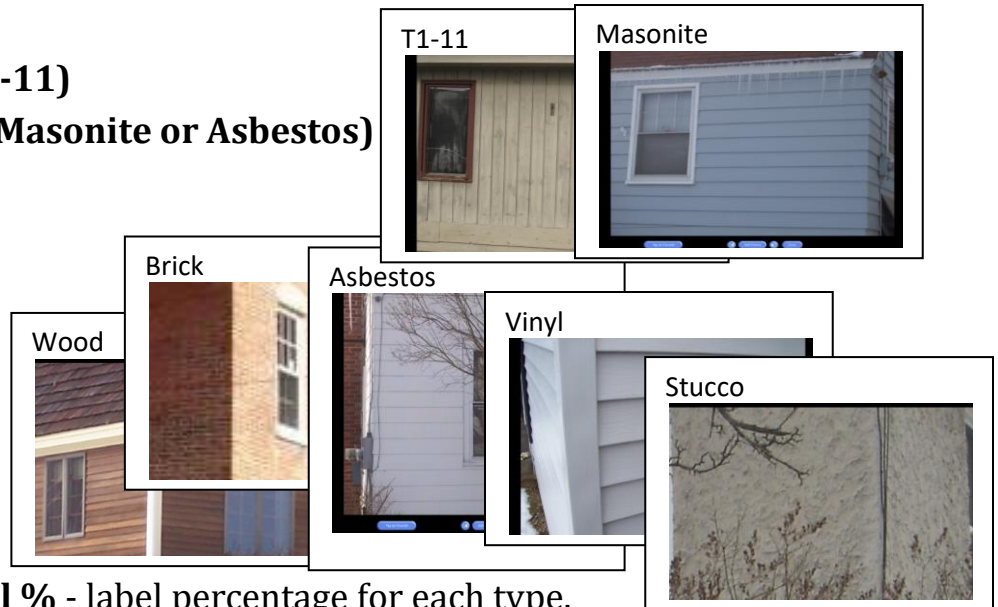
F. Frame

- ❖ **#1 Studded** – Has wood or steel studs in walls. May have brick/stone/log exterior.
- ❖ **#2 Masonry** – Solid. Typically cement block.

G. Siding/Exterior Walls (most commonly used) – You may have more than one type with a percentage estimate for each and must equal 100%.

H. Siding

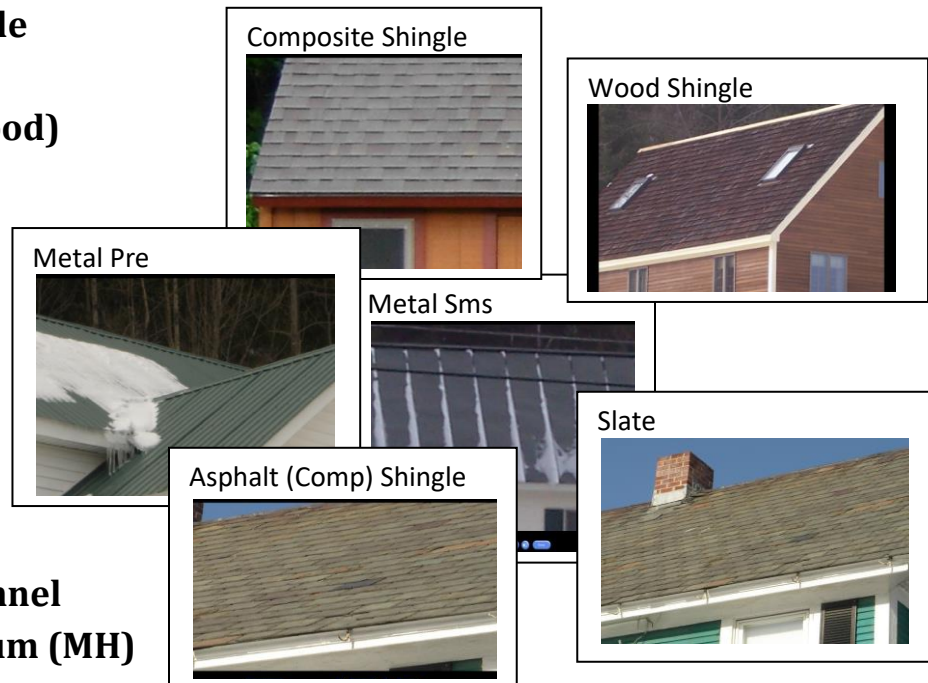
- ❖ **#1 Plywood (or T1-11)**
- ❖ **#2 Hardboard (or Masonite or Asbestos)**
- ❖ **#3 Metal**
- ❖ **#4 Vinyl**
- ❖ **#5 Stucco**
- ❖ **#6 Wood**
- ❖ **#7 Shingle (Wood)**
- ❖ **#9 Log**
- ❖ **#10 Brick Veneer**
- ❖ **#11 Stone Veneer**



I. Siding/Exterior Wall % - label percentage for each type.

J. Roof Cover. (most commonly used) – You may have more than one type with a percentage estimate for each and must equal 100%.

- ❖ **#1 Comp Shingle**
- ❖ **#2 Built-up**
- ❖ **#3 Shingle (Wood)**
- ❖ **#4 Shake**
- ❖ **#5 Metal Pre**
- ❖ **#6 Metal Sms**
- ❖ **#7 Metal Cpr**
- ❖ **#8 Comp Roll**
- ❖ **#9 Conc Tile**
- ❖ **#10 Clay Tile**
- ❖ **#11 Slate**
- ❖ **#16 Metal Channel**
- ❖ **#17 Ribbed Alum (MH)**



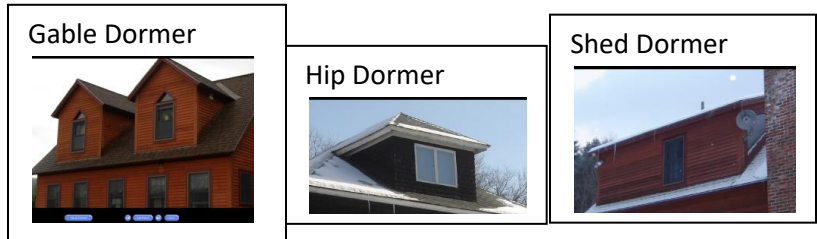
K. Roof Cover % - label percentage for each type.

L. Dormers

- ❖ **Linear foot measure** – Measure across face of dormer. May have to estimate from below.

- ❖ **Dormer Roof Type**

- ❖ #1 Hip
- ❖ #2 Gable
- ❖ #3 Shed



- ❖ **When to use** – 1 ½ story with shed dormer and 2 gable dormers may cost as 2 story, but do not use dormers. Cape with 2 gable dormers may be cost as 1 ½ story but add for the dormers. Speak to supervisor and be consistent! Notes are very important! It is important to note that when assessing dormers, you include the sq ft in the GLA (if applicable) as well as the dormer type to adequately capture the value.

M. Energy Adjustment – Vermont has an Extreme climate, by Marshall & Swift guidelines.

- ❖ **Moderate verses Extreme Climate** – Vermont is in the Extreme climate. Base cost includes glass and energy adjustment package for a moderate climate. Therefore, in most new construction with 6” walls and double pane, low-e windows, or good replacement windows data collector will record as good.
- ❖ **Energy Packages** (ask owner what insulation they have)
 - ❖ **#1 Below Average** – Single pane windows. 2x4 construction. Minimum wall and ceiling insulation. Older dwellings with little insulation.
 - ❖ **#2 Average** – Mix of some single and some double pane windows. 2x4 or 2x6 construction. R11 to R19 in walls and R19 to R30 ceiling. Normally pre-1980 construction if no updating of windows or older structures that have been re-insulated.
 - ❖ **#3 Good** – Double and possible triple pane glass, 2x6 exterior walls, R19-R25 walls and R33-R45 ceilings. **This represents most new construction. Data Collectors are likely to find this in Vermont.**
 - ❖ **#4 Excellent** (super-insulated) – Double and possible triple pane glass, Double walls, R30 walls with air infiltration wrap. Up to R55 ceiling.
 - ❖ **#5 None** – No insulation. Ask the property owner “What type of insulation and how much you have?”

***If the homeowner notes that the house is 5-star certified for efficiency (“green”, “net zero”, Leadership in Environmental Energy and Design (LEED), etc.) then you would consider these to be #4 Excellent.**

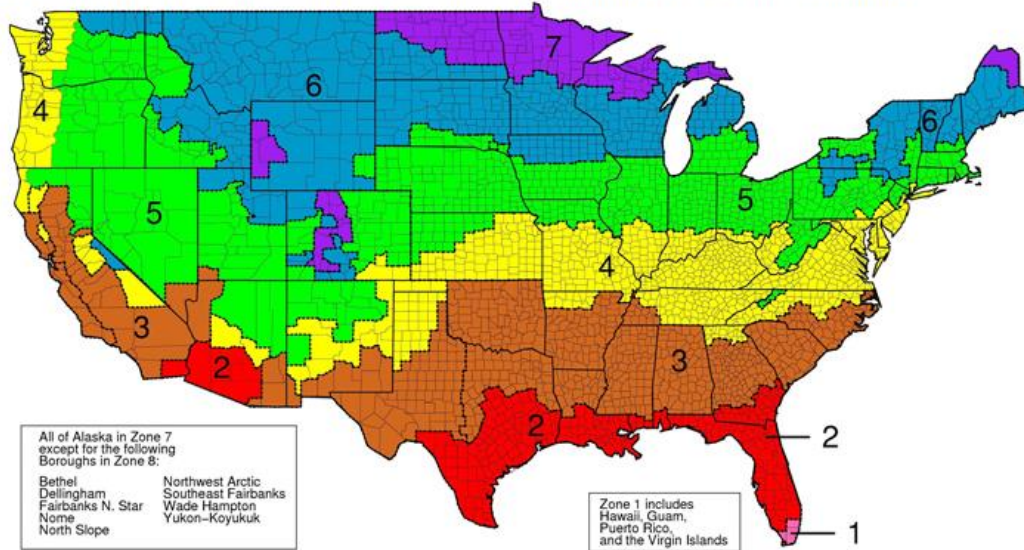
Walls – 2X3 Construction = 2 ½” fiberglass (R7)

2x4 Construction = 3 ½” fiberglass (R11 or R13)

2x6 Construction = 3 5/8” fiberglass (R19 – R25 Walls R30 – R45

Attic) Usual for Vermont

Recommended insulation levels for retrofitting existing wood-framed buildings



Zone	Add Insulation to Attic		Floor
	Uninsulated Attic	Existing 3–4 Inches of Insulation	
1	R30 to R49	R25 to R30	R13
2	R30 to R60	R25 to R38	R13 to R19
3	R30 to R60	R25 to R38	R19 to R25
4	R38 to R60	R38	R25 to R30
5 to 8	R49 to R60	R38 to R49	R25 to R30

Copied from website: http://www.energystar.gov/?c=home_sealing.hm_improvement_insulation_table

N. Foundation/Basement

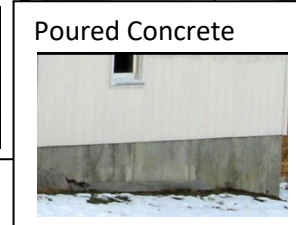
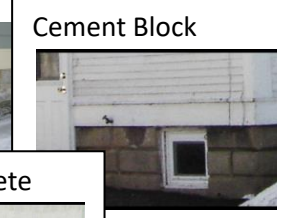
- ❖ **Partial/ Crawl/Slab- This foundation adjustment should not be used if the building has a basement.** Pertains to depth of foundation. If there is a basement under a mobile home or house, leave this section blank unless using moderate or steep slope adjustment.
 - ❖ #1 Single Family Foundation depth of < 18” – Rare in Vermont. Could be a floating slab or camp on rocks.
 - ❖ #2 Single Family Foundation depth of 18”-48” – No frost wall. Most camps. Look for evidence of heaving.
 - ❖ #3 Single Family Foundation depth of > 48” Frost Wall (crawl space)

- ❖ #4 Mobile Home Piers/ Blocks
- ❖ #5 Mobile Home Wood Perimeter
- ❖ #6 Mobile Home Concrete Perimeter
- ❖ #7 Mobile Home Concrete Block Perimeter
- ❖ #8 Moderate Slope- Used for walk-out basements. Covers the cost of a walk-out door.
- ❖ #9 Steep Slope- Used with full basement when extra re-enforcement is used for foundation stability.
- ❖ #10 Mobile Home Stone Perimeter



O. Basement Wall – Use if there is a basement or partial basement. If there is a combination of materials (stone, brick, concrete), such as in an older house with addition, **use whichever is more prevalent.** Marshall & Swift assumes crawl space – if not labeled as basement it is assumed to be crawl space.

- ❖ #1 6" Poured Concrete
- ❖ #2 8" Poured Concrete – Most common
- ❖ #3 12" Poured Concrete
- ❖ #4 6" Concrete Block
- ❖ #5 8" Concrete Block
- ❖ #6 12" Concrete Block
- ❖ #7 Stone
- ❖ #8 Wood Frame (pressure treated)



P. Basement Square Footage – Area of the basement. (Do not need to measure unless you cannot tell from sketch), label on sketch the portion that has full basement and if any basement portion is finished.

- ❖ Low basement-Below 6' - May be considered Functional Depreciation. Put reason in notes.

This is the cost for the concrete area.

Q. Basement Garage – count of garage doors.

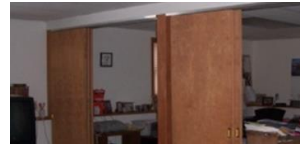
- ❖ #1 None - no interior finish on walls or ceiling.
- ❖ #2 Single
- ❖ #3 Double
- ❖ #4 Triple
- ❖ Do not subtract from basement area.

Basement area costs out the concrete & this option only adds for the doors.

R. Basement Finished Area (FNA)– Also used if there is a dirt floor instead of poured concrete. Do not include finished area in room count.

- ❖ #1 Unfinished
- ❖ #2 Minimal – lacking one or more components of finish.
- ❖ #3 Recreation Room – all components – heat, flooring, walls & ceiling but only one or two rooms.
- ❖ #4 Partitioned – two or more clearly defined rooms with all components of finish.
- ❖ #5 Finished Apartment – includes one kitchen, one bath and separate entry – fixtures included. If labeled as finished apartment do not add for these fixtures.
- ❖ #6 Dirt Floor – Is a deduction from the cost system.

Basement Finish Rec Room



Basement Dirt Floor



S. Finished basement area. Must enter square footage for calculation.

- ❖ Finished
- ❖ Dirt floor

(Must enter square footage of either)



T. Basement Entry. Bulkhead or walk-out (ask owner- Do you have an outside entry to the basement?).

- ❖ #1 None
- ❖ #2 Yes

If moderate or steep slope was used – do not add for basement entry



U. Sub-floor. This refers to sub-floor of first floor. Go to basement and look up.

- ❖ #1 Wood – floor joist and carrying beam for first floor (most dwellings).
- ❖ #2 Slab/ Pad - A minus adjustment for houses, plus for mobile homes.



V. Floor insulation – For insulation under the first floor. Not used with basement FNA (finished area) adjustment. Often found with electric heat or radiant heating – look between joists.

- ❖ #1 Below average
- ❖ #2 Average
- ❖ #3 Good



W. Floor Insulation Square Footage – enter square footage of floor insulation if indicated.

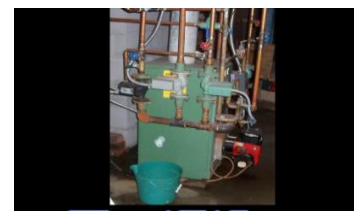
X. Heat Type – you can have more than one type, if multiple types or part of dwelling has no heat. Each type must be labeled as a Heat ID with the type and percentage and must equal 100%.

- ❖ #1 Forced Air (gas)
- ❖ #2 Forced Air (oil)
- ❖ #3 Space Heat (not wood stoves) – Built-in gas or kerosene.
- ❖ #4 Electric Radiant (Ceilings or floor)
- ❖ #5 Electric Baseboard
- ❖ #6 Hot water baseboard or Steam Rad.
- ❖ #7 Warm/Cool (includes air conditioning)
- ❖ #8 Heat Pump
- ❖ #9 Evaporating Cooling with ducts
- ❖ #10 Air exchange
- ❖ #11 Gravity Air Furnace
- ❖ #12 Individual wall units (multi-family only)
- ❖ #13 Hot water radiant
- ❖ #14 None – (if wood stove is only source of heat, or if portion of house is unheated)

Forced Hot Air Furnace



Hot Water Baseboard Boiler



Y. Heating / Cooling Percentage

- ❖ Label each type with percentage. Must total 100% – even if none.

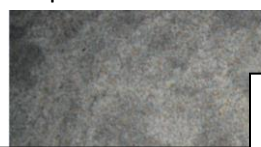
Z. Plaster

- ❖ Percent of building with plaster walls or ceiling. Talk with supervisor about functional depreciation if this is used in houses with quality less than good.

AA. Floor Cover – you can have multiple types or part no flooring. Each part is labeled as a Floor ID with the type and percentage. This must equal 100%

- ❖ #1 Resilient
- ❖ #2 Carpet
- ❖ #3 Softwood
- ❖ #4 Ceramic Tile
- ❖ #5 Terrazzo
- ❖ #6 Hardwood
- ❖ #7 Parquet
- ❖ #8 Linoleum
- ❖ #9 Vinyl sheet
- ❖ #10 Light Concrete

Carpet



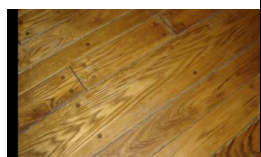
Tile



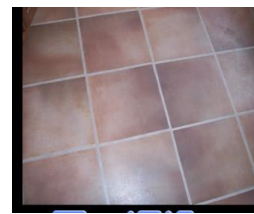
Hardwood



Hardwood



Vinyl



Vinyl



- ❖ #11 Allowance (assumes a mix of flooring types typical for the quality house you have designated)
- ❖ #12 None

BB. Floor Cover Percent

- ❖ Label each type with percentage. Must total 100, even if “None” is used.

CC. Wall Height – enter height in feet if other than expected for quality.

- ❖ Excellent quality assumes 10-foot wall height.
- ❖ Houses other than excellent quality – An 8-foot interior wall is considered the norm. Be aware of less than 8-foot height. If left blank, program assumes 8 feet.

May also be functional depreciation if extreme low or high wall height

DD. Features – Discuss with contractor-consistency. Ask yourself if this adds to the value of the property. May want to make notes and/or consider an overall quality (example: skylights or wood stove hookup)

- ❖ None/Allowance/Specific – Fourteen possible plus “none”. Typically, not used in mass appraisal in VT. Used more in fee appraisal.
- ❖ Non-Typical – 3 which seem to be used to some degree
 - ❖ #8 Intercom
 - ❖ #14 Central Vacuum
 - ❖ #15 Security System
- ❖ Quality- defaults to building quality. Not used at this time.
- ❖ Count/Area
 - ❖ A number equal to or more than 1 must be entered for this to add to cost.
 - ❖ 1 for item (or however many there are) – use with flat rate value or entered in rate
 - ❖ Square footage if rate section is used – use with cost per square entered in rate
- ❖ Rate
 - ❖ Lump sum for count of 1 or more
 - ❖ Cost per square foot of feature
- ❖ Name

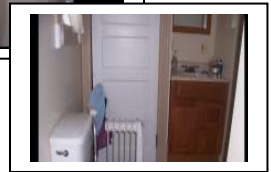
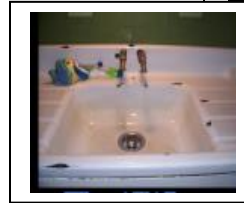
- ❖ Used in conjunction with Rate field – type the name that should appear on cost sheet.
- ❖ Discuss with supervisor



Example: Feature ID 1 / Type 0 / Count 1 / Rate 1500 / Name Woodstove hookup

EE. Plumbing Fixtures – data collector will enter number of plumbing fixtures.

- ❖ Fixtures (Definition) – Real property into which water runs, is held and then leaves. (Average quality assumes 8 fixtures, Very Good assumes 14 fixtures). Add fixtures above and below grade except if finished basement apartment is used.
- ❖ Toilet
- ❖ Sink (each count as one)
- ❖ Tub (with or without shower)
- ❖ Kitchen sink
- ❖ Dishwasher (contractors' option)
- ❖ Hot water heater
- ❖ Jacuzzi (count as fixture and add additional value as feature if built-in)
- ❖ Any sink that has a water supply and a drain



Decide and be consistent throughout town

- ❖ Rough-in (Definition) – Something water runs out of (Marshall Swift assumes 1 rough-in for Average)
- ❖ Washing machine
- ❖ Outside faucets (contractors' option)
- ❖ Future (Roughed in) new bath hookup

Decide and be consistent throughout town



FF. Room Count – Keep count by floor as you go through house. (Does not impact cost. If open floor plan, assume where logical walls may be).

- ❖ Total rooms – Never include bathrooms in room count. Include kitchens, bedrooms as well as other kinds (Den). Enter number of total rooms.
- ❖ Bedrooms – Usually have closet and at least one window. Can be used for something else – office, den – but originally intended as sleeping room. Enter number of bedrooms.

Total	Bed	Bath
1111 11	111	11

GG. Bath Count – (Does not impact cost). Enter number of full and half baths.

- ❖ Three fixtures make a full bath
- ❖ Two fixtures make a half bath

HH. Kitchen – M&S cost assumes one, for multifamily units add under name and rate for extra kitchens. Enter number of kitchens.



II. Fireplaces – Check with supervisor about how to handle gas direct - vent fireplaces. Also, if quality is distinctly different from house.

- ❖ Count
- ❖ Type
 - ❖ #1 Single
 - ❖ #2 Double (back to back or stacked)

Quality predetermined by House Quality (cost may not equal value).

Marshall and Swift assume the fireplace story height is the same as the story height of the house.



Physical Condition

Residential Condition of Items

FOUNDATION – Always look for moisture problems and any bulges or irregularities in the walls. Lines on the walls or floors may indicate water problems. Have these been cured? If not, the loss in value may be recognized as either physical or functional depreciation, or both.

- ❖ Excellent – New. No cracks in poured concrete or bulges in walls.
- ❖ Very Good – Almost new. Hairline cracks possible. No evidence of moisture infiltration.
- ❖ Good – No evidence of structural problems.
- ❖ Average/Good – Same as Good, but 20 (+) years old.
- ❖ Average – Some small cracks. Normal wear and tear. No major cracks, swelling or evidence of water damage.
- ❖ Fair/Average – Older foundation. Some cracks, especially in cement block

foundations.

- ❖ Fair – Older foundation. Cracks. Some evidence of water problems. Some stones could be loose.
- ❖ Poor – Major structural concerns. Large cracks, with possible bulges in, or non-vertical, walls. Loose stones. Water damage and dampness evident.
- ❖ Salvage – Not supportive.

EXTERIOR WALLS – As you measure a house, watch for irregularities or damage to the exterior walls. This may be cracks or rot with wood clapboards/siding, faded, stained or torn vinyl siding, bricks which have major cracks, are loose, or even appear to be in danger of falling.

- ❖ Excellent – New. No problems.
- ❖ Average – Has had appropriate maintenance for age. Some wear and tear evident, but still very functional.
- ❖ Salvage – Not functional. Could be extensive rot w/wood sidings or missing and broken parts of the wall.

EXTERIOR TRIM – Look for loose trim and/or corner boards, rot, wear or breakage on various pieces of trim.

- ❖ Excellent -New. No problems.
- ❖ Average -Has had appropriate maintenance for age. Some wear and tear evident, but still very functional.
- ❖ Salvage – Possible rot. Breakage. Missing items.

FENESTRATION -New windows may be the data collector's first visible clue of possible renovation. In newer windows, look for "steam" forming between the panes, evidencing a loss of the seal. Look for signs of moisture problems, mildew, discoloration or rot around the window itself. Older windows may be loose or lacking putty. Be aware of broken or cracked panes.

- ❖ Excellent – Either part of a new house or new windows recently installed in an older house.
- ❖ Average – Some wear, but no obvious breakage. Original windows on relatively new home.
- ❖ Salvage – Old single pane windows with loose or broken panes and sash needing repair or replacement. Newer windows which have lost their seal. May have broken hardware as well.

ROOF – Be sure to look at roof from front and rear of house. Presence or absence of heavy icicles in winter may give information about adequacy of insulation and ventilation problems. Look for curl or chips in asphalt shingles. Metal may be rusty or painted in spots. Note the presence of

mold. Ask if the roof is original or when it was replaced. Typical “235” asphalt shingle roof life has been quoted as 20 years but varies depending on circumstances. Note any ceiling damage on interior house inspection. If evident, ask about reason and if problem has been cured. If leaking is around the chimney, there may be a problem with the flashing. If left unchecked, this could lead to rot.

- ❖ Excellent – Either part of a new house or new roof recently installed on an older house.
- ❖ Average – No apparent problems with leakage, but not a new roof cover.
- ❖ Salvage – Broken shingles, possible mold growing. Evidence of leakage.

FLOOR STRUCTURE – In newer homes, look at the size, spacing and length of floor joists and supports. Note where trusses are used. In older homes with possible irregular spacing and size of floor supports, note whether the floors have any spring or “give” as you do your inspection. Look for settlement, where floors are not level. This may indicate problems with sills. Try to determine the presence of rot in sill and/or joists, especially if there is evidence of water in the basement or crawl space. Watch for rot around entry doors.

- ❖ Excellent – New. No problems. Average – Although not new, no obvious problems.
- ❖ Salvage – Possible rot in sill and/or floor joists. Major work is needed to ensure house is safely useable.

FLOOR COVER – Inspect for wear and tear. Carpet may have worn spots or areas from long term heavy traffic. Hallways can show excessive wear.

- ❖ Excellent – Either part of a new house or new floor cover recently installed in an older house.
- ❖ Average -Not new, but not showing significant wear. Any typical purchaser would continue to use the floor w/o immediate replacement.
- ❖ Salvage – Needs immediate replacement. Carpets have frayed areas from heavy wear. Possible faded/discolored spots. Wood shows many worn areas. Linoleum may have broken areas.

INTERIOR WALLS – This comprises not just the wall covering, but more importantly the walls themselves. Include the ceiling in your inspection. Watch for water stains. If present, ask about roof problems and if they’ve been fixed. Look for rough or irregular surfaces that may have been patched or painted to cover possible problems. Sheetrock nails/screws showing may show up as well as irregular walls or cracks in the drywall. These may be indicative of quality as well as condition problems. Ask for the reason. Take the entirety of the house into consideration before

assigning an overall condition.

- ❖ Excellent -Either part of a new house or part of recent remodeling of an older home.
- ❖ Average – Walls and ceiling are not new but show little wear and tear. No stains or holes.
- ❖ Salvage – Holes in drywall or paneling. Water stains from possible roof leaks. Wallpaper torn, faded or peeling. Significant or many cracks in older plaster. Possible holes in the plaster as well.

HARDWARE – Look at window locks and door hinges and locksets as well as hardware in kitchens and bathrooms. Look for older, out of date hardware showing wear and evidence of breakage or plumbing hardware which has apparently been leaking for some time.

- ❖ Excellent – New hardware, either in a new house or as a result of new windows or interior work being done.
- ❖ Average – Some evidence of wear in a fairly new house. Everything works but may have discoloration or some rust.
- ❖ Salvage – Broken or missing locksets and window locks. Obvious long-term leaks in bath or kitchen sinks.

ELECTRIC – Be sure to look only at the real estate when defining the condition of electric. Look for broken or unusable exterior and interior lights. Ask if there are any problems with switches. Outdated fixtures or inadequate outlets should be reflected in functional depreciation.

- ❖ Excellent – New fixtures, either in a new house, or due to renovation of an older structure.
- ❖ Average – Some evidence of wear, but all items are still functional.
- ❖ Salvage – Broken or obviously unusable and possibly unsafe items.

HEATING – Different types of heating will present different problems. If electric baseboard heat is termed unusable, find out why. If it could be used but is only turned off to save on electricity, this should still be counted as a functional heating source. Ask if there have been any recent upgrades to an older heating system or if it is still the same as originally installed. Woodstoves are not taxable.

- ❖ Excellent – A new system, whether in a new house or a new system in an older structure.
- ❖ Average – A 10 – 15-year-old system that still works but has not been upgraded since installation. Shows evidence of lack of maintenance – ex. Sooty oil burner.
- ❖ Salvage – Older system with, in the case of a hot water system, possible leaks.

KITCHEN – Look for wear on counters, cabinets, and signs of leaking in the

cabinet under sinks.

- ❖ Excellent – Newly installed kitchen cabinets, counters, and built-ins.
- ❖ Average – Some wear and tear, but no broken cabinetry. Counter shows some wear but is not cracked or broken.
- ❖ Salvage – Extensive wear on countertop as well as on cabinetry. Possible cracked or misaligned cabinet doors and rot around sink.

BATHROOMS – Look for possible rot in the floor around the fixtures as well as signs of extraordinary dampness around ceilings. This may result in discoloration and staining from mildew. Lack of outside vented ceiling fan should be considered in functional depreciation. Watch for more than normal wear on vanities.

- ❖ Excellent – New or recently re-done baths, whether in new structures or older houses being renovated.
- ❖ Average – Some wear, but no floor rot or discoloration of walls or ceiling.
- ❖ Salvage -Extensive wear on vanity. Rot around flush. Stains on walls and ceiling.

PLUMBING FIXTURES – Look for leaking, broken or unusable fixtures. Ask about the reason and ease or expense of fixing.

- ❖ Excellent – New. No problems.
- ❖ Average – 10 –15 years old, but still functional. No breakage or signs of leaking.
- ❖ Salvage – Broken or unusable fixtures requiring replacement

KK. Year Built (Try to get owners input). Reappraisal Contractor will derive depreciation table from the market or verify the existing table with the market. Therefore, estimating actual age or effective age and condition may be the preferred way to calculate depreciation. Must enter this field and condition if physical depreciation is to be estimated by computer table.

LL. Effective Age – If an age is entered here it will over-ride the depreciation table for actual age (once actual age is entered the system assumes actual age equals effective age).

- ❖ Definition – “...its age in comparison with other improvements of like character, considering the effects of major re-modeling or incurable deficiencies which tend to lengthen or shorten its remaining economic life.” (Marshall & Swift pg. D-1) “....the age of a similar structure of equivalent utility, condition and remaining life expectancy as distinct from chronological age...” (Real Estate Appraisal Terminology, Revised Edition, SREA, pg. 87-88)

- ❖ Depreciation generated by program table – If you put in only actual age or effective age and condition.

MM. Life Expectancy – Not used with system at this time.

- ❖ Remaining Economic Life – Amount of time an improvement will add value to the parcel. May be shorter than expected remaining physical life.

NN. Condition – in addition to condition year built or effective age must be entered to use depreciation tables. Data collectors must distinguish quality from condition! (Use condition rating sheet)

- ❖ #1 Salvage – Minimum value primarily for salvage, not dependent on age.
- ❖ #2 Poor – Major structural problems, not dependent on age.
- ❖ #3 Fair – Structural problems. Deferred maintenance. Things a potential buyer would fix automatically.
- ❖ #4 Fair/Average – Deferred maintenance.
- ❖ #5 Average – Average maintenance.
- ❖ #6 Average/Good – Maintained. Some renovations.
- ❖ #7 Good – Fairly new, well maintained, renovated or restored.
- ❖ #8 Very Good – Like new. Maintained.
- ❖ #9 Excellent – New. No problems.



OO. Depreciation

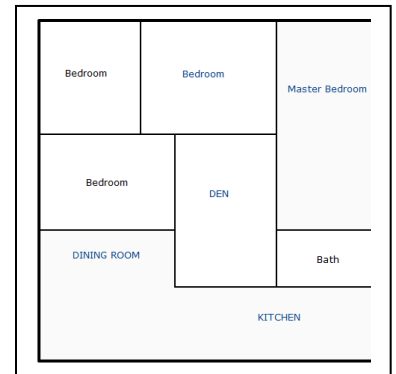
- ❖ Depreciation is the difference between the replacement cost new of the improvement on the date of appraisal and the market value of the improvement on the same date.
- ❖ Depreciation is more formally defined as a loss of utility and therefore value from any cause.

For data collection it is important to note areas of renovation as these will impact condition and depreciation.

- ❖ Three types of Depreciation
 - ❖ Physical Depreciation – Data collectors will leave blank if using age (year built)/effective age and condition schedule. If number is entered it will override depreciation schedule. (loss in value is measured and reflected in market derived depreciation schedules) – within property. Curable – Deferred maintenance. Incurable – Cost to cure is more than addition to value. Must delete any prior depreciation number to recalculate.
 - ❖ Wear and tear
 - ❖ Action of the elements



- ❖ Use & abuse
- ❖ Decay/dry rot
- ❖ Cracks
- ❖ Incrustations
- ❖ Inadequate repair & replacement
- ❖ Structural defects
- ❖ Pest or insect infestation
- ❖ Mold
- ❖ **Functional Obsolescence/Depreciation** – Data collector should enter number here to represent percent of lost value. (Loss in value may be from market or cost to cure) – within property. Curable and incurable. Actual or perceived lack (from the market) of utility for some reason (floor plan). Old electrical or outdated kitchen or bath.
 - ❖ Poor floor plan
 - ❖ Layout
 - ❖ Over-adequacy
 - ❖ Super-adequacy
 - ❖ Inadequacy in today's market
 - ❖ Inferior workmanship or materials
 - ❖ Outmoded equipment & fixtures
- ❖ **Economic (Locational) / External Obsolescence** – Data collector should enter number here to represent percent of lost value. (May be from market or estimated percentage) – Incurable. From off the property.
 - ❖ Encroachment of inharmonious land use
 - ❖ Heavy traffic
 - ❖ Excessive noise
 - ❖ Unpleasant odors
 - ❖ Legal actions
 - ❖ Changes in zoning
 - ❖ Physical hazards
- ❖ Every type of depreciation relates to and can be measured from the market.
- ❖ Depreciation is related only to improvements.



Elks Lodge in Back Yard



Physical Depreciation



Moved House



Example: MARKET EXTRACTED DEPRECIATION

Sale Price	300,000	
Land, Water & Septic	80,000	
Sale Price of Improvements	220,000	RCN
Replacement Cost New (RCN)	242,000	RCN
		242,000
	-	220,000
		22,000

OR Depreciation / RCN = Percent Depreciation

22,000 / 242,000 = 9% Depreciation or 91% Good

❖ Depreciation can be classified as

❖ **Curable**

❖ Depreciation that can be reversed by correcting deferred maintenance and/or relieving functional obsolescence.

❖ The cure must contribute more value than it costs.

(Example - adding 2nd bathroom if space available)

❖ **Incurable**

❖ The cure contributes less value than it costs

(Example - walk through, moving a house, ledge coming in on house)

❖ Depreciation is specific to the individual property.

❖ Depreciation is time related.

❖ As improvements age, they suffer physical deterioration, obsolescence and lose value relative to new structures.

❖ Depreciation tables used in mass appraisal and CAMA systems:

❖ Show typical loss in value at various ages (or effective ages)

❖ Tables recognize physical depreciation only

❖ Provided by cost services as a default

❖ Prepared by appraisers from market data

❖ Default can be customized to your market

In addition to condition, year built, or effective age must be entered to use depreciation tables (for physical depreciation only).

It is important to learn how your depreciation schedule works and be consistent.



***Be sure to discuss how to use the schedules for physical, functional, and economic depreciation and the percentages to be used for items with your supervisor.**

How to use this information with the NEMRC Microsolve Cost System

MicroSolve CAMA 2000 System

File Edit View Data Valuation Mapping Utilities Tools Help

Selected Database: StandVT (VT.DBC)

Parcel ID: 00000000081 Owner Name: SMITH Owner Name2:

Owner Address: City: State: ZipCode:

Parcel	Land/OB	Sec/Pg 1	Sec/Pg 2	Sec/Pg 3	Valuation	Picture	Note
Floor ID:	1	Plumb Fixt:		Effect Age:			
Floor Cover:	0 No Data	Plumb Roughn:		Life Expect:			
Floor Cov %:	%	Total Rooms:		Condition:	0 No Data		
Wall Height:		Bedrooms:		Phys Deprec:			
Feature ID:	1	Full Baths:		Func Deprec:			
Type:	0 No Data	Half Baths:		Econ Deprec:			
Quality:		Kitchens:		% Complete:		%	
Count:		Fireplace #:		%Bus/Rental:		%	
Rate:		Firepl Type:	0 NoData	Add to Hsite:	0 No Data		
Name:		Year Built:		Add to Hmstd:	0 No Data		

Add Delete SKETCH

Main (VtMain) Record: 10/10 Record Locked 3:57:25 pm

Start Depreciation TOEC's Microsoft PowerPoint - [...] Glastenbury - NEMRC ... MicroSolve CAMA 200...

Effective age or actual age if
only year built is entered

5.00 is Average

Condition

Update Cost Tables

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

Table # 40 Depreciation House-Mobile Home 1

Rownum	Effective age	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	col
0	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	00
1	1.00	5.00	4.00	3.00	2.00	1.00	0.00	0.00	0.00	0.00	00
2	5.00	10.00	8.00	6.00	4.00	3.00	1.00	0.00	0.00	0.00	00
3	10.00	15.00	12.00	9.00	7.00	5.00	3.00	1.00	0.00	0.00	00
4	15.00	20.00	16.00	12.00	9.00	7.00	5.00	2.00	1.00	0.00	00
5	20.00	25.00	20.00	16.00	13.00	10.00	7.00	4.00	3.00	1.00	00
6	25.00	30.00	25.00	20.00	16.00	13.00	9.00	6.00	4.00	2.00	00
7	30.00	35.00	30.00	24.00	19.00	15.00	11.00	8.00	5.00	3.00	00
8	35.00	40.00	35.00	28.00	23.00	17.00	13.00	10.00	6.00	4.00	00
9	40.00	45.00	39.00	32.00	26.00	19.00	15.00	12.00	8.00	5.00	00
10	45.00	50.00	43.00	36.00	29.00	22.00	18.00	14.00	10.00	6.00	00
11	50.00	55.00	49.00	41.00	33.00	25.00	21.00	16.00	12.00	7.00	00
12	60.00	60.00	53.00	45.00	36.00	28.00	24.00	18.00	14.00	8.00	00
13	70.00	65.00	57.00	49.00	40.00	31.00	27.00	21.00	16.00	9.00	00
14	80.00	70.00	62.00	53.00	44.00	34.00	30.00	24.00	18.00	10.00	00
15	90.00	75.00	66.00	57.00	48.00	37.00	33.00	27.00	20.00	11.00	00
16	100.00	80.00	70.00	61.00	52.00	40.00	36.00	30.00	22.00	12.00	00
17	115.00	85.00	76.00	66.00	56.00	45.00	40.00	33.00	24.00	13.00	00
18	125.00	87.00	80.00	71.00	60.00	50.00	43.00	36.00	26.00	15.00	00
19	150.00	90.00	83.00	75.00	65.00	55.00	47.00	38.00	28.00	17.00	00
20	200.00	95.00	90.00	80.00	70.00	60.00	50.00	40.00	30.00	20.00	00

PP. Percent Complete –Enter 100% or less if incomplete. Allows adjustment for unfinished portions of building. **Do not confuse with depreciation.** See Re-inspection Schedule. Make sure if Percent Complete is less than 100% (program assumes 100 if not entered) then click [Yes] Re-inspect box on Parcel section just above land information. For all other cases you should enter 100% for report writing.



Preferable to
assume
complete for
data entry, then
back out
percentage of
unfinished.



Percent Complete

% of Total	
	Construction completed
2%	Plans, permits and survey
4%	Excavation, forms, water/sewage hookup
8%	Concrete
21%	Rough framing
2%	Windows and exterior doors
3%	Roof cover
4%	Rough-in plumbing
1%	Insulation
11%	Rough-in electrical and mechanical
6%	Exterior cover
8%	Interior drywall and ceiling finish
13%	Built-in cabinets, interior doors, trim etc.
5%	Plumbing fixtures
3%	Floor covers
3%	Built-appliances
2%	Light fixtures and finish hardware
4%	Painting and decoration

QQ. Porches – Speak to supervisor to discuss what the minimum size porch should be, before you need to include. **BE CONSISTENT!**

- ❖ **Area** – square footage of porch
- ❖ **Floor type**
 - ❖ #1 Open Slab – concrete slab or wood on ground
 - ❖ #2 Open with steps – raised entry
 - ❖ #3 Wood Deck
 - ❖ #4 Preformed cement steps (MF)
 - ❖ #5 Steel (MF)
- ❖ **Walls**
 - ❖ #1 None
 - ❖ #2 Screen
 - ❖ #3 Knee – seasonal living, typically not heated
 - ❖ #4 Solid – mud room, not heated
 - ❖ #5 Iron Rail (MF)
 - ❖ #6 Wood Rail (MF)

Enclosed Porch



Wood Deck



If heated and functions as room, then include in building square footage instead.

- ❖ **Roof** – refers to roof structure does not roof cover
 - ❖ #1 None
 - ❖ #2 Metal (MF)
 - ❖ #3 Wood
 - ❖ #4 Concrete (MF)
- ❖ **Ceiling** – finished ceiling or not finished
 - ❖ #1 None
 - ❖ #2 Yes

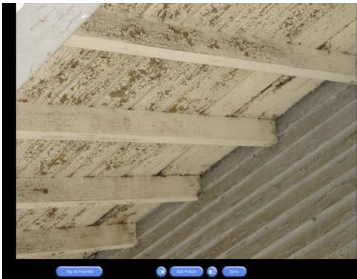
Covered Porch



Screen Porch



Porch Ceiling Unfinished



Porch Ceiling Finished



X. MANUFACTURED HOUSING

A. Mobile Homes -

1. **Always Measure** – If there has been an addition put on, it can be added as a shed with finish or as square footage of the mobile home. However, use base width and length of mobile home
2. **Do not include hitch in measurements.**
3. **Width** - must enter to get cost
4. **Length** - must enter to get cost
5. **Tipouts** – Square footage
6. **Skirting**
 - ❖ #1 Low cost (Vertical or panel skirt) (typically plywood, T1-11 or similar material.)
 - ❖ #2 Average (aluminum or vinyl often ribbed)
 - ❖ #3 Good (simulated brick/stone panels)
 - ❖ #4 Excellent (brick/stone veneer)
 - ❖ #5 Cement block
 - ❖ Skirting linear footage – total distance of all sides equal linear.

B. Definition

1. Modular (Do as Single Family only)
2. Prefabricated (Do as Single Family only)
3. Single Wide (Applies to Mobile Homes)
4. Double Wide (Applies to Mobile Homes but may be cost as mobile of single family)

C. Low Quality 8-10 Feet wide

1. Exterior
 - ❖ Pre-finished Aluminum siding
 - ❖ Flat or slightly arched metal roof- no overhang
 - ❖ Few inexpensive windows
2. Interior
 - ❖ Cheap paneled walls
 - ❖ 5 plumbing fixtures and 1 rough-in
 - ❖ Inexpensive carpet

D. Fair Quality 10-12 Feet Wide

1. Exterior

- ❖ Aluminum or Hardboard Sheet siding on 2X4's
- ❖ Low pitched metal roof, minimal eave
- ❖ Limited windows, louvered, minimal ornamentation

2. Interior

- ❖ Paneling or thin papered drywall on 2X4 studs
- ❖ 6 Fixtures and 1 Rough-in
- ❖ Inexpensive carpet

E. Average Quality 12-14 Feet Wide

1. Exterior

- ❖ Aluminum, Hardboard or Vinyl Lap Siding
- ❖ Typically sloped metal roof, some overhang
- ❖ Adequate number of windows, with some trim

2. Interior

- ❖ Paneling or Papered drywall on 2X4's
- ❖ 7 Fixtures and 1 Rough-in
- ❖ Lightweight carpet and Pad

F. Good Quality

1. Exterior

- ❖ Aluminum, Vinyl or Hardboard Horizontal siding
- ❖ Asphalt Shingles, Possible Roof Line variation
- ❖ Ample Fenestration, Sliding Glass Door, some ornamentation

2. Interior

- ❖ Good Quality Paneling, Natural wood, paper or textured drywall
- ❖ 7 Fixtures and 1 Rough-in
- ❖ Medium weight carpet

G. Very Good Quality

1. Exterior

- ❖ Hardboard sheets, horizontal siding, imitation stone or brick
- ❖ Asphalt shingle, moderate overhang and slope

- ❖ Ample fenestration, aluminum or wood frame windows

2. Interior

- ❖ Drywall or natural wood veneer
- ❖ 8 fixtures and One Rough-in
- ❖ High Quality medium weight carpet and Vinyl.

Modular Home



Double Wide Mobile Home



*Please Note – All grand lists require collection of make, model, year, and serial number. These can typically be found near the hitch, inside a cupboard or utility door, etc. and data collectors should include this in their notes

XI. ATTACHED GARAGE/CARPORT

Garage/ Shed – (this refers to attached garages only). With the NEMRC Microsolve system, an attached garage is given the same quality as the house it's attached to. In cases where the quality of the house is substantially different from that of the garage, consider entering the garage as an "Outbuilding". If garage finish area is accessible directly from the dwelling's second floor you may include square footage in dwelling.

A. Type

- ❖ #1 None
- ❖ #2 Attached One story
- ❖ #3 Attached One and a Half Story
- ❖ #4 Attached Two Story
- ❖ #5 Built-in
- ❖ #6 Carport

B. Area – Ground floor area.

C. Siding (Must Be Entered) (most used)

- ❖ #1 Plywood (T1-11)
- ❖ #2 Hardboard (Masonite or Asbestos)
- ❖ #3 Metal
- ❖ #4 Vinyl
- ❖ #5 Stucco
- ❖ #6 Wood
- ❖ #7 Shingle (Wood)
- ❖ #8 SPlaster
- ❖ #9 Rustic Log
- ❖ #10 Brick Veneer
- ❖ #11 Stone Veneer

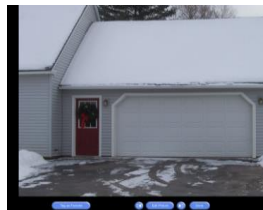
Attached One Story



1.5 story Garage



Attached One Story



#1 T1-11



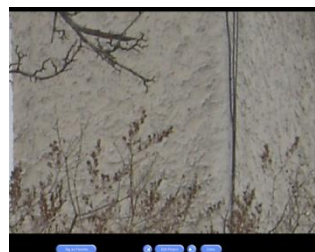
2 Masonite



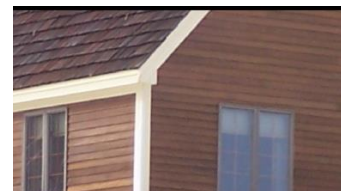
4 Vinyl



5 Stucco



#6 Wood



D. Floor

- ❖ #1 Concrete
- ❖ #2 Asphalt
- ❖ #3 Dirt
- ❖ #4 Wood

E. Finish - First 3 are informational only. If finish is similar to dwelling finish area include in building square footage and still label garage as its true story height and include fixtures in fixture count.

- ❖ #1 No Finish
- ❖ #2 Full Wall – Use for 2 story garages.
- ❖ #3 Gable Wall – Use for 1 ½ sty. garages.
- ❖ #4 Full and Minimum – Minimal finish in 2 sty. garage.
- ❖ #5 Gable and Minimum – Min. finish in 1 ½ sty. garage.
- ❖ #6 Full and Recreational – Rec. room. finish in 2-st. garage.
- ❖ #7 Gable and Recreational – Rec. rm. finish in 1 ½ sty. gar.
- ❖ #8 Full and Apartment – Apartment finish in 2-st. garage. Do not add for fixtures, as they are included in this cost.
- ❖ #9 Gable and Apartment – Apartment finish in 1 ½ sty garage. Fixtures same as above.

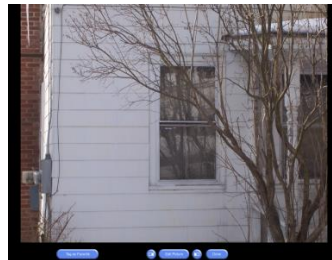
F. Finish Square footage – enter square footage – use only when you have chosen “5) Finish d thru i” above and if you have not chosen to include area in main dwelling square foot.

G. Carport Roof - only needs if carport type is chosen.

Preferred choice is “a - c”

- ❖ #1 Shed
- ❖ #2 Flat
- ❖ #3 Gable
- ❖ #4 Fiberglass
- ❖ #5 Aluminum
- ❖ #6 Steel
- ❖ #7 Wood Composition
- ❖ #8 Concrete

#2 Asbestos



Unit Multi – for use with multi type structures only

Story Multi – for use with multi type structures only

XII. CAMPS

- ❖ An excellent camp is equal to a good single-family dwelling
- ❖ A very good camp is equal to an average single-family dwelling
- ❖ A good camp is equal to a fair single-family dwelling
- ❖ An average camp is equal to a low-cost single-family dwelling
- ❖ A fair camp is equal to 80% of a low-cost single-family dwelling
- ❖ A low-cost camp is equal to 60% of a low cost single family dwelling
(Hunting camp)

Camp Cost Schedules:

Marshall & Swift does not have a camp schedule that is as comprehensive as its dwelling schedules.

The Marshall & Swift finished pine prefabricated cottage is very similar in cost to the low-cost dwelling schedule, each being comparably equipped.

Microsolve has adapted its cost tales so that an average camp is similar to a low-cost dwelling. By doing this, the appraiser has the same applications and use of the camp cost tables as he has with the dwelling cost tables.

The quality grade can go from low cost to excellent thus giving a good yardstick for measuring cost. It is recommended that the appraiser use the dwelling cost tables if the camp quality exceeds good.

Most camps are in an unfinished state and these cost tables presume that the camp is finished.

Deduction should be made for the following:

No Exterior Siding	-6%
No Finished Floors	Enter 0 for type floors @ 100%
No Heat	Enter 0 for type heat @ 100%
No Insulation	Enter 0 for Energy Adjustment -3%
No Plumbing Fixtures or Rough-ins	Enter 0 for Fixture & Rough-in
No Interior Partitions with Finished Walls	-10%
No Interior Finish on Exterior Walls	-5%
No Ceilings	-5%
No Electric Wiring	-5%
No Kitchen Cabinets	-5%

Example: A camp has no insulation, interior partitions, finish on walls, ceilings, wiring or kitchen cabinets, (-33%) call camp 67% Complete

V. MULTI-FAMILY

- ❖ If the original construction of the multi-family was as a single-family residence, the costing should be for a single family structure.
- ❖ If the multi-family was not originally constructed as a single-family residence and contains more than four units, the Data Collection should probably be done by a Supervisor, as the costing would be done with the Commercial Cost Tables.



Valuation Tab –

- ❖ **Miscellaneous adjustments** – this can be used to enter a flat rate dollar amount to add to or subtract from value. Recommended use for this is Board of Civil authority or State Board Decisions.
- ❖ **Homestead** – Do you want to calculate a homestead for this parcel?
 - ❖ #1 No
 - ❖ #2 Yes
 - ❖ #3 Forced
- ❖ **Housesite** – Do you want to calculate a housesite for this parcel?
 - ❖ #1 No
 - ❖ #2 Yes
 - ❖ #3 Forced

○ GLOSSARY OF TERMS

Aggregate ratio (weighted mean) – The sum of the listed values divided by the sum of the fair market values (sale prices). This is the ratio applied by PV&R in the equalization process.

Average ratio – Sum of the ratios divided by the number of transactions.

Appraised Value – the estimated value as determined by a Lister/Assessor of a property before any adjustments are made to that value for taxing purposes. Adjustments could include an assessment ratio if the property is to be taxed at a value other than full fair market value, either a full or partial exemption, or at a value established under a stabilization agreement.

Arithmetic Mean (5.3.2 IAAO Standards on Ratio Study) – The median ratio is the middle ratio when the ratios are arrayed in order of magnitude. If there is an even number of ratios, the median is the average of the two middle ratios. The median always divides the data into two equal parts and is less affected by extreme ratios than the other measures of central tendency. Because of these properties, the median is the generally preferred measure of central tendency for evaluating overall appraisal level, determining reappraisal priorities, or evaluating the need for a reappraisal.

The arithmetic mean (aka mean or average) ratio is the average of the ratios. It is calculated by summing the ratios and dividing by the number of ratios. In a normal distribution the mean equals the median. In a distribution skewed to the right (typical of ratio study data), the mean is greater than the median. The mean is affected more by extreme ratios than the median.

Assessed Value – amount in dollars at which a property is put on the assessment rolls. It differs from the appraised value for three major reasons, such as fractional assessment laws, exemptions or stabilization agreements, and decisions by assessing officials to override appraised value estimates.

Computer Assisted Mass Appraisal (CAMA)- A computer program, which uses cost tables from Marshall & Swift Valuation Services. An automated system for maintaining property data, valuing property, notifying owners, and ensuring tax equity through uniform valuations. The most common CAMA systems used in Vermont are: AssessPro/Patriot, Microsolve, PoVal, and Vision.

Category – All taxable properties in Vermont are classified into 15 categories based on their use. For example, R1 refers to small acreage residential and UE to utility electric. The goal is to group properties with similar uses together.

Class – There are three classes of property that are formed by the aggregation of the 15 categories into like-use groups. They are Residential (R1, R2, MHU, MHL, V1 and V2), commercial / industrial (COMM, CMA and IND), and open land (Farm, Wood and MISC). This grouping is used when equalization results are not reliable for smaller category groupings.

Coefficient of Dispersion (COD) – The coefficient of dispersion (COD) is a measure of uniformity of appraisals for all properties on the Grand List. If, for example, a town has valued every single property at 100% of fair market value (that is, every property has an assessment to fair market value ratio of 100%), then there is zero dispersion, hence 0.00 % COD. Similarly, if every single property is assessed at 80% of fair market value, there is zero dispersion. If, however, the town average assessment to sales ratio is 80%, but individual assessments vary markedly, either above or below the average, then the disparity of assessments will reflect in a COD greater than 0%. As the disparity increases, the COD correspondingly increases.

Zero is a perfect score as a coefficient of dispersion. It indicates absolute fairness insofar as every taxpayer is appraised at the same percentage of fair market value. The higher the number, the greater the dispersion, or disparity in how properties are assessed in that town. Because of fluctuations in the market, and because properties are constantly being improved or changed, a perfect score is impossible. A coefficient of dispersion of lower than 10 is unusual.

Statistically, it is the average absolute deviation of a group of numbers from the mean expressed as a percentage of the median.

Common Level of Appraisal (CLA) – In Vermont law, “the ratio of the aggregate value of local education property tax Grand List to the aggregate value of the equalized education property tax Grand List.” 32 VSA, section 5401(3).

It is essentially a measure of how close a town or city’s local appraisals are to fair market value. Vermont municipalities will be required to reappraise when the CLA falls below 80%. 32 VSA section 4041(a).

Education Grand List – See Grand List

Effective Tax Rate (ETR) – It is what the tax rate would be if all taxable property were appraised at full value. It is also called the equalized tax rate. The effective school tax rate is calculated by dividing the school taxes assessed by the equalized education Grand List.

Equalized Education Property Value – The Division of Property Valuation and Review’s estimate of the fair market value of all nonresidential and homestead real property that is required to be listed at fair market value, plus the aggregate value of property required to be listed at a stipulated value under a stabilization agreement, plus the aggregate use value of property enrolled in the Current Use program.

Equalized Education Property Tax Grand List (EEGL) – One percent of the equalized education property value. Statutorily defined in 32 VSA, section 5401(6).

Grand List – One percent of the listed value established by the local assessing officials. The “local Grand List” or “municipal Grand List” is the value used to raise municipal taxes. It includes any business personal property taxable at the local level and excludes locally voted exemptions. Properties subject to local stabilization agreements are included at their stabilized values.

The “education property tax Grand List” is one percent of the education property values. See 32 VSA section 5404. It is the value to be used to raise the State Education Tax and the Local Share Tax. It generally does not include inventory or business personal property. It includes the value of properties exempted by local vote (if not “grandfathered”), and it includes the full value of properties subject to local stabilization agreements as defined under 32 VSA section 5401(5).

Homestead - is the principal dwelling owned and occupied by a Vermont resident individual as the individual’s domicile. A homestead includes the entire parcel of land surrounding the dwelling, determined without regard to any road, river or stream that intersects the land. A homestead does not include buildings or improvements detached from the home and used for business purposes and do not include that portion of a principal dwelling used for business purposes if the portion used for business purposes includes more than 25 percent of the floor space of the building. The value of outbuildings and other improvements not used for business purposes are included in the value of the homestead, e.g. swimming pools, tennis courts, landscaping. See 32 VSA section 5401(7) and Reg. § 1.5401(7) for details and examples.

Housesite - The housesite value is not used in the tax classification system. It is used in the State’s income sensitivity programs. A housesite is that portion of a homestead that

includes the principal dwelling and as much of the land surrounding the dwelling as is reasonably necessary for use of the dwelling as a home, but in no event more than two acres per dwelling unit, and in the case of multiple dwelling units, no more than two acres per dwelling unit up to a maximum of 10 acres per parcel. See 32 VSA section 5401(11).

Indirect Equalization (2.2.2 IAAO Standards on Ratio Study) – The most common use of indirect equalization is to enable proper funding distribution, particularly for school districts. Such equalization provides an estimation of the proper tax base (acknowledging statutory constraints such as agricultural use value) despite appraisals that are higher or lower than legally required levels in certain jurisdictions. For example, if the assessed value of residential property in a jurisdiction is \$750 million, but a residential ratio study shows an assessment level of 75 percent, while the legally required level of assessment is 100 percent, an equalized value of \$1,000 million could be computed ($\$750 \text{ million} / 0.75$). This adjusted or equalized value would then be used to apportion payments or requisitions between the state or province and associated local governments. Indirect equalization results in fairer funding apportionment because the overall appraisal levels of the taxing jurisdictions tend to vary. If there were no equalization, the extent that a jurisdiction under- or overestimated its total tax base would result in over- or under-apportionment of funds. Indirect equalization does not correct under- or overvaluation between classes of property within a jurisdiction.

It adjusts only a portion of the tax or sometimes only intergovernmental payments, is less visible to taxpayers, and often lacks checks and balances associated with direct equalization (see Standard on Property Tax Policy [IAAO 2010]). By adjusting governmental payments, tax rates, or partial exemptions, indirect equalization encourages taxing jurisdictions to keep their overall tax bases close to the required level. Whether used to equalize shared funding or tax rates, the degree of equalization of the property tax is more limited than with direct equalization. Indirect equalization generally is applied to or affects only a portion of the funding or property tax levy (perhaps the school general levy or city levy). Indirect equalization usually is applied to the jurisdiction, rather than to a stratum, and therefore resolves inter-jurisdictional discrepancies in assessment level. In addition, properties in strata with poor uniformity are affected disproportionately. For this reason, indirect equalization also is not a substitute for reappraisal.

International Association of Assessing Officers (IAAO) – A non-profit educational association whose mission is to promote innovation and excellence in property appraisal and property tax policy and administration through professional development, education, research, and technical assistance.

Local (municipal) Grand List – See Grand List

Mean – The result of adding all the values and dividing by the number of values. For instance, the mean (average) of 3, 5 and 10 is 6. ($3+5+10=18$; $18/3 = 6$). Also called the arithmetic mean or the average.

Measures of Appraisal Level (6.1 IAAO Standards on Ratio Study) – The median is the generally preferred measure of central tendency for direct equalization, monitoring of appraisal performance, or evaluation of the need for a reappraisal. The mean should not be used for indirect equalization if there are measurable differences in appraisal level of high- and low-value properties (see table 2-2). In data commonly containing outliers, the trimmed mean can be substituted for the mean (Gloude-mans 1999, chapter 3). See Appendix B for outlier-trimming procedures. Because of its dollar-weighting feature, the weighted mean is most appropriately used in indirect equalization, when estimating the

total dollar value of the jurisdiction. When relying on the measure, however, outliers should be carefully reviewed (and deleted if appropriate), since they can strongly affect the weighted mean, particularly when they occur for high-value properties and in small samples.

Median Ratio – (5.3.1 IAAO Standards on Ratio Study) – The median ratio is the middle ratio when the ratios are arrayed in order of magnitude. If there is an even number of ratios, the median is the average of the two middle ratios. The median always divides the data into two equal parts and is less affected by extreme ratios than the other measures of central tendency. Because of these properties, the median is the generally preferred measure of central tendency for evaluating overall appraisal level, determining reappraisal priorities, or evaluating the need for a reappraisal.

Orthophotograph – a composite product made from overlapping aerial photographs. It appears like a standard enlarged aerial photograph, but because tilt and relief displacement have been eliminated (the land is essentially flattened out), the photo becomes close to being a map upon which property lines and other data can be plotted.

Parcel – For tax administration, it is the base unit to be reported in the Grand List book and is defined as “all contiguous land in the same ownership, together with all improvements thereon.” 32 VSA, section 4152(a) (3)”. This definition does not, however, govern the Listers’ value to property. The following factors must be considered when making that decision. The highest and best use, whether the property was conveyed in one deed: the land’s character and use; whether separately deeded tracts are contiguous and whether the property functions as one tract for the owner.

Payment-In-Lieu-of-Taxes (PILOT) – A payment to a town or city to compensate for a part of the cost for services on property which is exempt from the regular tax. For example, the State of Vermont makes a PILOT for state-owned buildings. Towns and cities may enter agreements with owners of low and moderate-income housing whereby a PILOT is paid, rather than the full tax based on fair market value. See 32 VSA section 3843.

Price-Related Differential (PRD) – The mean ratio divided by the aggregate ratio. This statistic is used to determine whether assessment practices are progressive or regressive. A PRD above 1.03 tends to indicate assessment regressivity (lower valued properties are assessed at a higher ratios). A PRD below .98 tends to indicate assessment progressivity (higher valued properties are assessed at a higher ratio) (Also called the regressivity index).

Regressivity Index (RI) – See price –related differential (also called price-related differential).

Use Value Appraisal – The value of property for a specific use (as opposed to the broader “highest and best use”).

Qualifying farm and forest land and farm buildings may enroll in Vermont’s use value appraisal program. Enrolled land and buildings are required to be assessed at use value. Use Value Appraisal is defined in Vermont law as meaning, “with respect to land, the price per acre which the land would command if it were required to remain henceforth in agriculture or forest use, as determined in accordance with the terms and provisions of this subchapter. With respect to farm buildings, ‘use value appraisal’ means 10 percent of fair market value.” 32 VSA, section 3752(12). The Current Use Advisory Board sets the use values for farm and forest land annually.

Weighted Mean (5.3.3 IAAO Standard Ratio Study) – The weighted mean ratio is the value-weighted average of the ratios in which the weights are proportional to the sales prices. The weighted mean also is the ratio of the average assessed value to the average sales price value. The weighted mean gives equal weight to each dollar of value in the sample, whereas the median and mean give equal weight to each parcel. The weighted mean is an

important statistic in its own right and is used in computing the PRD, a measure of uniformity between high- and low-value properties. The weighted mean also can be calculated by (1) summing the appraised values, (2) summing the sales prices, and (3) dividing the first result by the second. The weighted mean also is called the aggregate ratio.

Zero Energy Building ZEB) – Also known as a Net Zero Energy (NZE) building, or a Zero Net Energy (ZNE) building, is a building with net zero energy consumption, meaning the total amount of energy used by the building on an annual basis is equal to the amount of renewable energy created on the site [1][2] or in other definitions by renewable energy sources offsite, using technology such as heat pumps, high efficiency windows and insulation, and solar panels.

Data Collection Appendix

Microsolve Field Data Collection Sheet

Parcel ID:
Owner 1:
Owner 2:
Address 1:
Address 2:
City/State/Zip:

Parcel Data

Neighborhood Code: _____

Inspection Date: ____/____/____

Inspected By: _____ Re-inspect: 1-No 2-Yes

Owner Signature _____

Date _____

Interior Inspection _____ Refused _____

Closed after 2 Attempts _____

Land/Site Imp/Outbuilding Data

Land ID	Calc Code	Land Type	Area	Grade	FF	Depth
1						
2						
3						

Calculation Code: 0-No Data 1-Site 2-Acreage 3-Square Ft
4-Frontage & Depth 5-No Data

Land Type Code: 0-No Data 1-Building Lot 2-Woodland 3-Cropland 4-Pasture 5-Other 6-Total

Grade: 0.7 to 0.9 range for below average, **1.0 Average**, 1.1 to 1.5 range for above average, 1.5 to 2.0 for extremely desirable land, very rarely over 1.5

Note: _____

Impr ID	Type Code	Quality	Quantity	HS /HM
1				/
2				/
3				/
4				/

Type Code: 1-Water 2-Sewer 3-Landscape 4-Pond

Quality Code: 1-Low 2-BelowAvg 3-Avg 4-Good 5-Excellent

Quantity Code: 1-Min 2- <Typ. 3-Typical. 4- >Typ. 5-Extensive

Site Improve Name: _____ Rate: _____

Note: _____

Dwelling/Camp and Land

Sale Date: _____ Sale Price: _____

Notes:

Outbuildings

ID	Type	Area	Siding	Finish SqFt	Class	Quality	% Good	H S
1								
2								
3								
4								
5								
6								
7								

HS = include in Homestead Exemption

Type Codes:

1-LT Com Util	2-Equipment Bldg	3-Material Storage
4-Lumber Storage	5-Boat Storage	6 Material Shed
7-Lumber Storage	8-Boat Shed	9-Equipment Shed
10-Material Shelter	11-Tool Shed	12-Creamery
13-Dairy	14-Milkhouse	15-Hayloft
16-Barn GP	17-Freestall Barn	18-Stable
19-Arena	20-Poultry Cage	21-Poultry Fir
22-Corn Crib	23-Farm Equipment Shop	
24-Farm Utility Shed	25-Cattle Shed	26-Farm Shed
27-Farm Utility Shed	28-Hay Shed	29-Silo
30-GreenHouse	31-Outb Porch	32-Outb Fin Area
33-Outb Car Port	34-Outb Apt	35-Det Gar 1S
36-Det Gar 1.5S	37-Det Gar 2S	

Siding Code: 1-Plywd 2-Hrdbrd 3-Metal 4-Vynl 6-Wd 7-Shngl

Class Code: 3-C 4-D (Wood) 5-D Pole 6-S

Quality Code: 1-Low 2-Fair 3-Avg 4-Good 5-V Good 6-Excellent

% Good: Correlates closely with Condition
10%-Salvage 20%--Poor 30%-Fair 40%Fair/Avg
50%-Avg 60%-Avg/Good 70%-Good
80%-VeryGd 90%-Excel 100%-New

Silo Height: _____

Name: _____ Quantity: _____ Rate: _____

Standard (16 x 32) In-ground pools - \$5 - \$7K dep. on condition

Section Data/Page 1

Section Number: 1 2 3 4 5 Of Total _____

Building Type: 1-Single 2-Multi F 9-Mobile 10-Camp

Quality: _____

Quality: 1-Fair 2-Below Avg 3-Avg 4-Good 5-V Good 6-Excellent (can use decimals, e.g. 3.5 or 3.75, for house only)

Style: 1-1 Story 4-2 Story 7-Bi-Level
 2-1.5 St Unf 5-2.5 St Unf 8-Split Level
 3-1.5 St Fin 6-2.5 St Fin 9-3 St (EH)

Building Square Feet: _____

Design: 1-BiLevel 7-Apt House 13-Twn Hse 19 A Frame
 2-Camp 8-Duplex 14-Ranch 20-Condo
 3-Cape 9-Log 15 Saltbox 21-ResCom
 4-Chalet 10-MHO 16-SpLevel 22-2 Story
 5-Colonial 11-Modular 17-1.5 Story 23-1 Story
 6-Contmp 12-DblWide 18-Victorian

Frame: 1-Studded 2-Masonry

Siding: 1-_____ 1-_____ % 2-_____ 2-_____ %
 1-Plywood 7-Shingle 13-StucBlk (M) 19-RibAl(MH)
 2-Hardbrd 8-Splaster 14-CmBrick(M) 20-Hdbd(MH)
 3-MtlSiding 9-RustLog 15 FaceBrk(M) 21-Lap(MH)
 4-VnlSiding 10-BrkVnr 16-Adobe(M) 22-Ply/Hd(MF)
 5-Stucco 11-StnVnr 17-Stone(M) 23-Sid/Shg(MF)
 6-WdSiding 12-ConcBlk 18-Concrete(M) 24-MasV(MF)

Roof: 1-_____ 1-_____ % 2-_____ 2-_____ %
 1-CompShg 5-Metal Pre 9-ConcTile 1
 2-Built Up 6-Metal SmS 10-Glay Tile
 3-Shingle 7-Mtl Copper 11-Slate
 4-Shake 8-ConcRll 16-Metal Chnl
 17-Ribbed Alum (MH)

Dormer Lineal Feet: _____

Dormer Roof:: 1-Hip 2-Gable 3-Shed

Energy Adjustment: 1-BlwAvg 2-Avg 3-Good 4-Excel

Crawl/Slab: 1-Crawl<18"/Piers 4-Pier (MH) 7-ConcBlk (MH)
 2-SF 18"-48" 5-Wood(MH) 8-Mod Hill (SF)
 3-SF W Fr Wall 6-Concrt(MH) 9-SteepHill (SF)
 10-Stone(MH)

Basement Wall:

2-Conc 8 5-Block 8 7-Stone 8-WdFrame

Basement Square Feet: _____

Basement Garage: 1-None 2-Single 3-Double 4-Triple

Basement FNA: 1-Unfin 3-RecRoom 5-Finish Apt
 2-Minimal 4-Partition 6-Dirt Floor

Basement Finish Sqft: _____

Basement Entry: 1-No 2-Yes

Subfloor:: 1-Wood 2-ConcSlab

Heat/Cool: 1-_____ 1-_____ % 2-_____ 2-_____ %
 1-ForcAir 4-Elec Rad 7-WrmCool 10-AirExch
 2-Air Oil 5-Elec BB 8-Heat Pump 11-Grav Furn
 3-SpacHt 6-HW BB 9-Exp Cool 12-IndUnit(MF)
 13-HW Rad

Section Data/Page 2

Floor Cover: 1-_____ 1-_____ % 2-_____ 2-_____ %
 1-Resilient 4-Ceramic TI 7-Parquet 10-Lt Concrete
 2-Carpet 5-Terrazo 8-Linoleum 11-Allowance
 3-Softwood 6-Hardwood 9-VinylSheet

Fireplace: _____ Fireplace Type: 1-Single 2-Double

Plumb Fixture	Plumb Rough	Total Rooms	Total Bedrm	Full Bath	Half Bath	Kitchen

Notes: _____

Date of Renovations: _____

Kitchen	Baths	Windows	Siding	New Rooms	Wiring	Furnace

Notes: _____

Year Built: _____ Effective Age: _____

Condition: 1-Salvage 2-Poor 3-Fair 4-Fair/Avg
 5-Avg 6-Avg/Good 7-Good 8-VeryGd
 9-Excel

Physical: _____ Funct: _____ Econ: _____

% Complete: _____ Misc. Adjustment: _____

Section Data/Page 3

Porch	Area	Floor	Wall	Roof	Ceiling
1					
2					
3					
4					

Floor: 1-Open Slb 2-Open Step 3-Wood Deck 4-CmntCmp(MF)
 Wall: 1-None 2-Screen 3-Knee 4-Solid 5-IrnRail 6-WdRail
 Roof: 1-None 2-Metal(SF) 3-Wood(MF)
 Ceiling: 1-No 2-Yes

MHO Width: _____ MHO Length: _____

Tipout Sqft: _____ Skirting LF: _____

Skirting: 1-LowCost 2-Avg 3-Good 4-Excel 5-Conc Block

Garage	Type	Area	Siding	Floor Code	Finish Code	Finish Area
1						
2						

Type: 1-None 2-Att 1 St 3-Att 1.5 St 4-Att 2 St 5-Crpt 6-Bltin
 Siding: 1-Plywd 2-Hrdbrd 3-Mtl 4-Vynl 6-Wood
 10-BrkVnr

Floor: 1-Concret 2-Asphalt 3-Dirt 4-Wood
 FNA Code: 1-None 2-FIGbl 3-GablWal 4-Ful+Min
 5-Gabl+Min 6-Ful+Rec 7-Gabl+Rec 8-Ful+Apt
 9-Gabl+Apt

Carport Roof: 1-Shed 2-Flat 3-Gable 5-Alum 6-Steel

AssessPro/Proval Field Data Collection Sheet

PARCEL# _____ PROPERTY OWNER _____ LOCATION _____ ACRES _____

YEAR BUILT _____ REMODELED _____ NBGH static improving declining blighted _____ CLASS R1 R2 V1 V2 MHL MHU

LAND									
WATER	ROAD	ACCESS	ELECTRIC	DRIVEWAY	VIEW	TOPO	LANDSCAPE	Comments:	
well private well shared spring common none	public privat paved unpaved CLASS 1 2 3 4	grade above below	off grid public generator solar wind	shared paved gravel earth long steep	average good panoramic pastoral water	level high rolling swampy	average good superior pond stone work pool		

BUILDING INFORMATION									
Style	Story	Roof	Siding	Basement	Construction	Fireplace	Garage Att - Det		
R RR Split Cape Frmhse Log Contemp A Frame Hawk Camp Mobile Modular Manufactured	Basement LL 1 2 3 Attic Foundation Ptd Concrete Concrete Blk Stone Piers Slab	Gable Flat Gambrel Dormer Shed Doghouse	Wd Clap Vinyl Wd Vert Log Log Face T11 Wd Shake Asb Shin	Walk-Out Finished % Unfinished Heating Type Oil HW Oil HA Propane HW Propane HA Electric Radiant Wood Stove Space No Heat	Frame Log Post & Beam Brick Masonry Interior Walls Wood Panell Sheet Rock Flooring Wood Tile Vynl Carpet	Mas Custm+Stack Mas + Stack Gas Metal Wood Stove Market RFD Baslm garage 1-2-3 Baslm floor dirt WS Hearth Sauna Add Kit Central Air Central Vac	#Bays _____ Stories _____ Fir Dirt - Cem Electric Fin UnFin EI Door Opener		
Comments: _____									

Floor Level	Lv rm	Dn rm	Grt rm	Kit	Den	Bd rm	Other	2 Fix	3 Fix	4 Fix	5 Fix	X Fix	GRADE QUALITY	CONDITION
Basement													POOR	POOR
L Level													FAIR	FAIR
First													AVERAGE	AVERAGE
Second													GOOD	GOOD
Third													VERY GOOD	VERY GOOD
Attic/Loft													SUPERIOR	SUPERIOR

OUTBUILDINGS						
Type	Grd.	Cnd.	%	Yr.	Size	Frm.
1.						
2.						
3.						
4.						
5.						

PROPERTY LOCATION

No	Alt No	Direction/Street/City

OWNERSHIP

Owner 1:		
Owner 2:		
Owner 3:		
Street 1:		
Street 2:		
Twn/City:		
St/Prov:	Cntry	Own Occ:
Postal:	Type:	

PREVIOUS OWNER

Owner 1:			
Owner 2:			
Street 1:			
Twn/City:			
St/Prov:		Cntry	
Postal:			

NARRATIVE DESCRIPTION

This parcel contains .26 ACRES of land mainly classified as RESD 1 with a RANCH Building built about 1961, having primarily VINYL Exterior and 1072 Square Feet, with 1 Unit, 1 Bath, 1 3/4 Bath, 0 HalfBath, 5 Rooms, and 2 Bdrms.

OTHER ASSESSMENTS

Code	Descrip/No	Amount	Com. Int

PROPERTY FACTORS

Item	Code	Description	%	Item	Code	Description
Z				water		
o				Sewer		
n				Electri		
Census:				Exmpt		
Flood Haz:						
D				Topo	4	ROLLNG
s				Street		
t				Gas:		

LAND SECTION (First 7 lines only)

Use Code	Description	LUC Fact	No of Units	Depth / PriceUnits	Unit Type	Land Type	LT Factor	Base Value	Unit Price	Adj	Neigh	Neigh Infl	Neigh Mod	Infl 1	%	Infl 2	%	Infl 3	%	Appraised Value	Alt Class	%	Spec Land	J Code	Fact	Use Value	Notes
10	RESD 1		0.26		SITE ACRE	SITE	1.0	0	85,000.	2.85	MG									62,985						63,000	
Total AC/HA:	0.26000			Total SF/SM:	11326		Parcel LUC:	10	RESD 1		Prime NB Desc	MID GD								Total:	62,985		Spl Credit			Total:	63,000

Disclaimer: This Information is believed to be correct but is subject to change and is not warranted.

Database: AssessPro - MontpellierVT

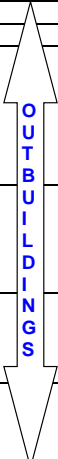
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2022

GENERAL QUALITY TRIGGERS:
ROOF TYPE, ROOF LINES & PITCH / HOUSE DESIGN & SHAPE / FENESTRATION & ORNAMENTATION / EAVES & SOFFITS / MATERIALS & WORKMANSHIP

Low Quality House	Fair Quality House	Average Quality House	Good Quality House	Very Good Quality House	Excellent Quality House
Foundation <u>A continuous concrete perimeter foundation and piers based on a moderate climate.</u>	<u>A continuous concrete perimeter foundation and piers based on a moderate climate.</u>	A continuous concrete perimeter foundation and foundation or piers under interior bearing wall, based on a moderate climate.	A continuous <u>reinforced</u> concrete perimeter foundation and foundation or piers under interior bearing wall, based on a moderate climate.	A continuous <u>reinforced</u> concrete perimeter foundation and <u>interior bearing wall foundation</u> , based on a moderate climate.	A continuous <u>reinforced</u> concrete perimeter foundation and <u>interior bearing wall foundation</u> , based on a moderate climate.
Floor Structure					
Wood Structure and subfloor on first and upper floors.				Wood or <u>steel floor joists</u> and subfloor on first and upper floors.	Wood or <u>steel floor joists</u> and subfloor on first and upper floors.
Floor Insulation					
Not included in the basic residence cost.					
Floor Cover <u>Inexpensive carpet, and asphalt or vinyl composition tile floor cover is used.</u>	<u>Carpet, and asphalt or vinyl composition tile floor cover is used.</u>	Carpet, hardwood, vinyl composition tile or sheet vinyl floor cover is used.	Carpet, hardwood, sheet vinyl floor or vinyl tile cover is used. <u>No vinyl composition tile.</u>	<u>High-quality carpet, hardwood, sheet vinyl floor and ceramic tile is used.</u>	<u>High-quality carpet, hardwood (parquet or plank), terrazzo and vinyl, ceramic or quarry tile is used.</u>
Floor Cover Allowance is not included in the basic residence cost. The Floor Cover Allowance is weighting of those floor coverings typically found at this quality.					
Exterior Wall <u>Minimum fenestration with inexpensive sash with little or no trim.</u>	<u>Moderate fenestration with inexpensive sash is typical. Front elevation may have inexpensive trim.</u>	Standard aluminum sash or wood sash is typical of the fenestration at Average Quality.	<u>Good fenestration using good-quality sash. Some ornamental trim.</u>	<u>Well designed fenestration with high-quality sash. Custom ornamental and trim are used.</u>	<u>Well designed fenestration with high-quality sash. Custom ornamental and trim, select brick, cut stone, high-quality siding, etc. are used.</u>
Roof Rafters or prefabricated trusses with <u>plywood or other inexpensive sheathing with a light weight composition shingle or a built-up with gravel roof cover. Roof slope is usually less than 4 in 12 with no eaves.</u>	Rafters or prefabricated trusses with <u>plywood or other inexpensive sheathing with a light weight composition shingle</u> or a built-up with small rock roof cover. <u>Roof slope is usually less than 4 in 12 with minimal eaves.</u>	Rafters or prefabricated trusses with exterior-grade plywood or wood sheathing with a medium-weight composition shingle or a built-up with small rock roof cover. Roof slope is usually 5 in 12 or less.	<u>Wood rafters and sheathing with hips and valleys. Good-quality cedar shingles are included in the basic residence cost.</u>	<u>Wood rafters and sheathing. Heavy wood shake roof cover is included in the basic residence cost.</u>	<u>Heavy wood rafters and sheathing. Clay tile or slate roof cover is included in the basic residence cost.</u>
Interior Finish <u>Walls are inexpensive taped drywall with paint or textured finish. Kitchen and baths may have enamel painted ceiling and walls. Cabinets are paint-grade wood or vinyl veneer with low-cost laminated plastic countertops. Doors are hollow-core with low-cost hardware. Minimal amount of closet space.</u>	Walls are taped and painted drywall <u>with enamel painted walls and ceiling</u> in kitchen and baths. <u>Inexpensive stock cabinets of paint-grade wood or vinyl veneer in kitchen</u> with a small pullman or vanity in bath. Countertops are laminated plastic <u>with a small splash. Stock hollow-core doors with expensive hardware. Minimal amount of closet space.</u>	Walls are taped and paint drywall with an allowance for some inexpensive wallpaper or paneling. Kitchen and baths have enamel painted ceiling and walls. Pre-finished plywood cabinets in the kitchen with a small pullman or vanity in bath areas. Countertops are laminated plastic or ceramic tile. Doors are medium grade, hollow core with standard-grade hardware. Baseboard and casings are stock. An adequate amount of closet space. Workmanship throughout is of average quality.	Walls are taped and paint drywall <u>with an some good-quality wallpaper or wood paneling.</u> Kitchen and baths have enamel painted ceiling and walls. <u>An ample amount of cabinetry with natural wood-veneer finish is used in the kitchen with a large pullman or vanity in bath areas.</u> Countertops <u>and splash</u> are laminated plastic, ceramic tile or <u>simulated marble. Ceilings are painted drywall. Some small areas, i.e., entries or foyers may have vaulted or cathedral ceilings. Doors are good-quality, hollow core with attractive hardware. Baseboard and casings are hardwood or softwood and have mitered comers. Walk-in closets or large sliding door wardrobes. Workmanship throughout is of good quality.</u>	Walls are taped and painted drywall <u>with high-grade wallpaper or vinyl wall covering, hardwood paneling or ceramic tile. An ample amount of cabinetry, which may include such specialty cabinetry items as a cooking island, bar, desk, etc. High-quality pullman or vanity cabinets. Ceramic tile or highest-quality laminated plastic countertops and splash. Ceilings are mostly painted drywall, with some molding and coving details. Vaulted or cathedral ceilings will usually be found in master bedrooms and entries. Raised-panel hardwood veneer or enameled doors with good-quality hardware. Base, casings and moldings have tight metered corners. Spacious walk-in closets or wardrobes and large linen storage closets.</u>	Walls are taped and painted drywall <u>with high-grade wallpaper or vinyl wall covering, hardwood paneling or ceramic tile. Built-in bookshelf and ample cabinets, which may include such specialty cabinetry items as a cooking island, bar, desk, etc. High-quality pullman or vanity cabinets in bathrooms and dressing areas. Ceramic tile, marble or highest-quality laminated plastic countertops and splash. Ceilings are mostly painted drywall, with molding and coving details and other ornamentation with some degree of intricacy in their design and/or finish. Vaulted or cathedral ceilings will usually be found in master bedrooms dining, great or family rooms as well as entries. Raised-panel hardwood veneer or enameled doors with good-quality hardware. Base, casings and moldings have tight mitered corners. Spacious walk-in closets or wardrobes with many built-in features. Large linen storage closets and pantry are fully shelved.</u>
Note: Base interior wall height is 8'.			Note: Base interior wall height is 10'.		

Low Quality House	Fair Quality House	Average Quality House	Good Quality House	Very Good Quality House	Excellent Quality House
Heating/Cooling <u>A forced-air furnace is included in the basic residence cost.</u>	A forced-air furnace with <u>minimum</u> output and ductwork is included in the basic residence cost.	A forced-air furnace is with adequate output and ductwork is included in the basic residence cost.	A forced-air furnace is with adequate output and ductwork to <u>all main areas</u> is included in the basic residence cost.	A forced-air furnace is with <u>insulated ductwork to all main areas</u> is included in the basic residence cost.	A forced-air furnace with <u>multiple controls, large capacity with insulated ductwork to all main areas</u> is included in the basic residence cost.
Energy Package Basic residence cost includes those insulation, framing and glazing items typically found in a moderate climate.					
Electrical <u>A minimum number of outlets and low-cost lighting fixtures.</u>	<u>A minimum number of outlets and average lighting fixtures.</u>	An adequate number of outlets and luminous fixtures in kitchen and bath areas.	<u>A good amount of convenience outlets.</u> Luminous fixtures in kitchen and bath areas.	<u>Well-positioned outlets and high-quality fixtures throughout. Good Luminous fixtures in kitchen and bath areas.</u>	<u>Many well-positioned outlets and high-quality fixtures throughout. Large luminous fixtures in kitchen, bath and dressing areas.</u>
Plumbing <u>Five, competitively priced white</u> plumbing fixtures with one plumbing rough-in are included in the basic residence cost. The fixtures can include any of the following: water heater, laundry tray, stall shower, toilet, lavatory, tub with shower over, or kitchen sink.	<u>Six competitively priced white</u> plumbing fixtures with one plumbing rough-in are included in the basic residence cost. The fixtures can include any of the following: water heater, laundry tray, stall shower, toilet, lavatory, tub with shower over, or kitchen sink.	Eight average-quality white or colored plumbing fixtures with one plumbing rough-in are included in the basic residence cost. The fixtures can include any of the following: water heater, laundry tray, tiled or modular plastic shower stall, toilet, lavatory, tub, tub with shower over, or kitchen sink.	<u>Eleven good-quality</u> white or colored plumbing fixtures with one plumbing rough-in are included in the basic residence cost. The fixtures can include any of the following: water heater, laundry tray, tiled or modular plastic shower stall, toilet, lavatory, tub, tub with shower over, or kitchen sink.	<u>Fourteen high-quality</u> white or colored plumbing fixtures with one plumbing rough-in are included in the basic residence cost. The fixtures can include any of the following: water heater, laundry tray, tiled or modular plastic shower stall, toilet, lavatory, tub, tub with shower over, or kitchen sink or wet bar.	<u>Seventeen high-quality</u> white or colored plumbing fixtures with one plumbing rough-in are included in the basic residence cost. The fixtures can include any of the following: water heater, laundry tray, tiled or modular plastic shower stall, toilet, lavatory, tub, tub with shower over, or kitchen sink or wet bar.
Fireplaces Not included in the basic residence cost.					

	Class	Frame	Floor	Roof	Walls
	A	See manual - A type not commonly used for residential properties			
	B	See manual - B type not commonly used for residential properties			
	C	Masonry or concrete load-bearing walls with or without pilasters. Masonry, concrete or curtain walls with full or partial open steel, wood, or concrete frame.	Wood or concrete plank on wood or steel floor joists, or concrete slab on grade.	Wood or steel joists with wood or steel deck. Concrete plank.	Brick, concrete block, or tile masonry, tilt-up, formed concrete, nonbearing curtain walls
	D	Wood or steel studs in bearing wall, full or partial open wood or steel frame, primarily combustible construction.	Wood or Steel floor joists or concrete slab on grade.	Wood or steel joists with wood or steel deck.	Almost any material except bearing or curtain walls of solid masonry or concrete. Generally combustible construction.
	D-Pole	Wood or metal siding on pole frame	May or may not have flooring. (Pole type supporting structure)	Wood or steel joists with wood or steel deck.	Almost any material except bearing or curtain walls of solid masonry or concrete. Generally combustible construction.
	S	Metal bents, columns, girders, purlins and girts without fireproofing, incombustible construction.	Wood or Steel deck on steel floor joists, or concrete slab on grade.	Steel or wood deck on steel joists.	Metal skin or sandwich panels. Generally incombustible

Helpful Hints:

***Water & Sewer Assume Average/Typical if Unknown
***Pools? Tennis Courts? - Use Flat rate value.
***Basement Finish: Minimal vs. Partitioned -
***Minimal - vinyl flooring, painted walls electrical lighting and incidental heating.
***Partitioned - similar quality materials & workmanship to that of the main residence. Full partitioned for different rooms - costs includes ceiling, wall and floor finishes and electrical lighting, as well as heating.
***Condition - has to do with general upkeep, maintenance and/or wear and tear observed.
***Dormers - add linear feet and add to SF
***Mobile Homes - need total SF, length & width and quality to get value
***Percentages - make sure all percentages add up to 100% (example: heat - if none in part of house use #14 (NONE) @ ___% remaining)

Common Outbuilding Used

3 - Material Storage (for higher quality sheds/shelters)
6 - Three sided shed or attached sheds
11 - Tool Shed
15 - Hayloft or barn with more than one story
16 - General purpose barns