Real Property Tax Administration
Office of Tax and Revenue
941 N. Capitol Street, NE, Suite 400
Washington, DC 20002

Office of the Chief Financial Officer
Office of Tax and Revenue

Real Property Assessment Division

2005 GENERAL REASSESSMENT ASSESSOR'S REFERENCE MATERIALS

. . . . . .

February 2004

Helpful Hints:

This publication represents a selected compilation of materials developed and used by the Real Property Assessment Division of the Office of Tax and Revenue during the 2005 revaluation of real property in the District of Columbia. As such, it does not purport to be an exhaustive collection of all assessment administration documents and materials. Its primary purpose is designed to be a quick reference guide for the real property assessor in his/her day-to-day work activities.

1. The **Table of Contents** allows you to jump directly to any topic in the reference materials by clicking on the topic of interest.

2. To return to the **Table of Contents**, simply click on the page number located in the lower right corner of the document you are viewing. Where pages have been rotated for easier viewing, the page number is located in the lower left corner.

3. Additional navigation options are available at any time by "right-clicking" on a document page.

Please feel free to call or e-mail your comments or suggestions to the contact below. Thank you.

Standards & Services Section
Real Property Assessment Division
941 North Capitol St. NE, Suite 400
Washington, DC 20002
Phone: (202) 442-6760
E-mail: DCAssessor@DC.Gov

Table of Contents

OFFICE OF TAX AND REVEUNE
REAL PROPERTY ASSESSMENT DIVISION
INTEROFFICE MEMORANDUM

TO: REAL PROPERTY ASSESSMENT DIVISION STAFF

FROM: THOMAS W. BRANHAM, CHIEF ASSESSOR

SUBJECT: TY 2005 REASSESSMENT EFFORT

DATE: FEBRUARY 26, 2004

Again, you were asked to put forth a Herculean effort and again you rose to the occasion. Thank you all for confronting this tremendous challenge with such a positive spirit. I am sure it is what enabled us to complete the general reassessment of all real property in the District of Columbia. After last year's general reassessment and another 50% increase in workload, we were sure that the volume had reached the maximum. That is, until we received nearly 12,000 first level appeal applications. No one thought we could handle 12,000 appeal hearings and still complete the annual reassessment. We not only completed the reassessment on time, but for the third year in a row, the assessment notices were mailed to all property owners by the statutorily required deadline. In addition, during the last thirty months you have performed 200% more assessments than were completed in the previous six years all together. Your work did not end with the general reassessment either. You inspected and verified nearly 8,000 sales, inspected approximately 2,000 building permits, resolved 11,586 first level appeals and will respond to 2,511 Board of Real Property Assessments and Appeals (BRPAA) appeals. The degree of difficulty of your task was exacerbated due to the labor intensive demands of the Craig class action law suit and the loss of another four assessors.

I would like to thank all of you again for the tremendous effort you put forth to accomplish the aforementioned tasks. All 173,000 notices were mailed February 26, 2004. Remember that two events have contributed to the large increase in assessments that property owners are experiencing this year. First, the return to an annual assessment program means that there is no longer a phase-in of the proposed assessment as was the case in the triennial assessment program. And second, we are in the midst of the most rapidly appreciating real estate market that Washington, D.C. has experienced in more than two decades.

As the taxpayers begin to receive their notices, the telephone calls will come and the questions will begin pouring in. Let me just take a minute to remind each of you to provide sensitive, prompt, courteous and informative customer service. As I said last year, the best advice I can give in this regard is to always treat the customer the way you would hope to be treated if you were in their position. An ability to respond to inquiries in a knowledgeable and cordial manner is crucial to providing excellent customer service. These recent changes in tax policy were not at the property owners' request and they may be more upset than usual. Please be patient. The City Council recently responded to the reaction of the District's taxpayers by passing legislation that limits the annual property tax increase for an individual property.

Let's turn our attention to the various processes utilized this year to produce the TY 2005 assessed values. This year marked the third reassessment period in which our Computer Assisted Mass Appraisal system (CAMA) was used in the valuation process. Substantially more property-specific appraisals were prepared compared to last year. Last year there were 106,231 property-specific appraisals done and this year over 132,811 parcels were valued property-specific. Your efforts in the sales verification process supplied valuable data to the CAMA modeling and calibration process that assisted the CAMA models with accurate estimates of market values. Of course, we owe a great deal of gratitude to William Nelson and Robert Gloudemans, for their assistance with the model development, calibration and the review process. We achieved improvement in the assessment process, final values and uniformity. As time progresses, this process will improve and thus improve both the quantity and quality of property-specific appraisals we conduct.

Listed below is the breakdown of the appraisal methodology used for TY 2005 for the various types of property in the District:

Residential – market-oriented cost approach: 70,006 properties
Residential – market-trending methodology: 39,274 properties.

Condominiums – market-based MRA: 36,921 properties
(332 cooperatives).

Commercial – income and market approaches: 7,135 properties
Commercial – cost approach to value: 10,924 properties.

Major properties – income approach to value: 7,825.

One of the results of more property-specific valuations may be questions from property owners asking why one person's property value may be different from their neighbor's property. Or, why did my neighbor's property go up only 15%

and mine went up 35%? These are legitimate questions and we need to be prepared to answer them with knowledge, understanding and accuracy. Any time a taxpayer feels concerned about his/her value, please encourage them to file an appeal. As always, the appeal-filing deadline is April 1 and applications are on the Website, at District public libraries, fire stations and in the customer services area. Property owners may appeal by sending a letter requesting a first level appeal also.

District-wide, the values of property increased, on average, 12.2% over their prior year's assessment. The rate of appreciation is still in double digits for most property in the District.

Our overall goal is to uniformly and equitably assess all properties in the District, based on market-derived valuation techniques, whether they be the market-calibrated cost approach, the income capitalization, multiple regression analysis or time trending. All of these methods and techniques are authorized in D.C. Municipal Regulations 9–307.2. I would like to take a moment and discuss these various appraisal methodologies. I am sure many questions will be asked about "how" we arrived at our values. A brief description of the methods used this year to value property is shown below and a more detailed discussion follows. ***Each method was selected based on its ability to provide the most accurate assessment and/or generate improved results over the previous year:***

A. Trending – A mass appraisal technique where one adjusts (sub) neighborhood values stratified by use code for the effect of time. The prior year's values are multiplied by a trending factor to account for the appreciation (depreciation) that has occurred in the neighborhood since the last reassessment. The District is economically, socially and geographically divided into 139 sub-neighborhoods. It is further divided into numerous property types and use codes for valuation purposes. If, for example, market data indicates that sub-neighborhood 'A', Property type, single family detached has appreciated 25% in the past year, then last year's value of $200,000 would be trended to $250,000 ($200,000* 1.25).

B. Market-oriented cost approach – A mass appraisal technique where the estimated cost to construct a new improvement is determined and from that, an appropriate amount of depreciation is deducted. The resulting value is then added to the land value to arrive at the total assessed value of the property. Instead of relying on traditional cost tables, the market-oriented approach refines the process by using actual market-derived costs. Extensive analysis of market sales data and property characteristics generate the appropriate values for the components of the improvements. For example, a traditional cost table may list a fireplace value as $5,000, whereas the DC market may indicate a fireplace adds $7,500 value to the improvement.

C. Multiple Regression Analysis (MRA) –A mass-appraisal technique used to predict, or estimate, the market value of property. Through statistical analysis of properties that have recently sold, MRA develops the relationship between various property components and the value they contribute to the sale price. The process estimates the contributory value of such components as the size of the house, the number of bathrooms, the number of bedrooms and other components that may contribute to the sale price of the house. As an example, let us say that several sales in a neighborhood reliably indicate the contributory value of one full bath is $15,000 and houses with two full baths is $45,000. When estimating the value of a house containing two full baths, one-value component would be $45,000 to account for the baths. The full market value estimation would be the total contributory value of all those value components identified in the house whose value is being predicted.

D. Income approach – A commercial property appraisal technique, where net operating income is converted in an estimate of value using a process called capitalization. The technique is usually property-specific; however, many of the variables (market rent, expense ratios, capitalization rates) are derived from market sales analysis. RPAD's *Pertinent Data Book* summarizes the annual analysis of the DC commercial sales and economic data that becomes the basis for the income approach to value.

Preliminary results of the Assessment / Sales Ratio Study conclude that city-wide, residential properties are being assessed at 95% of their selling price with acceptable dispersion. The commercial properties are being assessed at 93.2% of their selling price. A more complete summary of the study is included in the reference materials that follow.

The next several sections will provide more detail regarding the actual steps taken in the reassessment. **Again, thank you for your incredible contribution to the District's annual reassessment program.**

Explanation of Residential Market-oriented Cost Method

Note: The market-oriented cost approach to valuation is further explained and illustrated in the document, *Vision Residential Valuation Process*.

The market-oriented cost approach involved the following:

1. Extracting the CAMA data of qualified sales and importing it into SPSS.
2. Replicating the existing CAMA cost model to ensure that the same land and improvement values could be produced in SPSS.
3. Building a preliminary regression model that reflected the variables of the CAMA cost approach.
4. Reviewing the results of the preliminary regression to identify candidate market areas where the data was such to allow for successful regression analysis.
5. Eliminating outliers in the candidate areas to better ensure accuracy of the regression results.
6. Establishing time adjustment factors in order to analyze sale prices as of a specific point in time. The city was divided into 4 major market areas for time adjusting sale prices. Market data indicated monthly time adjustment factors over 32 months (1/1/2001 through 8/31/2003) as follows:

	1/1/2001 – 8/31/2002	9/1/2002 – 8/31/2003
"Southeast" Neighborhoods: (2, 3, 16, 22, 28, 33, 43)	+ 0.90% per month	+ 1.20% per month
"Northeast" Neighborhoods: (5, 7, 12, 14, 17, 32, 35, 36, 42, 47, 48, 51, 52, 56)	+ 1.20% per month	+ 1.50% per month
"Northwest" Neighborhoods: (1, 4, 8, 11, 13, 21, 23, 24, 25, 26, 27, 29, 30, 34, 37, 38, 41, 50, 53, 54, 55)	+ 1.25% per month	+ 0.85% per month
"Downtown" Neighborhoods: (9, 10, 20, 39, 40, 46)	+ 1.55% per month	+ 0.95% per month

7. Building a final regression model, using the time-adjusted sale price as the dependant variable.
8. Calibrating that model using non-linear multiple regression. Variables were included to extract land values from the market.
9. Reviewing the regression predicted values and removing extreme outliers.
10. Examining the predicted-values-to-time-adjusted-sale-price ratios for equitability with respect to lot size, building area, age, use, grade, and location.
11. Entering the coefficients indicated by the regression analysis back into the CAMA program's cost model.
12. Applying the cost model in CAMA and reviewing the resulting values to ensure they agreed with the predicted values produced by the regression.
13. Performing sales analysis to determine if acceptable levels of assessment were achieved, and adjusting rates as necessary.
14. Applying model to inventory and producing percent change reports for assessor review.
15. Incorporating oversight of the computer aided procedure by our professional staff cited in the *2005 Valuation Review Process*. All projected market value changes are submitted to the staff for their review, refinement, and adjustments.

Explanation of Residential Trending Method

The Trending process consists of the following steps:

1. Compiling and analyzing qualified sales data for the subject market areas; the sales included in the analysis occurred over a period of two full years from January 2002 to December 2003.

2. Stratifying the sales by neighborhood, sub-neighborhood, use code and sale year (see the table titled *1/10/04: NBHDs to Trend by Use*).

3. Examining the mean and median sale price, assessment, assessment-to-sale ratio, and sale-to-assessment ratio within each stratification. The median sale-to-assessment ratio is effectively the indicated trend factor.

4. Selecting a market-derived trend factor for each use code within a sub-neighborhood. The selection is based on the 2003 indicated trend factor, but it is considered in the context of the other available data (see the table titled *Residential Trend Factors*).

5. Stratifying all properties, sales and non-sales, in the subject market areas by neighborhood, or sub-neighborhood, and use code.

6. Uniformly applying the appropriate market-derived trend factor to each property's current assessed value to establish a proposed assessment for 2005.

7. Incorporating oversight by our professional staff cited in the *2005 Valuation Review Process*. All projected market value changes are submitted to the staff for their review, refinement and adjustment. This is the final step toward our goals of uniformity, equity and fairness.

Land Valuation in Trended Neighborhoods:

The selected trend factors were applied to the current total assessment of the properties in the subject areas:

2004 Assessment * Selected Trend Factor = 2005 Assessment

The land values were established based on an analysis of the market data contained in the table *Land Rate Analysis For Non-modeled NBHDs*. Standard lot sizes were established for each subject area, except 39 (A, B, C, F, G, H, L) and 40 (A, B), where standard lot sizes were established during the 2003 reassessment. Land rates were then derived based on market data, by estimating an appropriate land-to-building (L-T-B) ratio, and dividing the indicated land values by the standard lot sizes. Finally, the Group 1 land curve, established in the regression modeling analysis, was applied to each of the subject areas to adjust the land rates for lot size.

Explanation of Residential Condominium Valuation Methods

To determine what method was used for a particular regime, refer to list titled *Residential Condominium Regime Valuation Method*.

Regression:

The sales comparison approach using multiple regression analysis involved the following:

1. Extracting the CAMA data of qualified sales and importing it into SPSS.
2. Reviewing data to determine what regimes were candidates for regression analysis. As a rule, regimes could be valued using regression where the physical data attributes were complete and adequate sales data existed. Regimes without adequate sales, but with complete data, could be clustered with regimes having similar profiles to allow regression to be used.
3. Exploring the data to determine what variables would likely contribute to the model.
4. Building a base model.
5. Reviewing the results of the base model and eliminating outliers in the candidate regimes to better ensure the accuracy of the regression results.
6. Establishing time adjustment factors in order to analyze sale prices as of a specific point in time. Market data indicated a citywide monthly time adjustment factor over 32 months (1/1/2001 through 8/31/2003) of 1.50% per month.
7. Building a final regression model, using the time-adjusted sale price as the dependant variable.
8. Calibrating that model using multiple regression analysis.
9. Applying the model to the sales, reviewing the predicted values and removing extreme outliers.
10. Performing sales analysis to determine if acceptable levels of assessment were achieved, and adjusting rates as necessary.
11. Extracting condominium inventory data and importing into SPSS.
12. Applying model to inventory, and exporting the values back to CAMA, allocating 30% of predicted value to land and 70% of predicted values to improvements.
13. Producing percent change reports for assessor review.
14. Identifying necessary corrections to data and location adjustments.
15. Repeating process of extracting data, applying model, and exporting back to CAMA to include corrections.

The Condominium Regression Model:

ESP= 339.59 * SIZE * SIZE_ADJ * COND_ADJ * VIEW_ADJ * BATH_ADJ * PARK_ADJ * LOC_ADJ.

Estimated Sale Price (ESP) – the value predicted by the model for the parcel, given the variables in the model, the coefficients of those variables and the attributes of the subject unit.

Base Rate (339.59) – base size rate (constant)

Size – the square footage of the unit

Size Adj. – the adjustment for the unit's size being larger or smaller than the base size

The base unit size is 800 sf. The formula for calculating the size adjustment is: $((SIZE^{.874})/SIZE)/.431$, where $.431 = (800^{.874})/800$. See graph titled *Condominium Size Curve*.

Condition – adjustment for the unit's physical condition

(1) Poor	.936
(2) Fair	.936
(3) Average	1.000
(4) Good	1.061
(5) Very Good	1.140
(6) Excellent	1.145

View – adjustment for the unit's view

(1) Poor	.879
(2) Fair	.935
(3) Average	1.000
(4) Good	1.027
(5) Very Good	1.042
(6) Excellent	1.110

Bath Adj. – adjustment for the unit's number of full baths more than one.

BATH_ADJ = ((FULLBATH-1) * .055) + 1

Example: *2 baths: ((2 – 1) * .055) + 1 = 1.055*
*3 baths: ((3 – 1) * .055) + 1 = 1.11*

Parking – adjustment for Limited Common Element parking

	Outdoor	Indoor
1 space	1.075	1.119
2 (or more) spaces	1.135	1.182

Location – adjustment for unit's geographic location

Location adjustments were made for neighborhood, sub-neighborhood, cluster of regimes, or unique regime. The actual location adjustment for any unit may be the combination of one or more of those location factors.

Assessor Valuation:

A small number of regimes were not candidates for regression because part or all of the data variables required by the model were not present, or special conditions existed that precluded application of the regression model. Regimes that were new for 1st Half 2004 also were not valued by the regression model. In these cases, the assessors assigned to those regimes conducted their own analysis of the available data and valued the units in those regimes. When possible, they also collected the information that was lacking, so that in coming years, those regimes will become candidates for regression analysis.

Final Assessor Review:

At the conclusion of the valuation, several reports are produced showing the results of the reassessment. These reports, reflecting proposed market value changes, are submitted to the assessment staff for their review, refinement and adjustment in accordance with the processes outlined in the *2005 Valuation Review Process* document.

Explanation of Cooperative Valuation Method

Cooperatives are a type of residential property. In a cooperative, a corporation owns a property and the shareholders can use the unit or units represented by their shares. In Washington, DC cooperatives are assessed according to statue by either of two methods. The first method is by calculating the cumulative value of the leasehold interests (by sales). The second method is to treat the project as if it was a condominium project and reduce the value by 30%. After arriving at either of these values you further reduce the value an additional 35%.

The cooperatives in the district had not been reassessed from 1997 - 2002. During this period there was an assessment freeze for several years and after the freeze we did not have access to sales information to make good evaluations. For the reassessment for 2002 it was decided to increase the values by the indexes used by residential properties in their neighborhoods. After the review we were able to collect sales information from MRIS. Using this information we were able to review the appealed properties and review the next years group.

For 2005, we reviewed all the complexes with sales information and calculated the sales prices per square foot after factoring in the time adjustment. Matched pairs sales were used to calculate the typical percentage increase per month. We were surprised to discover that in the better complexes the trend from 1999 - 2002 was approximately 3% per month. In other words units that sold in 1999 would sell for about twice as much in 2002. In 2003 the market began to cool although sales prices were still increasing by 1-2% per month in many complexes. Multiplying the square footage of the units by the adjusted rates (occasionally they were adjusted for view or parking as sales indicated) would result in the aggregate values which were further reduced for personal property and the result multiplied by 65%.

In complexes where there were no sales we treated them as if they were condominiums. To do this we would find a condominium as similar as possible to the subject and use the square foot rate that seemed to be appropriate to the square foot of the units or the estimated square footage. We would multiply the rate times the square footage and reduce the result by 30% and then by 35%. The complexes without sales were usually limited - equity coops or very small complexes.

2005 Valuation Review Process

As part of the CAMA valuation process, initial assessments for all residential properties will be estimated and preliminary reports will be generated summarizing the results of the valuation effort. Your review, modification and approval of the proposed assessments indicate that they are representative of the estimated market value.

The Valuation Review Process is designed to allow for a thorough review of the new values for the upcoming tax year before notices are sent to property owners. The purpose of this review is two-fold. First, it allows us the opportunity to correct any errors that may have occurred in the valuation process before they cause administrative difficulties (i.e. public relations problems, unnecessary appeal activity, and the like). Second, the process provides feedback to the CAMA modeling and calibration process.

The process involves examining all assessments with particular attention given to the outliers in a relatively short period. As such, the assessor is primarily concerned with arriving at a reasonable final value estimate for the accounts on the outlier list, known as the Old-to-New Report. Briefly, the process involves the assessor of record reviewing a selected group of properties in their neighborhood that, on first inspection, appear to be over or under appraised based on previously determined criteria such as sales price, percent change reports, etc. When this review indicates correct values, no records are changed, however, if the value requires modification, the assessor will make changes in the CAMA record and on the PRC to correct the situation. If he/she discovers minor discrepancies in the data, it should be noted and revisited during another inspection program. The purpose of this program is not to engage in a detailed analysis of accounts but rather to expeditiously review outlier accounts to improve our estimate of market value.

> **NOTE**: It is advisable that the assessor has a solid knowledge of CAMA valuation before proceeding with the review process. Several significant changes have been made to the residential valuation model for the 2005 valuation. Please refer to *the "2005 CAMA Residential Construction Valuation Guideline"* for a summary of these changes. Along with the report entitled “VISION CAMA Valuation,” the guideline will serve as a tutorial for the methodology employed within CAMA for valuing residential property.

Following are some general guidelines to consider while conducting review activity.

1. The valuation review process begins with CAMA producing two reports for each (sub)neighborhood. The first report is the “Old to New” report that shows the old value, new value, percent and dollar change in value from

the current assessment to the proposed assessment for specific properties that constitute outliers in the (sub)neighborhood. Included are the individual PRCs for each corresponding account listed in the report that increased 25 percentage points more than the median increase for the (sub)neighborhood or decreased more than 10 percent. The second report, Percent Change Detail Analysis, contains more specific detail about all of the accounts in the selected (sub)neighborhood.

2. The assessor will be provided these two individual reports for each of the assigned (sub)neighborhoods, along with individual PRCs from the Old-to-New report.

3. Before individual reviews of the Old to New report begins, the assessor will examine the Percent Change Detail Analysis report for signs of irregularities or general discrepancies based on their knowledge of their neighborhoods. The review entails several tasks as follows:

    A. Review the "A/S Ratio", when present. The ratios are calculated based on sales over a long period of time. Pay particular attention to sales that occurred during 2001 – 2003. These sales will give a better picture of the actual assessment/sales ratio. Where the assessed values are not close to the sales prices, fully examine the record, and consider making appropriate changes. The assessor will notice many of the ratios exceed 100%. This will often occur because the sale price used to calculate the ratio has not been time adjusted to the present. On average, the amount of time adjustment will range between 1 and 1.3 percent per month. As the age of the sale increases, the likelihood of an apparently high A/S ratio also increases. This is to be expected.

    B. Examine the "Grade" of the accounts. If there is a two or more departure of grade between the account and the typical grade in the (sub) neighborhood, the assessor may be concerned.

    C. Look for extremes in the "Cond" and "% Good" data. Again, on average, these should be relatively consistent throughout the (sub)neighborhood.

The preferred process to follow when conducting individual reviews of accounts contained on the Old-to-New report is as follows:

1. The assessor will examine each record that appears on the "Old to New" report. Each record has been selected for inclusion because the value change from last year to this year has dropped or is more than 25 percent points greater than the median increase for the (sub)neighborhood.

These records constitute the "outliers" of the (sub)neighborhood. The values may be correct or erroneous, and the purpose of this process is to make that determination.

2. The assessor, exercising his or her professional skill and judgement, first will conduct a "desk review" of each account appearing on the report. If the value does not seem reasonable perform the following actions:

    A. Examine the PRC for any missing or incorrectly coded data contained in the Construction Detail section.

    B. In the Building Summary Section, check the sq. ft. sizes of the areas listed for accuracy and reasonableness.

    C. Check the Building Cost Section for correct *Effective Area*, *Special Feature RCN and % Good.* If any are erroneous, examine their respective sections for details.

    D. Examine the Special Features/Amenities and Detached Structures sections for accuracy.

    E. On the front of the PRC, check the Land Line Valuation Section for proper size and value.

    F. Make use of the Pictometry tool available in the Mapping Apps folder.

3. Three results may occur from the desk review:

    A. The desk review indicates the value is correct. In this case, note in the column adjacent to the account "OK", your initials and the date.

    B. The desk review indicates an erroneous value discovered by examining various reports and records (i.e. Percent Change, CAMA record, etc). In this case, the assessor makes the correction in the CAMA record, notes the changes made on the PRC in red, notes on the OTN report the new amount, your initials and the date.

    C. The desk review is inconclusive and a field inspection is in order.

An example may help illustrate scenario "A", the first situation. Let's say the Old-to-New report indicates an account has jumped 400%, from $300,000 to $1,200,000! That amount of increase seems absolutely erroneous. To determine a possible explanation, the assessor begins the review by locating the account on the Percent Change Detail Analysis report. After finding the account,

the assessor notices that the properties close to the account have only increased by approximately 40%, the median for the neighborhood. They are approximately similar to the account in size, grade, and condition, but their prior year's value was $900,000, while the outlier was only $300,000. The assessor would be safe to conclude that the account was grossly under-assessed last year. The low "old" value caused the large increase in value, not an over-assessed new value. To complete the desk review, the assessor notes on the Old-to-New report, "OK", his/her initials and the date.

Scenario "B", the second situation, may find the assessor reviewing an account that also appears to be over-assessed based on the large increase from old to new value. The assessor again locates the account on the Percent Change Detail Analysis report and reviews the account in context to other (sub)neighborhood properties. The assessor discovers that most of the data about the account is similar to the other properties – same use code, similar size, percent good, etc. However, where most of the properties are listed at Grade 4, the account is Grade 7. This would help explain the likelihood that the account is over-assessed. The assessor would make the change to the grade in the CAMA system, note the new value, make the change on the PRC in red, and document the change on the Old-to-New report by writing the new value, his/her initials and the date in the far right column of the report next to the account.

The last scenario, "C", results when the assessor can not immediately explain the reason an account appears on the Old-to-New report. He/she should set aside accounts that will require field inspection and at a point, go to the field for inspection. Upon conclusion of the inspection, the assessor will document the results in a similar manner to the desk reviews. The actual schedule for field-work will vary and will be coordinated by the assessor and his/her supervisor.

Residential Neighborhoods Valuation Method

#	Neighborhood Name	Subs	Valuation Method
1	AMERICAN UNIVERSITY PARK	ALL	COST
2	ANACOSTIA	ALL	COST
3	BARRY FARMS	ALL	COST
4	BERKELEY	ALL	COST
5	BRENTWOOD	ALL	COST
6	BRIGHTWOOD	ALL	TREND
7	BROOKLAND	A,B	COST
7	BROOKLAND	C,D,E	TREND
8	BURLEITH	ALL	COST
9	CAPITOL HILL	ALL	COST
10	CENTRAL	ALL	COST
11	CHEVY CHASE	ALL	COST
12	CHILLUM	ALL	COST
13	CLEVELAND PARK	ALL	COST
14	COLONIAL VILLAGE	ALL	COST
15	COLUMBIA HEIGHTS	ALL	TREND
16	CONGRESS HEIGHTS	ALL	COST
17	CRESTWOOD	ALL	COST
18	DEANWOOD	ALL	TREND
19	ECKINGTON	ALL	TREND
20	FOGGY BOTTOM	ALL	COST
21	FOREST HILLS	ALL	COST
22	FORT DUPONT PARK	ALL	COST
23	FOXHALL	ALL	COST
24	GARFIELD	ALL	COST
25	GEORGETOWN	ALL	COST
26	GLOVER PARK	ALL	COST
27	HAWTHORNE	ALL	COST
28	HILLCREST	ALL	COST
29	KALORAMA	ALL	COST

#	Neighborhood Name	Subs	Valuation Method
30	KENT	ALL	COST
31	LEDROIT PARK	ALL	TREND
32	LILY PONDS	A	TREND
32	LILY PONDS	B	COST
33	MARSHALL HEIGHTS	ALL	COST
34	MASS. AVE. HEIGHTS	ALL	COST
35	MICHIGAN PARK	ALL	COST
36	MOUNT PLEASANT	ALL	COST
37	N. CLEVELAND PARK	ALL	COST
38	OBSERVATORY CIRCLE	ALL	COST
39	OLD CITY #1	A, B, C, F, G, H, L	TREND
39	OLD CITY #1	E, J, K, M	COST
40	OLD CITY #2	A, B	TREND
40	OLD CITY #2	C, D, E, F	COST
41	PALISADES	ALL	COST
42	PETWORTH	ALL	COST
43	RANDLE HEIGHTS	ALL	COST
44	R.L.A.(N.E.)	ALL	N/A
46	R.L.A. (S.W.)	ALL	COST
47	RIGGS PARK	ALL	COST
48	SHEPHERD PARK	ALL	COST
49	16TH STREET HEIGHTS	ALL	TREND
50	SPRING VALLEY	ALL	COST
51	TAKOMA PARK	ALL	COST
52	TRINIDAD	ALL	COST
53	WAKEFIELD	ALL	COST
54	WESLEY HEIGHTS	ALL	COST
55	WOODLEY	ALL	COST
56	WOODRIDGE	ALL	COST
66	FORT LINCOLN	ALL	COST

Residential Trend Factors

NBHD	SUB	NAME	USE 11	12	13	15	23	24	97
6	A	Brightwood	1.650	1.076	1.650	1.200	1.203	1.400	1.200
	B	Brightwood	1.355	1.406	1.450	N/A	1.100	1.100	1.100
	C	Brightwood	1.150	1.150	1.215	1.150	1.450	1.200	1.150
	D	Brightwood	1.150	1.400	1.147	1.416	1.200	N/A	1.611
	E	Brightwood	1.249	1.150	1.170	N/A	1.150	1.150	1.160
7	C	Brookland	1.153	1.120	1.240	N/A	1.550	1.200	1.150
	D	Brookland	1.050	1.250	1.050	N/A	1.450	1.250	1.000
	E	Brookland	1.200	1.112	1.200	1.150	1.450	1.200	1.150
15	A	Columbia Heights	1.074	1.074	1.074	1.074	1.750	1.159	1.000
	B	Columbia Heights	1.228	1.200	1.200	1.096	1.089	1.229	1.100
	C	Columbia Heights	1.249	1.323	1.340	1.200	1.200	1.250	1.100
	D	Columbia Heights	1.453	1.150	1.400	1.200	1.000	1.152	1.000
	E	Columbia Heights	1.179	1.100	1.000	1.100	1.800	1.400	1.100
18	A	Deanwood	1.180	1.147	1.180	1.150	1.317	1.100	1.050
	B	Deanwood	1.000	1.150	1.000	N/A	1.000	1.000	1.100
	C	Deanwood	1.050	1.100	1.050	1.100	1.100	1.100	1.100
	D	Deanwood	1.100	1.150	1.100	N/A	1.100	N/A	1.100
	E	Deanwood	1.100	1.050	1.100	N/A	1.100	1.050	1.050
19	A	Eckington	1.286	N/A	1.354	N/A	1.000	1.350	1.100
	B	Eckington	1.207	1.200	1.200	1.200	1.350	1.200	1.100
31	A	LeDroit Park	1.331	1.500	1.550	1.250	1.250	1.350	1.100
	B	LeDroit Park	1.312	1.250	1.300	1.250	1.300	1.300	1.200
32	A	Lily Ponds	N/A	1.200	1.156	N/A	1.150	1.200	1.100
39	A	Old City #1	1.458	1.300	1.381	N/A	1.355	1.450	1.100
	B	Old City #1	1.362	1.200	1.350	1.200	1.750	1.350	1.100
	C	Old City #1	1.104	1.100	1.000	N/A	1.000	1.000	1.200
	F	Old City #1	1.277	1.200	1.366	1.200	1.077	1.270	1.100
	G	Old City #1	1.391	1.200	1.000	1.200	1.400	1.391	1.000
	H	Old City #1	1.289	N/A	1.289	N/A	1.313	1.289	1.100
	L	Old City #1	1.404	1.400	1.129	N/A	1.500	1.400	1.200
40	A	Old City #2	1.560	1.400	1.500	1.400	1.120	1.328	1.200
	B	Old City #2	1.492	1.376	1.530	1.200	1.429	1.000	1.200
49	A	16th Street Heights	1.455	1.257	1.409	1.200	1.300	1.300	1.300
	B	16th Street Heights	1.400	1.000	1.400	N/A	1.200	1.400	1.200
	C	16th Street Heights	1.317	1.418	1.200	1.200	1.200	1.300	1.100

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
6	A	11	2002	# Sales	8	8	8	8
				Mean	$188,438	$207,144	0.919	1.100
				Median	$186,910	$203,000	0.909	1.101
			2003	# Sales	9	9	9	9
				Mean	$171,311	$319,961	0.566	2.013
				Median	$175,690	$325,000	0.558	1.793
		12	2002	# Sales	16	16	16	16
				Mean	$307,232	$339,681	0.966	1.101
				Median	$303,675	$340,000	0.905	1.105
			2003	# Sales	22	22	22	22
				Mean	$352,388	$403,338	0.901	1.145
				Median	$307,340	$356,250	0.883	1.133
		13	2002	# Sales	4	4	4	4
				Mean	$179,248	$200,500	0.904	1.139
				Median	$176,780	$197,500	0.952	1.054
			2003	# Sales	4	4	4	4
				Mean	$213,480	$388,125	0.572	1.783
				Median	$216,630	$381,750	0.572	1.773
		23	2003	# Sales	3	3	3	3
				Mean	$179,783	$231,667	0.777	1.290
				Median	$177,750	$230,000	0.790	1.266
		24	2002	# Sales	1	1	1	1
				Mean	$267,500	$391,500	0.683	1.464
				Median	$267,500	$391,500	0.683	1.464
	B	11	2003	# Sales	3	3	3	3
				Mean	$161,433	$220,643	0.740	1.368
				Median	$164,860	$220,000	0.701	1.426
		12	2002	# Sales	7	7	7	7
				Mean	$222,437	$275,071	0.826	1.268
				Median	$229,880	$260,000	0.768	1.303
			2003	# Sales	18	18	18	18
				Mean	$217,846	$314,139	1.198	1.463
				Median	$214,460	$332,500	0.676	1.480
		13	2002	# Sales	10	10	10	10
				Mean	$154,728	$166,990	0.962	1.081
				Median	$151,525	$157,000	0.950	1.053
			2003	# Sales	7	7	7	7
				Mean	$168,614	$259,200	0.656	1.556
				Median	$176,460	$250,000	0.625	1.600
	C	12	2002	# Sales	2	2	2	2
				Mean	$216,695	$254,000	0.841	1.213
				Median	$216,695	$254,000	0.841	1.213
		13	2002	# Sales	22	22	22	22
				Mean	$162,998	$176,295	0.941	1.089
				Median	$162,715	$178,500	0.925	1.082
			2003	# Sales	25	25	25	25
				Mean	$160,767	$204,560	0.843	1.275
				Median	$158,860	$206,000	0.782	1.279

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		23	2003	# Sales	2	2	2	2
				Mean	$181,455	$292,000	0.622	1.608
				Median	$181,455	$292,000	0.622	1.608
		97	2002	# Sales	1	1	1	1
				Mean	$154,290	$169,000	0.913	1.095
				Median	$154,290	$169,000	0.913	1.095
	D	12	2002	# Sales	22	22	22	22
				Mean	$247,951	$277,713	0.942	1.111
				Median	$235,470	$270,000	0.913	1.096
			2003	# Sales	14	14	14	14
				Mean	$253,662	$340,325	0.805	1.350
				Median	$261,240	$334,500	0.652	1.535
		13	2002	# Sales	3	3	3	3
				Mean	$163,637	$194,000	0.846	1.187
				Median	$164,860	$190,000	0.824	1.214
			2003	# Sales	7	7	7	7
				Mean	$175,497	$207,743	0.862	1.187
				Median	$175,070	$215,000	0.829	1.207
		97	2003	# Sales	1	1	1	1
				Mean	$142,090	$241,000	0.590	1.696
				Median	$142,090	$241,000	0.590	1.696
		15	2003	# Sales	1	1	1	1
				Mean	$308,460	$460,000	0.671	1.491
				Median	$308,460	$460,000	0.671	1.491
	E	11	2002	# Sales	8	8	8	8
				Mean	$178,644	$187,050	1.432	1.064
				Median	$168,720	$186,950	0.898	1.114
			2003	# Sales	6	6	6	6
				Mean	$175,683	$247,983	0.723	1.439
				Median	$168,295	$229,250	0.761	1.315
		12	2002	# Sales	5	5	5	5
				Mean	$224,782	$239,560	0.961	1.057
				Median	$226,920	$239,000	0.949	1.053
			2003	# Sales	8	8	8	8
				Mean	$202,248	$268,500	0.775	1.349
				Median	$208,175	$257,500	0.826	1.211
		13	2002	# Sales	14	14	14	14
				Mean	$190,336	$211,011	0.935	1.115
				Median	$188,270	$213,250	0.853	1.172
			2003	# Sales	15	15	15	15
				Mean	$194,905	$227,100	0.928	1.177
				Median	$188,680	$235,000	0.812	1.232
		97	2003	# Sales	1	1	1	1
				Mean	$228,580	$279,000	0.819	1.221
				Median	$228,580	$279,000	0.819	1.221
7	C	11	2002	# Sales	6	6	6	6
				Mean	$220,647	$239,317	0.919	1.103
				Median	$240,355	$244,950	0.951	1.052

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	15	15	15	15
				Mean	$209,669	$251,491	0.874	1.203
				Median	$218,250	$265,000	0.824	1.214
		12	2002	# Sales	16	16	16	16
				Mean	$258,848	$245,286	1.086	1.015
				Median	$242,040	$255,000	0.975	1.026
			2003	# Sales	16	16	16	16
				Mean	$244,872	$305,750	0.834	1.267
				Median	$259,945	$312,500	0.836	1.196
		13	2002	# Sales	13	13	13	13
				Mean	$177,803	$198,391	0.924	1.108
				Median	$183,560	$203,500	0.926	1.080
			2003	# Sales	18	18	18	18
				Mean	$165,005	$220,437	0.779	1.339
				Median	$156,970	$217,100	0.746	1.340
		23	2002	# Sales	1	1	1	1
				Mean	$149,500	$181,000	0.826	1.211
				Median	$149,500	$181,000	0.826	1.211
			2003	# Sales	4	4	4	4
				Mean	$158,403	$257,000	0.638	1.626
				Median	$149,895	$276,500	0.585	1.719
		24	2002	# Sales	1	1	1	1
				Mean	$257,500	$232,000	1.110	0.901
				Median	$257,500	$232,000	1.110	0.901
	D	12	2002	# Sales	33	33	33	33
				Mean	$208,916	$231,567	0.936	1.156
				Median	$201,640	$246,000	0.875	1.143
			2003	# Sales	33	33	33	33
				Mean	$208,355	$293,443	0.747	1.449
				Median	$192,200	$298,500	0.714	1.400
		13	2002	# Sales	4	4	4	4
				Mean	$157,808	$198,226	0.843	1.262
				Median	$153,790	$205,000	0.827	1.215
			2003	# Sales	1	1	1	1
				Mean	$248,550	$209,900	1.184	0.844
				Median	$248,550	$209,900	1.184	0.844
		23	2003	# Sales	1	1	1	1
				Mean	$185,770	$300,000	0.619	1.615
				Median	$185,770	$300,000	0.619	1.615
		97	2002	# Sales	1	1	1	1
				Mean	$144,700	$97,412	1.485	0.673
				Median	$144,700	$97,412	1.485	0.673
			2003	# Sales	1	1	1	1
				Mean	$180,060	$114,060	1.579	0.633
				Median	$180,060	$114,060	1.579	0.633
	E	11	2002	# Sales	31	31	31	31
				Mean	$160,514	$173,781	0.980	1.106
				Median	$154,840	$179,500	0.897	1.115

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	45	45	45	45
				Mean	$148,472	$187,841	0.859	1.265
				Median	$145,190	$186,000	0.792	1.263
		12	2002	# Sales	8	8	8	8
				Mean	$145,341	$202,688	0.738	1.490
				Median	$161,755	$193,000	0.645	1.553
			2003	# Sales	15	15	15	15
				Mean	$161,716	$208,733	0.844	1.331
				Median	$155,440	$205,000	0.854	1.171
		13	2002	# Sales	3	3	3	3
				Mean	$140,563	$167,333	0.896	1.172
				Median	$145,480	$192,000	0.758	1.320
			2003	# Sales	1	1	1	1
				Mean	$141,110	$185,900	0.759	1.317
				Median	$141,110	$185,900	0.759	1.317
		23	2002	# Sales	2	2	2	2
				Mean	$136,170	$156,250	0.859	1.177
				Median	$136,170	$156,250	0.859	1.177
			2003	# Sales	5	5	5	5
				Mean	$150,494	$189,256	1.002	1.446
				Median	$155,420	$159,000	0.622	1.608
		24	2002	# Sales	2	2	2	2
				Mean	$162,610	$170,000	0.959	1.052
				Median	$162,610	$170,000	0.959	1.052
		97	2002	# Sales	2	2	2	2
				Mean	$136,630	$137,000	1.347	1.034
				Median	$136,630	$137,000	1.347	1.034
15	A	11	2002	# Sales	27	27	27	27
				Mean	$327,951	$301,606	1.192	0.912
				Median	$314,280	$310,000	0.982	1.018
			2003	# Sales	19	19	19	19
				Mean	$278,885	$292,572	1.422	1.065
				Median	$271,480	$310,000	0.885	1.131
		23	2003	# Sales	2	2	2	2
				Mean	$200,365	$422,125	0.488	2.112
				Median	$200,365	$422,125	0.488	2.112
		24	2002	# Sales	9	9	9	9
				Mean	$384,910	$367,933	1.060	0.959
				Median	$382,310	$341,000	0.981	1.019
			2003	# Sales	3	3	3	3
				Mean	$348,853	$460,333	0.801	1.275
				Median	$291,640	$340,000	0.820	1.220
		97	2003	# Sales	1	1	1	1
				Mean	$264,170	$251,000	1.052	0.950
				Median	$264,170	$251,000	1.052	0.950
	B	11	2002	# Sales	32	32	32	32
				Mean	$240,738	$240,217	1.123	0.980
				Median	$237,285	$254,500	1.019	0.981

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	36	36	36	36
				Mean	$213,188	$275,435	0.844	1.346
				Median	$194,935	$250,000	0.774	1.293
		23	2002	# Sales	3	3	3	3
				Mean	$247,550	$237,500	1.047	0.958
				Median	$249,170	$250,000	1.033	0.968
			2003	# Sales	1	1	1	1
				Mean	$239,970	$274,900	0.873	1.146
				Median	$239,970	$274,900	0.873	1.146
		24	2003	# Sales	1	1	1	1
				Mean	$193,220	$250,000	0.773	1.294
				Median	$193,220	$250,000	0.773	1.294
		97	2002	# Sales	1	1	1	1
				Mean	$151,990	$154,000	0.987	1.013
				Median	$151,990	$154,000	0.987	1.013
		15	2003	# Sales	1	1	1	1
				Mean	$225,250	$260,000	0.866	1.154
				Median	$225,250	$260,000	0.866	1.154
	C	11	2002	# Sales	69	69	69	69
				Mean	$180,347	$185,286	1.016	1.038
				Median	$173,250	$183,000	0.980	1.020
			2003	# Sales	66	66	66	66
				Mean	$161,404	$210,904	0.850	1.360
				Median	$146,690	$215,000	0.761	1.315
		12	2002	# Sales	2	2	2	2
				Mean	$233,055	$175,000	1.392	0.791
				Median	$233,055	$175,000	1.392	0.791
			2003	# Sales	1	1	1	1
				Mean	$175,160	$244,000	0.718	1.393
				Median	$175,160	$244,000	0.718	1.393
		13	2002	# Sales	7	7	7	7
				Mean	$205,691	$210,461	1.118	1.026
				Median	$195,980	$187,500	0.980	1.020
			2003	# Sales	4	4	4	4
				Mean	$186,415	$267,750	0.735	1.417
				Median	$183,025	$258,000	0.718	1.411
		23	2002	# Sales	1	1	1	1
				Mean	$255,940	$270,000	0.948	1.055
				Median	$255,940	$270,000	0.948	1.055
		24	2002	# Sales	3	3	3	3
				Mean	$162,310	$155,000	1.068	0.955
				Median	$160,680	$165,000	0.980	1.020
			2003	# Sales	1	1	1	1
				Mean	$146,120	$300,000	0.487	2.053
				Median	$146,120	$300,000	0.487	2.053
		97	2002	# Sales	1	1	1	1
				Mean	$181,260	$171,000	1.060	0.943
				Median	$181,260	$171,000	1.060	0.943

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	2	2	2	2
				Mean	$184,925	$171,250	1.192	0.931
				Median	$184,925	$171,250	1.192	0.931
	D	11	2002	# Sales	45	45	45	45
				Mean	$183,536	$216,039	0.985	1.166
				Median	$184,130	$200,000	0.928	1.077
			2003	# Sales	67	67	67	67
				Mean	$194,068	$291,231	0.758	1.523
				Median	$184,080	$295,000	0.654	1.529
		12	2003	# Sales	1	1	1	1
				Mean	$178,670	$590,000	0.303	3.302
				Median	$178,670	$590,000	0.303	3.302
		13	2002	# Sales	1	1	1	1
				Mean	$241,670	$332,500	0.727	1.376
				Median	$241,670	$332,500	0.727	1.376
		23	2002	# Sales	3	3	3	3
				Mean	$288,120	$208,000	1.591	0.672
				Median	$263,060	$128,000	1.624	0.616
			2003	# Sales	3	3	3	3
				Mean	$378,533	$408,333	0.900	1.168
				Median	$336,450	$350,000	0.975	1.025
		24	2002	# Sales	9	9	9	9
				Mean	$256,787	$337,311	0.801	1.331
				Median	$267,400	$335,000	0.773	1.294
			2003	# Sales	12	12	12	12
				Mean	$317,172	$433,042	0.825	1.434
				Median	$300,335	$395,000	0.825	1.213
		97	2003	# Sales	2	2	2	2
				Mean	$212,390	$217,500	0.975	1.026
				Median	$212,390	$217,500	0.975	1.026
	E	11	2002	# Sales	48	48	48	48
				Mean	$200,866	$235,095	0.986	1.170
				Median	$200,825	$196,100	0.898	1.114
			2003	# Sales	69	69	69	69
				Mean	$214,869	$286,945	0.901	1.402
				Median	$200,070	$245,000	0.806	1.241
		13	2002	# Sales	5	5	5	5
				Mean	$215,912	$174,380	1.310	0.845
				Median	$217,010	$170,000	1.365	0.733
			2003	# Sales	13	13	13	13
				Mean	$215,358	$205,292	1.099	0.950
				Median	$215,870	$196,500	1.024	0.976
		23	2002	# Sales	4	4	4	4
				Mean	$253,258	$309,000	0.818	1.233
				Median	$255,280	$309,000	0.811	1.240
			2003	# Sales	4	4	4	4
				Mean	$220,803	$428,500	0.567	1.939
				Median	$227,925	$431,500	0.524	2.016

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		24	2002	# Sales	18	18	18	18
				Mean	$306,093	$404,001	0.805	1.349
				Median	$308,420	$440,000	0.740	1.352
			2003	# Sales	11	11	11	11
				Mean	$362,441	$499,136	0.925	1.447
				Median	$352,810	$530,000	0.611	1.637
		97	2003	# Sales	1	1	1	1
				Mean	$224,740	$404,500	0.556	1.800
				Median	$224,740	$404,500	0.556	1.800
18	A	11	2002	# Sales	8	8	8	8
				Mean	$109,584	$129,801	0.865	1.183
				Median	$109,230	$139,000	0.788	1.269
			2003	# Sales	18	18	18	18
				Mean	$100,881	$124,222	0.846	1.235
				Median	$109,105	$117,500	0.791	1.266
		12	2002	# Sales	12	12	12	12
				Mean	$108,842	$116,976	0.941	1.076
				Median	$109,500	$113,105	0.956	1.047
			2003	# Sales	10	10	10	10
				Mean	$110,779	$139,290	0.845	1.302
				Median	$115,730	$154,900	0.829	1.207
		13	2002	# Sales	12	12	12	12
				Mean	$106,355	$112,942	0.960	1.055
				Median	$111,750	$119,900	0.957	1.044
			2003	# Sales	7	7	7	7
				Mean	$111,879	$146,624	0.770	1.358
				Median	$110,750	$149,900	0.753	1.327
		23	2002	# Sales	8	8	8	8
				Mean	$99,496	$98,000	1.044	0.971
				Median	$96,325	$94,000	1.083	0.925
			2003	# Sales	9	9	9	9
				Mean	$113,699	$152,798	0.760	1.359
				Median	$119,010	$150,000	0.721	1.386
		24	2002	# Sales	3	3	3	3
				Mean	$94,343	$97,000	0.983	1.019
				Median	$95,000	$97,000	0.979	1.021
			2003	# Sales	3	3	3	3
				Mean	$96,960	$102,500	0.957	1.062
				Median	$98,990	$100,000	0.898	1.114
		97	2002	# Sales	1	1	1	1
				Mean	$121,100	$92,000	1.316	0.760
				Median	$121,100	$92,000	1.316	0.760
			2003	# Sales	1	1	1	1
				Mean	$71,640	$78,010	0.918	1.089
				Median	$71,640	$78,010	0.918	1.089
	B	11	2002	# Sales	4	4	4	4
				Mean	$112,780	$97,125	1.124	0.916
				Median	$112,100	$97,000	1.130	0.889

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	8	8	8	8
				Mean	$95,019	$85,068	1.189	0.872
				Median	$83,300	$79,950	1.136	0.881
		12	2002	# Sales	15	15	15	15
				Mean	$106,363	$101,097	1.120	0.932
				Median	$103,210	$92,500	1.091	0.917
			2003	# Sales	21	21	21	21
				Mean	$91,367	$117,799	0.831	1.305
				Median	$87,720	$115,000	0.800	1.250
		13	2002	# Sales	26	26	26	26
				Mean	$95,862	$105,005	0.920	1.124
				Median	$86,215	$107,350	0.864	1.157
			2003	# Sales	15	15	15	15
				Mean	$104,989	$119,108	0.911	1.161
				Median	$89,350	$120,000	0.902	1.108
		23	2002	# Sales	2	2	2	2
				Mean	$130,590	$140,750	0.931	1.081
				Median	$130,590	$140,750	0.931	1.081
			2003	# Sales	6	6	6	6
				Mean	$129,965	$117,150	1.135	0.901
				Median	$127,585	$112,500	1.110	0.903
		24	2003	# Sales	1	1	1	1
				Mean	$59,580	$50,000	1.192	0.839
				Median	$59,580	$50,000	1.192	0.839
		97	2002	# Sales	7	7	7	7
				Mean	$97,624	$99,402	0.997	1.042
				Median	$83,980	$90,000	0.963	1.039
			2003	# Sales	3	3	3	3
				Mean	$85,263	$88,214	1.180	1.015
				Median	$85,600	$109,641	0.797	1.255
	C	11	2002	# Sales	6	6	6	6
				Mean	$78,130	$86,500	0.906	1.113
				Median	$64,245	$78,000	0.923	1.083
			2003	# Sales	3	3	3	3
				Mean	$84,413	$116,032	0.751	1.388
				Median	$94,310	$103,200	0.698	1.433
		12	2002	# Sales	14	14	14	14
				Mean	$93,977	$104,110	0.922	1.144
				Median	$78,245	$110,950	0.977	1.023
			2003	# Sales	16	16	16	16
				Mean	$90,076	$113,522	1.014	1.280
				Median	$86,850	$126,750	0.824	1.214
		13	2002	# Sales	21	21	21	21
				Mean	$107,910	$113,990	0.956	1.080
				Median	$107,470	$115,000	0.991	1.009
			2003	# Sales	17	17	17	17
				Mean	$96,369	$104,153	1.004	1.100
				Median	$101,500	$99,900	0.943	1.061

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		23	2002	# Sales	1	1	1	1
				Mean	$76,460	$49,000	1.560	0.641
				Median	$76,460	$49,000	1.560	0.641
		24	2003	# Sales	1	1	1	1
				Mean	$79,960	$127,000	0.630	1.588
				Median	$79,960	$127,000	0.630	1.588
		97	2002	# Sales	3	3	3	3
				Mean	$93,323	$102,700	1.019	1.037
				Median	$95,550	$90,000	1.062	0.942
			2003	# Sales	2	2	2	2
				Mean	$66,965	$90,500	0.743	1.354
				Median	$66,965	$90,500	0.743	1.354
	D	12	2002	# Sales	2	2	2	2
				Mean	$108,740	$114,500	0.995	1.053
				Median	$108,740	$114,500	0.995	1.053
			2003	# Sales	2	2	2	2
				Mean	$88,020	$115,500	0.832	1.250
				Median	$88,020	$115,500	0.832	1.250
		13	2002	# Sales	8	8	8	8
				Mean	$123,624	$135,086	0.922	1.094
				Median	$121,445	$131,943	0.936	1.068
			2003	# Sales	8	8	8	8
				Mean	$116,013	$129,805	0.944	1.118
				Median	$115,985	$141,250	0.849	1.183
	E	11	2002	# Sales	3	3	3	3
				Mean	$95,033	$109,833	0.875	1.152
				Median	$93,560	$101,500	0.922	1.085
			2003	# Sales	1	1	1	1
				Mean	$80,860	$104,900	0.771	1.297
				Median	$80,860	$104,900	0.771	1.297
		12	2002	# Sales	6	6	6	6
				Mean	$116,977	$126,092	0.928	1.092
				Median	$113,985	$112,000	0.933	1.072
			2003	# Sales	4	4	4	4
				Mean	$98,045	$117,000	0.836	1.224
				Median	$99,650	$116,500	0.892	1.122
		13	2002	# Sales	11	11	11	11
				Mean	$101,048	$113,435	0.920	1.130
				Median	$97,200	$120,000	0.873	1.145
			2003	# Sales	17	17	17	17
				Mean	$112,204	$123,112	0.943	1.131
				Median	$101,760	$128,000	0.850	1.177
		23	2003	# Sales	1	1	1	1
				Mean	$71,390	$115,000	0.621	1.611
				Median	$71,390	$115,000	0.621	1.611
		24	2003	# Sales	1	1	1	1
				Mean	$74,180	$69,500	1.067	0.937
				Median	$74,180	$69,500	1.067	0.937

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		97	2002	# Sales	1	1	1	1
				Mean	$102,050	$83,000	1.230	0.813
				Median	$102,050	$83,000	1.230	0.813
19	A	11	2002	# Sales	36	36	36	36
				Mean	$221,693	$268,398	0.872	1.279
				Median	$218,980	$266,500	0.836	1.197
			2003	# Sales	36	36	36	36
				Mean	$218,495	$310,626	0.732	1.476
				Median	$218,980	$297,000	0.738	1.354
		13	2002	# Sales	1	1	1	1
				Mean	$216,070	$237,000	0.912	1.097
				Median	$216,070	$237,000	0.912	1.097
			2003	# Sales	2	2	2	2
				Mean	$221,265	$314,500	0.709	1.425
				Median	$221,265	$314,500	0.709	1.425
		23	2003	# Sales	1	1	1	1
				Mean	$272,740	$275,000	0.992	1.008
				Median	$272,740	$275,000	0.992	1.008
		24	2002	# Sales	7	7	7	7
				Mean	$210,359	$279,143	0.921	1.946
				Median	$190,930	$248,500	0.950	1.052
			2003	# Sales	7	7	7	7
				Mean	$261,714	$393,571	0.694	1.611
				Median	$232,080	$410,000	0.553	1.808
		97	2003	# Sales	1	1	1	1
				Mean	$109,090	$270,000	0.404	2.475
				Median	$109,090	$270,000	0.404	2.475
	B	11	2002	# Sales	51	51	51	51
				Mean	$155,475	$186,859	0.917	1.246
				Median	$159,950	$165,000	0.881	1.135
			2003	# Sales	61	61	61	61
				Mean	$160,931	$218,173	0.801	1.369
				Median	$161,970	$203,500	0.787	1.270
		12	2002	# Sales	2	2	2	2
				Mean	$144,285	$202,500	0.682	1.561
				Median	$144,285	$202,500	0.682	1.561
			2003	# Sales	1	1	1	1
				Mean	$155,680	$204,000	0.763	1.310
				Median	$155,680	$204,000	0.763	1.310
		13	2002	# Sales	1	1	1	1
				Mean	$190,050	$239,000	0.795	1.258
				Median	$190,050	$239,000	0.795	1.258
		23	2002	# Sales	5	5	5	5
				Mean	$145,764	$190,450	0.794	1.342
				Median	$159,240	$198,252	0.741	1.350
			2003	# Sales	2	2	2	2
				Mean	$140,635	$195,000	0.700	1.699
				Median	$140,635	$195,000	0.700	1.699

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		24	2002	# Sales	3	3	3	3
				Mean	$187,323	$246,667	0.769	1.313
				Median	$184,910	$270,000	0.750	1.333
			2003	# Sales	2	2	2	2
				Mean	$184,735	$284,950	0.645	1.552
				Median	$184,735	$284,950	0.645	1.552
		97	2002	# Sales	3	3	3	3
				Mean	$154,290	$136,000	1.202	0.906
				Median	$152,950	$115,000	1.123	0.891
			2003	# Sales	2	2	2	2
				Mean	$107,150	$127,000	0.897	1.250
				Median	$107,150	$127,000	0.897	1.250
31	A	11	2002	# Sales	21	21	21	21
				Mean	$210,403	$230,948	0.978	1.105
				Median	$207,510	$224,500	0.985	1.015
			2003	# Sales	21	21	21	21
				Mean	$198,420	$325,086	0.677	1.697
				Median	$191,570	$280,000	0.714	1.401
		12	2003	# Sales	2	2	2	2
				Mean	$156,485	$317,000	0.492	2.035
				Median	$156,485	$317,000	0.492	2.035
		13	2002	# Sales	3	3	3	3
				Mean	$202,323	$340,967	0.783	1.521
				Median	$172,850	$200,000	0.764	1.309
			2003	# Sales	6	6	6	6
				Mean	$157,942	$295,583	0.631	2.008
				Median	$149,250	$257,000	0.585	1.711
		23	2002	# Sales	1	1	1	1
				Mean	$255,590	$285,000	0.897	1.115
				Median	$255,590	$285,000	0.897	1.115
			2003	# Sales	1	1	1	1
				Mean	$84,520	$329,000	0.257	3.893
				Median	$84,520	$329,000	0.257	3.893
		24	2002	# Sales	4	4	4	4
				Mean	$277,028	$365,500	0.754	1.354
				Median	$291,905	$367,500	0.763	1.317
			2003	# Sales	2	2	2	2
				Mean	$287,190	$497,250	0.628	1.696
				Median	$287,190	$497,250	0.628	1.696
		97	2002	# Sales	2	2	2	2
				Mean	$145,085	$202,750	0.818	1.465
				Median	$145,085	$202,750	0.818	1.465
			2003	# Sales	1	1	1	1
				Mean	$132,190	$375,900	0.352	2.844
				Median	$132,190	$375,900	0.352	2.844
	B	11	2002	# Sales	37	37	37	37
				Mean	$225,841	$291,604	0.869	1.405
				Median	$222,570	$280,000	0.855	1.169

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	47	47	47	47
				Mean	$234,655	$324,623	0.769	1.476
				Median	$235,310	$326,500	0.724	1.381
		23	2003	# Sales	2	2	2	2
				Mean	$250,875	$372,500	0.765	1.474
				Median	$250,875	$372,500	0.765	1.474
		24	2002	# Sales	7	7	7	7
				Mean	$296,223	$327,221	1.073	1.101
				Median	$282,590	$340,000	0.945	1.058
			2003	# Sales	9	9	9	9
				Mean	$273,862	$400,111	0.715	1.454
				Median	$262,020	$400,000	0.694	1.442
		97	2003	# Sales	1	1	1	1
				Mean	$105,240	$380,000	0.277	3.611
				Median	$105,240	$380,000	0.277	3.611
32	A	12	2002	# Sales	8	8	8	8
				Mean	$116,345	$170,238	0.726	1.557
				Median	$118,625	$177,500	0.675	1.487
			2003	# Sales	7	7	7	7
				Mean	$112,517	$197,486	0.587	1.770
				Median	$119,630	$199,900	0.580	1.725
		13	2002	# Sales	1	1	1	1
				Mean	$57,310	$94,900	0.604	1.656
				Median	$57,310	$94,900	0.604	1.656
			2003	# Sales	2	2	2	2
				Mean	$77,140	$93,750	0.823	1.217
				Median	$77,140	$93,750	0.823	1.217
		97	2002	# Sales	1	1	1	1
				Mean	$127,680	$82,000	1.557	0.642
				Median	$127,680	$82,000	1.557	0.642
39	A	11	2002	# Sales	51	51	51	51
				Mean	$188,683	$227,826	0.937	1.231
				Median	$188,880	$239,000	0.845	1.184
			2003	# Sales	74	74	74	74
				Mean	$184,297	$274,840	0.748	1.516
				Median	$188,990	$276,000	0.651	1.535
		13	2002	# Sales	2	2	2	2
				Mean	$151,235	$189,000	0.815	1.247
				Median	$151,235	$189,000	0.815	1.247
			2003	# Sales	2	2	2	2
				Mean	$165,845	$244,600	0.701	1.454
				Median	$165,845	$244,600	0.701	1.454
		23	2002	# Sales	8	8	8	8
				Mean	$284,134	$335,800	0.924	1.178
				Median	$287,855	$379,000	0.869	1.152
			2003	# Sales	3	3	3	3
				Mean	$236,593	$342,000	0.694	1.442
				Median	$249,530	$375,000	0.701	1.426

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		24	2002	# Sales	1	1	1	1
				Mean	$199,140	$225,000	0.885	1.130
				Median	$199,140	$225,000	0.885	1.130
			2003	# Sales	1	1	1	1
				Mean	$193,210	$349,500	0.553	1.809
				Median	$193,210	$349,500	0.553	1.809
		97	2002	# Sales	3	3	3	3
				Mean	$152,023	$165,000	0.886	1.195
				Median	$132,360	$140,000	0.945	1.058
	B	11	2002	# Sales	44	44	44	44
				Mean	$236,023	$271,935	0.910	1.168
				Median	$236,785	$262,538	0.872	1.146
			2003	# Sales	38	38	38	38
				Mean	$244,105	$333,950	0.750	1.407
				Median	$231,025	$342,500	0.700	1.434
		23	2002	# Sales	5	5	5	5
				Mean	$185,040	$205,700	0.903	1.156
				Median	$165,810	$175,000	1.030	0.971
			2003	# Sales	4	4	4	4
				Mean	$149,355	$303,140	0.553	2.138
				Median	$146,150	$309,500	0.434	2.317
		24	2003	# Sales	1	1	1	1
				Mean	$277,150	$466,700	0.594	1.684
				Median	$277,150	$466,700	0.594	1.684
	C	11	2002	# Sales	28	28	28	28
				Mean	$226,882	$242,536	1.115	1.076
				Median	$215,170	$244,000	0.914	1.094
			2003	# Sales	29	29	29	29
				Mean	$249,704	$311,295	0.816	1.300
				Median	$241,960	$266,750	0.860	1.162
		12	2002	# Sales	1	1	1	1
				Mean	$313,340	$375,000	0.836	1.197
				Median	$313,340	$375,000	0.836	1.197
		13	2002	# Sales	2	2	2	2
				Mean	$155,265	$135,750	2.019	0.990
				Median	$155,265	$135,750	2.019	0.990
			2003	# Sales	3	3	3	3
				Mean	$293,000	$334,233	1.100	1.075
				Median	$326,450	$350,000	1.000	1.000
		23	2002	# Sales	1	1	1	1
				Mean	$342,270	$625,000	0.548	1.826
				Median	$342,270	$625,000	0.548	1.826
			2003	# Sales	1	1	1	1
				Mean	$490,000	$498,000	0.984	1.016
				Median	$490,000	$498,000	0.984	1.016
		24	2002	# Sales	3	3	3	3
				Mean	$257,617	$336,667	0.931	1.284
				Median	$248,810	$380,000	0.823	1.215

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	4	4	4	4
				Mean	$556,535	$594,750	0.913	1.112
				Median	$581,045	$642,250	0.964	1.037
		97	2003	# Sales	2	2	2	2
				Mean	$161,260	$267,500	0.602	1.675
				Median	$161,260	$267,500	0.602	1.675
	F	11	2002	# Sales	46	46	46	46
				Mean	$208,291	$228,024	0.937	1.125
				Median	$214,350	$221,500	0.896	1.116
			2003	# Sales	66	66	66	66
				Mean	$203,918	$278,138	0.774	1.369
				Median	$209,335	$285,500	0.744	1.344
		12	2002	# Sales	1	1	1	1
				Mean	$106,730	$157,500	0.678	1.476
				Median	$106,730	$157,500	0.678	1.476
			2003	# Sales	1	1	1	1
				Mean	$135,030	$309,000	0.437	2.288
				Median	$135,030	$309,000	0.437	2.288
		13	2002	# Sales	1	1	1	1
				Mean	$144,130	$130,000	1.109	0.902
				Median	$144,130	$130,000	1.109	0.902
			2003	# Sales	3	3	3	3
				Mean	$172,227	$269,167	0.683	1.570
				Median	$157,740	$299,500	0.696	1.438
		23	2002	# Sales	3	3	3	3
				Mean	$330,340	$387,667	0.880	1.150
				Median	$361,070	$473,000	0.877	1.140
			2003	# Sales	6	6	6	6
				Mean	$304,638	$327,983	0.932	1.128
				Median	$252,035	$320,000	0.887	1.134
		24	2002	# Sales	1	1	1	1
				Mean	$213,800	$200,000	1.069	0.935
				Median	$213,800	$200,000	1.069	0.935
			2003	# Sales	1	1	1	1
				Mean	$217,370	$375,000	0.580	1.725
				Median	$217,370	$375,000	0.580	1.725
		97	2002	# Sales	1	1	1	1
				Mean	$189,450	$260,000	0.729	1.372
				Median	$189,450	$260,000	0.729	1.372
			2003	# Sales	3	3	3	3
				Mean	$207,917	$256,667	0.852	1.261
				Median	$212,110	$245,000	0.926	1.080
	G	11	2002	# Sales	16	16	16	16
				Mean	$137,257	$156,606	0.905	1.153
				Median	$137,060	$140,500	0.947	1.056
			2003	# Sales	35	35	35	35
				Mean	$125,218	$184,613	0.759	1.510
				Median	$121,310	$170,000	0.683	1.464

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
		13	2002	# Sales	1	1	1	1
				Mean	$120,000	$119,000	1.008	0.992
				Median	$120,000	$119,000	1.008	0.992
			2003	# Sales	4	4	4	4
				Mean	$117,860	$108,300	1.552	0.953
				Median	$118,735	$122,850	1.072	0.945
		23	2002	# Sales	7	7	7	7
				Mean	$110,893	$101,889	1.081	0.946
				Median	$81,000	$90,000	1.100	0.909
			2003	# Sales	6	6	6	6
				Mean	$132,218	$278,583	0.617	2.150
				Median	$132,480	$205,500	0.633	1.639
		24	2002	# Sales	1	1	1	1
				Mean	$166,330	$175,000	0.950	1.052
				Median	$166,330	$175,000	0.950	1.052
		97	2002	# Sales	3	3	3	3
				Mean	$94,903	$78,833	1.215	0.826
				Median	$96,040	$78,000	1.231	0.812
			2003	# Sales	3	3	3	3
				Mean	$110,363	$111,000	1.116	0.948
				Median	$101,090	$75,500	1.231	0.813
	H	11	2002	# Sales	17	17	17	17
				Mean	$119,181	$142,282	0.883	1.194
				Median	$115,890	$125,000	0.950	1.053
			2003	# Sales	35	35	35	35
				Mean	$119,896	$168,346	0.832	1.406
				Median	$118,310	$162,000	0.737	1.357
		23	2002	# Sales	10	10	10	10
				Mean	$123,884	$116,911	1.144	0.951
				Median	$125,085	$113,750	1.130	0.888
			2003	# Sales	8	8	8	8
				Mean	$135,839	$194,812	0.723	1.434
				Median	$139,455	$187,000	0.724	1.382
		97	2002	# Sales	1	1	1	1
				Mean	$114,290	$88,900	1.286	0.778
				Median	$114,290	$88,900	1.286	0.778
			2003	# Sales	4	4	4	4
				Mean	$100,708	$127,975	0.901	1.264
				Median	$85,370	$125,950	0.848	1.195
	L	11	2002	# Sales	60	60	60	60
				Mean	$147,586	$179,733	0.906	1.289
				Median	$148,035	$175,000	0.810	1.235
			2003	# Sales	114	114	114	114
				Mean	$146,932	$223,646	0.836	1.624
				Median	$143,105	$217,500	0.677	1.478
		12	2002	# Sales	1	1	1	1
				Mean	$265,160	$312,000	0.850	1.177
				Median	$265,160	$312,000	0.850	1.177

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	2	2	2	2
				Mean	$152,690	$335,000	0.501	2.538
				Median	$152,690	$335,000	0.501	2.538
		13	2002	# Sales	3	3	3	3
				Mean	$150,200	$231,633	0.692	1.522
				Median	$150,260	$259,900	0.704	1.421
			2003	# Sales	5	5	5	5
				Mean	$128,176	$144,980	0.903	1.128
				Median	$130,910	$149,900	0.842	1.188
		23	2003	# Sales	10	10	10	10
				Mean	$134,872	$251,720	0.628	2.081
				Median	$121,585	$225,000	0.606	1.652
		24	2002	# Sales	10	10	10	10
				Mean	$183,836	$201,417	0.964	1.129
				Median	$195,610	$197,500	0.958	1.045
			2003	# Sales	7	7	7	7
				Mean	$181,733	$316,321	0.623	2.040
				Median	$184,930	$326,400	0.583	1.714
		97	2002	# Sales	3	3	3	3
				Mean	$138,543	$173,667	0.906	1.372
				Median	$129,120	$132,000	0.730	1.370
			2003	# Sales	2	2	2	2
				Mean	$89,290	$146,000	0.763	1.840
				Median	$89,290	$146,000	0.763	1.840
40	A	11	2002	# Sales	62	62	62	62
				Mean	$171,478	$221,275	0.915	1.415
				Median	$162,650	$225,000	0.796	1.257
			2003	# Sales	82	82	82	82
				Mean	$169,941	$264,897	0.720	1.726
				Median	$148,265	$255,000	0.609	1.642
		13	2002	# Sales	3	3	3	3
				Mean	$170,353	$290,333	0.578	1.895
				Median	$179,390	$280,000	0.641	1.561
		23	2002	# Sales	6	6	6	6
				Mean	$196,850	$326,417	0.783	2.362
				Median	$187,875	$271,500	0.785	1.298
			2003	# Sales	7	7	7	7
				Mean	$220,376	$301,071	1.043	1.366
				Median	$193,070	$400,000	0.848	1.179
		24	2002	# Sales	17	17	17	17
				Mean	$200,229	$214,165	1.077	1.175
				Median	$195,160	$215,000	0.950	1.053
			2003	# Sales	14	14	14	14
				Mean	$242,882	$351,357	0.763	1.548
				Median	$215,890	$322,500	0.742	1.398
		97	2002	# Sales	8	8	8	8
				Mean	$119,743	$234,975	0.670	2.092
				Median	$111,140	$237,500	0.480	2.165

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	2	2	2	2
				Mean	$140,910	$392,500	0.360	2.782
				Median	$140,910	$392,500	0.360	2.782
	B	11	2002	# Sales	30	30	30	30
				Mean	$203,642	$260,436	0.869	1.372
				Median	$184,150	$262,500	0.742	1.347
			2003	# Sales	46	46	46	46
				Mean	$194,811	$286,939	0.728	1.562
				Median	$176,315	$277,500	0.637	1.571
		12	2002	# Sales	2	2	2	2
				Mean	$156,155	$175,944	0.888	1.126
				Median	$156,155	$175,944	0.888	1.126
			2003	# Sales	2	2	2	2
				Mean	$308,660	$362,500	0.786	1.448
				Median	$308,660	$362,500	0.786	1.448
		13	2002	# Sales	2	2	2	2
				Mean	$331,740	$391,000	0.806	1.315
				Median	$331,740	$391,000	0.806	1.315
			2003	# Sales	4	4	4	4
				Mean	$228,143	$376,000	0.715	1.566
				Median	$202,380	$379,500	0.621	1.611
		23	2002	# Sales	6	6	6	6
				Mean	$260,887	$290,317	1.055	1.167
				Median	$231,995	$312,500	0.880	1.143
			2003	# Sales	3	3	3	3
				Mean	$204,320	$289,967	0.718	1.516
				Median	$225,980	$280,000	0.665	1.504
		24	2002	# Sales	13	13	13	13
				Mean	$250,109	$333,644	0.877	1.372
				Median	$236,120	$324,500	0.782	1.279
			2003	# Sales	6	6	6	6
				Mean	$290,562	$297,398	1.506	1.016
				Median	$297,940	$265,280	1.486	0.811
		97	2002	# Sales	1	1	1	1
				Mean	$75,940	$395,000	0.192	5.201
				Median	$75,940	$395,000	0.192	5.201
			2003	# Sales	3	3	3	3
				Mean	$183,583	$302,000	0.628	1.723
				Median	$184,140	$281,000	0.695	1.439
49	A	11	2002	# Sales	8	8	8	8
				Mean	$268,068	$323,388	0.880	1.203
				Median	$246,485	$322,000	0.867	1.155
			2003	# Sales	17	17	17	17
				Mean	$236,315	$352,458	0.725	1.491
				Median	$234,760	$370,000	0.653	1.532
		12	2002	# Sales	19	19	19	19
				Mean	$435,544	$454,906	1.019	1.049
				Median	$411,810	$460,000	0.943	1.060

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	22	22	22	22
				Mean	$449,745	$571,382	0.918	1.252
				Median	$427,235	$577,000	0.756	1.323
		13	2003	# Sales	3	3	3	3
				Mean	$307,900	$423,000	0.858	1.337
				Median	$314,220	$466,000	0.674	1.483
		23	2002	# Sales	2	2	2	2
				Mean	$168,515	$285,000	0.598	1.701
				Median	$168,515	$285,000	0.598	1.701
			2003	# Sales	2	2	2	2
				Mean	$158,260	$229,250	1.087	1.440
				Median	$158,260	$229,250	1.087	1.440
		24	2002	# Sales	2	2	2	2
				Mean	$198,550	$230,000	0.842	1.198
				Median	$198,550	$230,000	0.842	1.198
		97	2003	# Sales	1	1	1	1
				Mean	$141,630	$286,000	0.495	2.019
				Median	$141,630	$286,000	0.495	2.019
	B	11	2002	# Sales	7	7	7	7
				Mean	$208,497	$234,700	0.995	1.128
				Median	$195,590	$214,000	0.905	1.105
			2003	# Sales	3	3	3	3
				Mean	$230,090	$358,667	0.657	1.592
				Median	$238,100	$380,000	0.627	1.596
		12	2002	# Sales	7	7	7	7
				Mean	$299,800	$339,857	0.920	1.140
				Median	$300,540	$339,000	0.887	1.128
			2003	# Sales	9	9	9	9
				Mean	$310,704	$303,667	1.107	0.979
				Median	$313,650	$290,000	1.000	1.000
		13	2002	# Sales	3	3	3	3
				Mean	$272,083	$285,250	1.005	1.060
				Median	$277,290	$282,000	1.013	0.987
			2003	# Sales	3	3	3	3
				Mean	$285,160	$387,000	0.763	1.355
				Median	$285,410	$422,000	0.676	1.479
		23	2002	# Sales	1	1	1	1
				Mean	$170,190	$249,500	0.682	1.466
				Median	$170,190	$249,500	0.682	1.466
	C	11	2002	# Sales	5	5	5	5
				Mean	$248,892	$278,800	0.905	1.120
				Median	$259,260	$290,000	0.894	1.119
			2003	# Sales	6	6	6	6
				Mean	$216,157	$317,750	0.741	1.514
				Median	$222,425	$305,750	0.722	1.386
		12	2002	# Sales	4	4	4	4
				Mean	$251,063	$312,750	0.818	1.306
				Median	$251,970	$312,000	0.900	1.111

1/10/04: NBHDs to Trend by Use

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
			2003	# Sales	12	12	12	12
				Mean	$255,994	$369,192	0.739	1.456
				Median	$239,385	$389,950	0.671	1.493
		24	2002	# Sales	1	1	1	1
				Mean	$154,220	$255,000	0.605	1.653
				Median	$154,220	$255,000	0.605	1.653
		97	2002	# Sales	1	1	1	1
				Mean	$164,550	$234,650	0.701	1.426
				Median	$164,550	$234,650	0.701	1.426

Land Rate Analysis For Non-modeled NBHDs

NBHD	SUB	MEAN SALE	MEDIAN SALE	L-T-B RATIO	MEAN SALE x L-T-B RATIO	MEDIAN SALE x L-T-B RATIO	MEAN LOT SIZE	MEDIAN LOT SIZE	STANDARD LOT SIZE	MEAN $/SF	MEDIAN $/SF	SELECTED RATE	STANDARD LOT VALUE
6	A	$308,748	$260,000	40%	$123,499	$104,000	3754	3634	4000	$30.87	$26.00	$26.00	$104,000
	B	$247,903	$250,000	40%	$99,161	$100,000	5068	4531	4000	$24.79	$25.00	$25.00	$100,000
	C	$185,069	$185,000	40%	$74,028	$74,000	2065	1755	2000	$37.01	$37.00	$37.00	$74,000
	D	$276,651	$255,000	40%	$110,660	$102,000	4582	4400	4000	$27.67	$25.50	$26.00	$104,000
	E	$210,413	$219,000	40%	$84,165	$87,600	3352	2913	3000	$28.06	$29.20	$29.00	$87,000
7	C	$231,262	$232,000	40%	$92,505	$92,800	3968	3465	3000	$30.83	$30.93	$30.00	$90,000
	D	$231,659	$245,970	40%	$92,664	$98,388	5638	5400	5000	$18.53	$19.68	$19.00	$95,000
	E	$179,529	$182,000	40%	$71,812	$72,800	2256	1777	2000	$35.91	$36.40	$36.00	$72,000
15	A	$303,044	$310,000	40%	$121,218	$124,000	1924	1695	1800	$67.34	$68.89	$68.00	$122,400
	B	$238,833	$243,000	40%	$95,533	$97,200	2179	2070	1800	$53.07	$54.00	$54.00	$97,200
	C	$193,465	$187,500	40%	$77,386	$75,000	1862	1700	1800	$42.99	$41.67	$42.00	$75,600
	D	$273,081	$245,000	40%	$109,232	$98,000	2029	1966	1800	$60.68	$54.44	$54.00	$97,200
	E	$283,172	$240,000	40%	$113,269	$96,000	1830	1750	1800	$62.93	$53.33	$54.00	$97,200
18	A	$111,309	$115,000	40%	$44,524	$46,000	3150	2633	3000	$14.84	$15.33	$15.00	$45,000
	B	$110,557	$99,677	40%	$44,223	$39,871	3269	2720	3000	$14.74	$13.29	$13.00	$39,000
	C	$97,879	$99,950	40%	$39,152	$39,980	3338	2741	3000	$13.05	$13.33	$13.00	$39,000
	D	$130,856	$135,193	40%	$52,342	$54,077	3454	2875	3000	$17.45	$18.03	$17.00	$51,000
	E	$118,223	$113,500	40%	$47,289	$45,400	3466	2868	3000	$15.76	$15.13	$15.00	$45,000
19	A	$267,958	$260,000	40%	$107,183	$104,000	1519	1500	1800	$59.55	$57.78	$57.00	$102,600
	B	$205,903	$180,000	40%	$82,361	$72,000	1725	1575	1800	$45.76	$40.00	$40.00	$72,000
31	A	$280,517	$275,000	40%	$112,207	$110,000	1973	1700	1800	$62.34	$61.11	$61.00	$109,800
	B	$307,190	$305,000	40%	$122,876	$122,000	1813	1680	1800	$68.26	$67.78	$68.00	$122,400
32	A	$158,417	$171,000	40%	$63,367	$68,400	5350	4800	5000	$12.67	$13.68	$13.00	$65,000
39	A	$249,787	$250,000	40%	$99,915	$100,000	1617	1600	1500	$66.61	$66.67	$66.00	$99,000
	B	$286,322	$265,000	40%	$114,529	$106,000	1533	1440	1500	$76.35	$70.67	$76.00	$114,000
	C	$280,430	$249,875	40%	$112,172	$99,950	1465	1413	1500	$74.78	$66.63	$61.00	$91,500
	F	$259,545	$265,000	40%	$103,818	$106,000	1299	1190	1200	$86.52	$88.33	$80.00	$96,000
	G	$167,310	$146,450	40%	$66,924	$58,580	1585	1438	1500	$44.62	$39.05	$39.00	$58,500
	H	$149,987	$134,540	40%	$59,995	$53,816	1809	1582	1500	$40.00	$35.88	$39.00	$58,500
	L	$194,409	$178,500	40%	$77,764	$71,400	1393	1293	1200	$64.80	$59.50	$64.00	$76,800
40	A	$251,939	$225,000	35%	$88,179	$78,750	1361	1372	1400	$62.98	$56.25	$56.00	$78,400
	B	$269,398	$250,000	35%	$94,289	$87,500	1439	1415	1400	$67.35	$62.50	$67.00	$93,800
49	A	$402,603	$380,000	40%	$161,041	$152,000	4165	3585	3000	$53.68	$50.67	$51.00	$153,000
	B	$289,424	$282,000	40%	$115,770	$112,800	4009	4000	3000	$38.59	$37.60	$38.00	$114,000
	C	$294,608	$290,000	40%	$117,843	$116,000	3390	2946	3000	$39.28	$38.67	$39.00	$117,000

Market Approach to Land Valuation in Costed Neighborhoods

A non-linear regression model was used to calibrate the residential cost model. It was developed from citywide market analysis of qualified sales. One of the variables calibrated by the model was the land rate. Base land rates were adjusted for location in each sub-neighborhood. Regression analysis calibrated the land and building components of the model at the same time using the same market data. Additionally, the analysis established three size curves for land area. Each land size curve indicates that as lot sizes increase, lot values also increase. However, with each land size curve, values increase at different rates as the land size ratio changes (land size ratio is the lot size / base lot size). In each case, land rates decrease as land area increases. Market data supports the curves up to approximately 5 - 6 times the standard lot size. However, in application, rates are assumed to continue similar decreases beyond that point. Each sub-neighborhood was assigned to one of the three land size curve groups based upon analysis of the qualified sales data (a fourth curve was established specifically for neighborhood 25H, which fit best between curve 2 and curve 3). The table that follows, *Residential Base Land Rates by Neighborhood*, indicates the base rates, base lot size, and size curve for each neighborhood. The graph that follows, *Residential Land Size Curves*, illustrates how land values change as the land size ratio changes.

Land value is only one of a number of variables that contribute to a property's sale price and/or estimated market value. In practical terms, it is the combination of all of a property's attributes, nuances in the market, and buyer preference that contribute to the final market value of a property. It is difficult to isolate some of the contributory elements and value them separately with certainty. Nevertheless, it is required in the District of Columbia that land and building values be separated for assessment purposes. Because of this requirement, it is necessary to create land rate tables for use in the District's CAMA product. These rates were developed in the regression analysis referred to above. The results of the analysis are applied to the market-oriented cost model in the CAMA system.

Land is calculated in the CAMA program using the following algorithm:

Area * (Base Rate * Size Adj * % Special Adj 1 * % Special Adj 2 + $ Special Adj 1 + $ Special Adj 2)

Where:

Area is the lot size expressed in square feet.

Base Rate is the market-derived rate for each sub-neighborhood.

Size Adj is the market-derived adjustment made for the lot size as it relates to the standard size lot for the sub-neighborhood. The look-up along the size curve is based on the ratio of the subject lot size to the standard lot size.

% Special Adj is any adjustment present that is expressed and applied as a percentage adjustment to the rate.

$ Special Adj is any adjustment present that is expressed and applied as a dollar adjustment to the rate.

Land Rate Development Example

A hypothetical example may help illustrate how regression analysis develops the base land rates and subsequent adjustments to the rates. Suppose two properties in a neighborhood were recently sold. The first, comprised of just a house without land, sold for $400,000. The second property had the identical house but with a lot of 2,000 square feet (sf.), the typical size for that neighborhood. It sold for $600,000. In a process similar to adjusting comparables in the sales comparison approach to value, regression analysis identifies the contributory value of the lot to the second property and sets its value to $200,000. The base land rate of $100 per sf ($200,000/2,000 sf) will be the basis for lot values for all other properties in that (sub)neighborhood.

Next, let us assume another house sells. In this instance, the house is identical to the previous sale in all respects, except the lot size was 4,000 sf instead of the "standard" (base lot) size of 2,000 sf. This house recently sold for $700,000, $100,000 more than a property with the standard lot size. The land component of this sale is $300,000. This sale helps develop size adjustments for non-standard lots in the neighborhood. If no adjustment was made to the land rate, the land component of this sale would be $400,000 (4,000 sf * $100). The appraisal would overstate the value of the property by $100,000. An adjustment to the base land rate is necessary to recognize the market response to the departure from the standard lot size. Regression analysis would calculate the appropriate land size adjustment necessary to properly determine the contributory value of the larger lot. Dividing the market-indicated value of the lot by the unadjusted appraised value of the lot ($300,000/$400,000) yields a factor of 0.75. In this example, CAMA would follow the model:

Appraised land value = Area * (Base Rate * Size Adj)

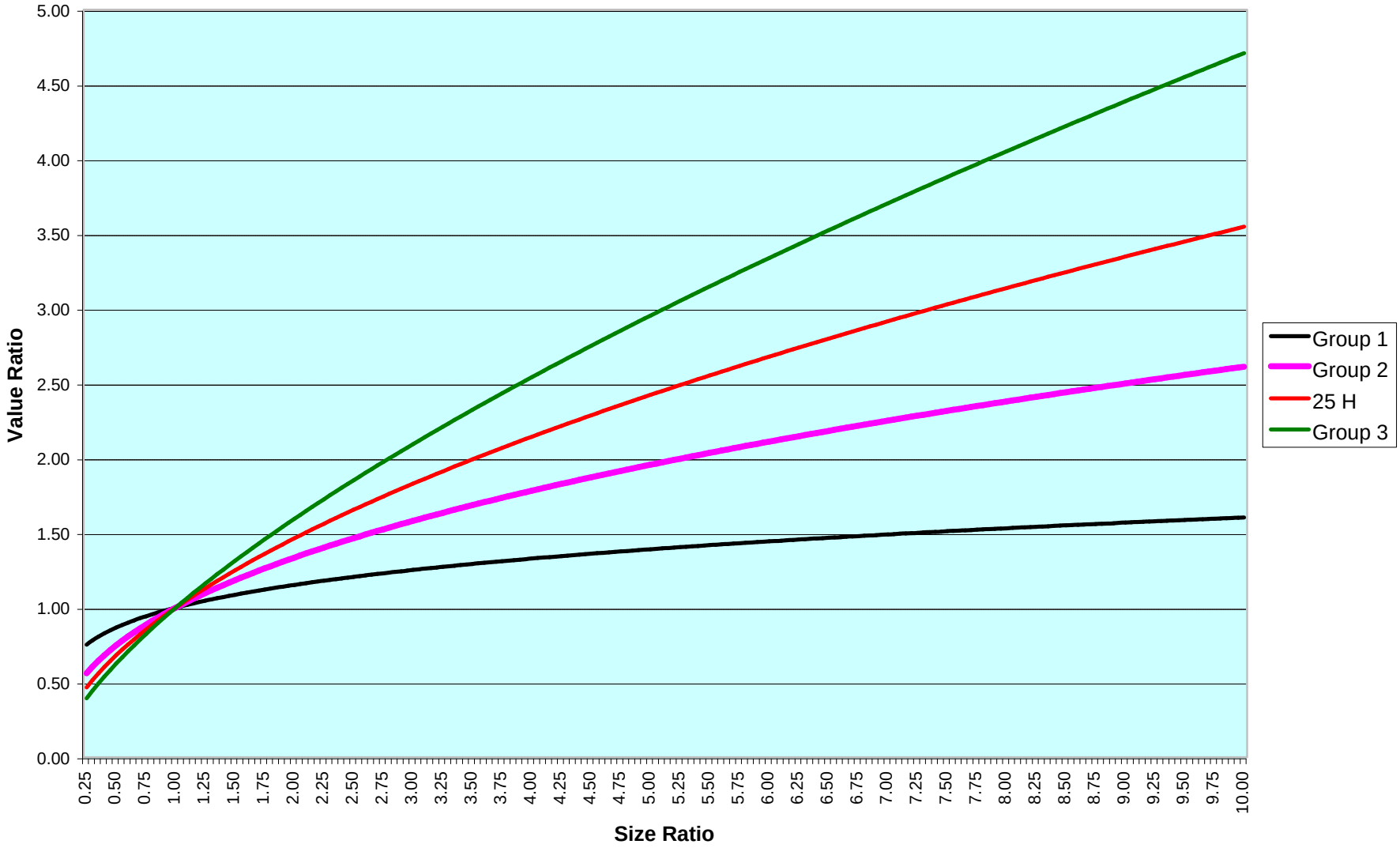
or

$300,000= 4000sf * ($100 * .75)

Residential Base Land Rates By Neighborhood

NBHD	Base Lot Size	Base Rate	Base Lot Value	Size Curve
1A	4000 sf	$66.47	$265,880	LG1
1B	5000 sf	$56.27	$281,350	LG1
1C	5000 sf	$56.41	$282,050	LG1
2A	2000 sf	$36.14	$72,280	LG1
2B	2000 sf	$37.26	$74,520	LG1
3	2000 sf	$34.30	$68,600	LG1
4A	6700 sf	$62.53	$418,950	LG2
4B	10000 sf	$52.18	$521,800	LG2
4C	8000 sf	$58.61	$468,880	LG2
5A	1700 sf	$43.84	$74,530	LG1
5B	1700 sf	$37.91	$64,450	LG1
6A	4000 sf	$26.00	$104,000	LG1
6B	4000 sf	$25.00	$100,000	LG1
6C	2000 sf	$37.00	$74,000	LG1
6D	4000 sf	$26.00	$104,000	LG1
6E	3000 sf	$29.00	$87,000	LG1
7A	2000 sf	$43.94	$87,880	LG1
7B	3000 sf	$35.27	$105,810	LG1
7C	3000 sf	$30.00	$90,000	LG1
7D	5000 sf	$19.00	$95,000	LG1
7E	2000 sf	$36.00	$72,000	LG1
8A	2000 sf	$131.17	$262,340	LG1
8B	2000 sf	$141.50	$283,000	LG1
9A	1400 sf	$153.94	$215,520	LG2
9B	1400 sf	$164.75	$230,650	LG2
9C	1400 sf	$171.50	$240,100	LG2
10	1400 sf	$238.03	$333,240	LG1
11A	5000 sf	$55.73	$278,650	LG1
11B	5000 sf	$55.86	$279,300	LG1
11C	5000 sf	$59.59	$297,950	LG1
11D	5000 sf	$57.08	$285,400	LG1
11E	5000 sf	$50.49	$252,450	LG1
12	4000 sf	$29.53	$118,120	LG1
13	5000 sf	$76.58	$382,900	LG3
14	9000 sf	$27.00	$243,000	LG1
15A	1800 sf	$68.00	$122,400	LG1
15B	1800 sf	$54.00	$97,200	LG1
15C	1800 sf	$42.00	$75,600	LG1
15D	1800 sf	$54.00	$97,200	LG1
15E	1800 sf	$54.00	$97,200	LG1
16A	2400 sf	$25.69	$61,660	LG1
16B	2400 sf	$25.69	$61,660	LG1
16C	2400 sf	$27.45	$65,880	LG1
17	6000 sf	$34.33	$205,980	LG1
18A	3000 sf	$15.00	$45,000	LG1
18B	3000 sf	$13.00	$39,000	LG1
18C	3000 sf	$13.00	$39,000	LG1
18D	3000 sf	$17.00	$51,000	LG1
18E	3000 sf	$15.00	$45,000	LG1
19A	1800 sf	$57.00	$102,600	LG1
19B	1800 sf	$40.00	$72,000	LG1
20	1000 sf	$200.17	$200,170	LG1
21	9000 sf	$41.11	$369,990	LG2
22A	3000 sf	$22.27	$66,810	LG1
22B	2400 sf	$30.11	$72,260	LG1
22C	3000 sf	$23.47	$70,410	LG1
22D	2400 sf	$31.88	$76,510	LG1
23	2500 sf	$100.48	$251,200	LG1
24	2400 sf	$123.12	$295,490	LG2
25A	1800 sf	$145.37	$261,670	LG2
25B	1800 sf	$193.42	$348,160	LG2
25C	1800 sf	$194.65	$350,370	LG2
25D	1800 sf	$198.34	$357,010	LG3
25E	1800 sf	$213.13	$383,630	LG3
25F	2000 sf	$193.23	$386,460	LG3
25G	2000 sf	$221.38	$442,760	LG2
25H	2000 sf	$206.57	$413,140	25H
25I	800 sf	$288.20	$230,560	LG3
25J	1200 sf	$249.71	$299,650	LG3
26	1700 sf	$152.63	$259,470	LG1
27	9000 sf	$28.86	$259,740	LG1
28A	2400 sf	$31.88	$76,510	LG1
28B	5000 sf	$23.04	$115,200	LG1
28C	5000 sf	$23.63	$118,150	LG1
29A	2000 sf	$171.89	$343,780	LG3
29B	2000 sf	$144.10	$288,200	LG3
29C	2000 sf	$151.74	$303,480	LG2
30A	8000 sf	$51.17	$409,360	LG3
30B	7000 sf	$54.25	$379,750	LG3
30C	7000 sf	$54.92	$384,440	LG2
31A	1800 sf	$61.00	$109,800	LG1
31B	1800 sf	$68.00	$122,400	LG1
32A	5000 sf	$13.00	$65,000	LG1
32B	2000 sf	$37.91	$75,820	LG1
33	2000 sf	$29.95	$59,900	LG1
34	9000 sf	$80.79	$727,110	LG3
35	5000 sf	$25.73	$128,650	LG1
36A	2000 sf	$97.09	$194,180	LG1
36B	2000 sf	$123.88	$247,760	LG2
36C	1600 sf	$141.51	$226,420	LG2
37	3000 sf	$94.06	$282,180	LG2
38	5000 sf	$86.55	$432,750	LG3
39A	1500 sf	$66.00	$99,000	LG1
39B	1500 sf	$76.00	$114,000	LG1
39C	1500 sf	$61.00	$91,500	LG1
39E	1200 sf	$68.36	$82,030	LG1
39F	1200 sf	$80.00	$96,000	LG1
39G	1500 sf	$39.00	$58,500	LG1
39H	1500 sf	$39.00	$58,500	LG1
39J	1500 sf	$105.35	$158,030	LG1
39K	1500 sf	$131.67	$197,510	LG1
39L	1200 sf	$64.00	$76,800	LG1
39M	1500 sf	$135.63	$203,450	LG1
40A	1400 sf	$56.00	$78,400	LG1
40B	1400 sf	$67.00	$93,800	LG1
40C	1600 sf	$126.04	$201,660	LG2
40D	1600 sf	$167.19	$267,500	LG2
40E	1600 sf	$160.76	$257,220	LG2
40F	1200 sf	$162.85	$195,420	LG2
41	5000 sf	$51.26	$256,300	LG1
42A	1800 sf	$56.30	$101,340	LG1
42B	1800 sf	$60.80	$109,440	LG1
42C	1800 sf	$53.86	$96,950	LG1
43A	2000 sf	$37.19	$74,380	LG1
43B	2000 sf	$28.43	$56,860	LG1
43C	2000 sf	$34.97	$69,940	LG1
46	1200 sf	$147.13	$176,560	LG1
47	3000 sf	$33.30	$99,900	LG1
48	5000 sf	$33.36	$166,800	LG1
49A	3000 sf	$51.00	$153,000	LG1
49B	3000 sf	$38.00	$114,000	LG1
49C	3000 sf	$39.00	$117,000	LG1
50A	10000 sf	$52.33	$523,300	LG2
50B	6000 sf	$44.86	$269,160	LG1
50C	14000 sf	$50.70	$709,800	LG2
50D	15000 sf	$48.29	$724,350	LG2
51	3000 sf	$40.39	$121,170	LG2
52A	1800 sf	$37.26	$67,070	LG1
52B	1600 sf	$39.69	$63,500	LG1
52C	1600 sf	$42.40	$67,840	LG1
53	5000 sf	$59.45	$297,250	LG1
54A	6000 sf	$72.15	$432,900	LG3
54B	1000 sf	$198.38	$198,380	LG1
55	6000 sf	$67.19	$403,140	LG2
56A	5000 sf	$20.03	$100,150	LG1
56B	5000 sf	$16.21	$81,050	LG1
56C	5000 sf	$18.16	$90,800	LG1
56D	5000 sf	$17.17	$85,850	LG1
66	5000 sf	$16.21	$81,050	LG1

Residential Land Size Curves



Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
1001	36	Reg
1002	157	Reg
1003	16	Reg
1004	29	Reg
1005	5	Reg
1006	6	Reg
1007	12	Reg
1008	36	Reg
1009	101	Reg
1010	97	Reg
1011	79	Reg
1013	33	Reg
1014	217	Reg
1016	6	Reg
1017	3	Reg
1018	114	Reg
1019	21	Reg
1020	9	Reg
1021	13	Reg
1022	25	Reg
1023	8	Reg
1024	3	Reg
1025	34	Reg
1026	10	Reg
1027	2	Reg
1028	10	Reg
1029	9	Reg
1030	31	Reg
1031	8	Reg
1032	6	Reg
1033	5	Reg
1034	11	Reg
1035	7	Reg
1036	6	Reg
1037	6	Reg
1038	195	Reg
1039	28	Reg
1040	114	Reg
1041	57	Reg
1042	10	Reg
1044	132	Reg
1045	25	Reg
1046	37	Reg
1049	6	Reg
1050	4	Reg
1051	276	Reg
1052	69	Reg
1053	23	Reg
1055	7	Reg
1056	6	Reg
1057	216	Reg
1058	104	Reg
1059	162	Reg
1060	95	Reg
1061	9	Reg
1062	79	Reg
1063	18	Reg
1064	188	Reg
1065	20	Reg
1066	720	Reg
1067	221	Reg
1068	309	Reg
1069	11	Reg
1070	39	Reg
1071	120	Reg
1072	93	Reg
1073	108	Reg
1074	33	Reg
1075	46	Reg
1076	41	Reg
1077	143	Reg
1078	57	Reg
1079	134	Reg
1080	755	Reg
1081	30	Reg
1082	2	Reg
1083	29	Reg
1084	169	Reg
1085	178	Reg
1086	106	Reg
1087	6	Reg
1088	146	Reg
1089	68	Reg
1090	60	Reg
1091	99	Reg
1092	216	Reg
1093	61	Reg
1094	42	Reg
1095	142	Reg
1096	206	Reg
1097	9	Reg
1098	44	Reg
1099	62	Reg
1100	17	Reg
1101	58	Reg
1102	26	Reg
1103	57	Reg
1104	13	Reg
1105	37	Reg
1106	27	Reg
1107	9	Reg
1108	25	Reg
1109	64	Reg
1111	43	Reg
1112	10	Reg
1113	14	Reg
1114	99	Reg
1115	105	Reg
1116	25	Reg
1117	62	Reg
1118	5	Reg
1119	62	Reg
1120	7	Reg
1121	5	Reg
1122	35	Reg
1123	47	Reg
1124	3	Reg
1125	27	Reg
1126	8	Reg
1127	4	Reg
1129	7	Reg
1130	6	Reg
1131	52	Reg
1132	33	Reg
1133	174	Reg
1134	42	Reg
1135	15	Reg
1136	41	Reg
1137	2	Reg
1138	20	Reg
1139	246	Reg
1140	4	Reg
1141	5	Reg
1142	7	Reg
1143	5	Reg
1144	4	Reg
1146	16	Reg
1147	32	Reg
1148	28	Reg
1149	5	Reg
1150	49	Reg

AV Assessor-Valued
Reg Regression

Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
1151	4	Reg
1152	73	Reg
1153	7	Reg
1154	5	Reg
1155	18	Reg
1156	8	Reg
1157	11	Reg
1158	2	Reg
1159	2	Reg
1160	4	Reg
1161	73	Reg
1162	5	Reg
1163	19	Reg
1164	4	Reg
1165	9	Reg
1166	26	Reg
1167	4	Reg
1168	9	Reg
1169	37	Reg
1170	4	Reg
1171	41	Reg
1172	10	Reg
1173	16	Reg
1174	7	Reg
1175	6	Reg
1176	5	Reg
1177	4	Reg
1178	6	Reg
1179	14	Reg
1181	3	Reg
1182	10	Reg
1183	14	Reg
1184	22	Reg
1185	9	Reg
1186	14	Reg
1187	4	Reg
1188	6	Reg
1189	35	Reg
1190	9	Reg
1191	29	Reg
1192	15	Reg
1193	10	Reg
1194	14	Reg
1195	40	Reg
1196	25	Reg
1197	11	Reg
1198	19	Reg

Regime	# Units	Method
1199	18	Reg
1200	20	Reg
1201	15	Reg
1202	4	Reg
1203	2	Reg
1204	2	Reg
1205	2	Reg
1207	9	Reg
1208	27	Reg
1210	247	Reg
1211	142	Reg
1212	36	Reg
1214	36	Reg
1215	12	Reg
1216	38	Reg
1217	34	Reg
1218	12	Reg
1219	27	Reg
1220	59	Reg
1221	50	Reg
1222	4	Reg
1223	8	Reg
1224	8	Reg
1225	3	Reg
1226	30	Reg
1227	28	Reg
1228	32	Reg
1229	19	Reg
1230	22	Reg
1231	10	Reg
1232	34	Reg
1233	59	Reg
1234	57	Reg
1235	4	Reg
1237	8	Reg
1238	24	Reg
1240	6	Reg
1241	30	Reg
1242	31	Reg
1243	68	Reg
1244	7	Reg
1245	12	Reg
1247	24	Reg
1248	2	Reg
1249	2	Reg
1250	36	Reg
1251	8	Reg

Regime	# Units	Method
1253	9	Reg
1254	13	Reg
1255	4	Reg
1256	4	Reg
1257	4	Reg
1259	42	Reg
1260	37	Reg
1261	22	Reg
1262	24	Reg
1263	4	Reg
1264	4	Reg
1265	2	Reg
1266	4	Reg
1267	15	Reg
1268	52	Reg
1269	55	Reg
1270	6	Reg
1271	59	Reg
1272	181	Reg
1273	49	Reg
1274	122	Reg
1275	70	Reg
1276	65	Reg
1277	121	Reg
1278	150	Reg
1279	136	Reg
1280	85	Reg
1281	4	Reg
1282	39	Reg
1283	8	Reg
1285	28	Reg
1286	78	Reg
1287	19	Reg
1288	10	Reg
1289	8	Reg
1290	2	Reg
1291	5	Reg
1292	34	Reg
1293	4	Reg
1294	4	Reg
1295	2	Reg
1296	8	Reg
1297	3	Reg
1298	3	Reg
1299	4	Reg
1300	2	Reg
1301	4	Reg

AV Assessor-Valued
Reg Regression

Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
1302	156	Reg
1303	131	Reg
1304	55	Reg
1308	3	Reg
1309	14	Reg
1310	24	Reg
1311	46	Reg
1312	14	Reg
1313	161	Reg
1314	54	Reg
1315	30	Reg
1317	4	Reg
1318	18	Reg
1319	45	Reg
1320	4	Reg
1475	4	Reg
1476	5	Reg
1477	4	Reg
1478	67	Reg
1479	27	Reg
1480	6	Reg
1481	42	Reg
1482	43	Reg
1483	16	Reg
1484	10	Reg
1485	14	Reg
1486	4	Reg
1487	3	Reg
1488	17	Reg
1490	68	Reg
1492	11	Reg
1493	59	Reg
1494	4	Reg
1495	4	Reg
1496	6	Reg
1497	2	Reg
1498	6	Reg
1499	43	Reg
1500	77	Reg
1501	12	Reg
1502	36	Reg
1503	9	Reg
1505	12	Reg
1506	40	Reg
1507	3	Reg
1508	7	Reg
1509	7	Reg

Regime	# Units	Method
1510	29	AV
1511	4	Reg
1512	4	Reg
1513	8	Reg
1514	8	Reg
1515	11	Reg
1516	32	Reg
1517	29	AV
1518	2	AV
1519	2	AV
1520	76	AV
1521	17	AV
1522	2	AV
1523	8	AV
1524	30	AV
1525	46	AV
1526	9	AV
1527	6	AV
1528	2	AV
1529	3	AV
1531	19	AV
1532	174	Reg
1533	4	Reg
1534	9	AV
1535	31	AV
2000	84	Reg
2001	86	Reg
2002	96	Reg
2003	40	Reg
2004	5	Reg
2005	8	Reg
2006	152	Reg
2007	51	Reg
2008	19	Reg
2009	22	Reg
2010	223	Reg
2012	152	Reg
2013	151	Reg
2014	52	Reg
2015	3	Reg
2016	2	Reg
2017	14	Reg
2018	125	Reg
2019	3	Reg
2020	147	Reg
2021	1	Reg
2022	20	Reg

Regime	# Units	Method
2023	4	Reg
2024	2	Reg
2025	147	Reg
2026	4	Reg
2027	3	Reg
2028	29	Reg
2029	7	Reg
2030	11	Reg
2031	10	Reg
2032	6	Reg
2033	24	Reg
2034	20	Reg
2035	46	Reg
2036	4	Reg
2037	4	Reg
2038	6	Reg
2039	10	Reg
2040	70	Reg
2041	20	Reg
2042	16	Reg
2043	17	Reg
2044	7	Reg
2045	4	Reg
2046	5	Reg
2047	4	Reg
2048	5	Reg
2049	9	Reg
2050	7	Reg
2051	4	Reg
2052	6	Reg
2053	11	Reg
2054	22	Reg
2055	4	Reg
2056	2	Reg
2057	5	Reg
2058	8	Reg
2059	19	Reg
2060	6	Reg
2061	2	Reg
2062	51	Reg
2063	55	Reg
2064	4	Reg
2065	5	Reg
2066	7	Reg
2067	5	Reg
2068	8	Reg
2069	20	Reg

AV Assessor-Valued
Reg Regression

Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
2070	14	Reg
2071	2	Reg
2072	6	Reg
2073	3	Reg
2074	9	Reg
2075	5	Reg
2076	4	Reg
2077	2	Reg
2078	18	Reg
2079	5	Reg
2080	18	Reg
2081	4	Reg
2082	28	Reg
2083	77	Reg
2084	10	Reg
2085	3	Reg
2086	6	Reg
2087	26	Reg
2088	5	Reg
2089	5	Reg
2090	5	Reg
2091	2	Reg
2092	11	Reg
2093	13	Reg
2094	3	Reg
2095	128	Reg
2096	63	Reg
2097	6	Reg
2098	7	Reg
2099	4	Reg
2100	12	Reg
2101	14	Reg
2102	6	Reg
2103	7	Reg
2104	4	Reg
2105	14	Reg
2106	4	Reg
2107	9	Reg
2108	4	Reg
2109	4	Reg
2110	4	Reg
2111	21	Reg
2112	25	Reg
2113	4	Reg
2114	43	Reg
2115	8	Reg
2116	34	Reg
2117	88	Reg
2118	17	Reg
2119	5	Reg
2120	4	Reg
2121	39	Reg
2122	22	Reg
2123	5	Reg
2124	35	Reg
2125	26	Reg
2126	28	Reg
2127	6	Reg
2128	8	Reg
2129	19	Reg
2130	4	Reg
2131	201	Reg
2132	6	Reg
2133	6	Reg
2134	6	Reg
2135	2	Reg
2136	17	Reg
2137	20	Reg
2138	243	Reg
2139	10	Reg
2140	17	Reg
2141	5	Reg
2142	5	Reg
2143	5	Reg
2144	5	Reg
2145	6	Reg
2146	7	Reg
2147	4	Reg
2148	2	Reg
2149	4	Reg
2150	227	Reg
2151	142	Reg
2152	344	Reg
2154	7	Reg
2155	7	Reg
2156	27	Reg
2157	53	Reg
2158	6	Reg
2159	13	Reg
2160	30	Reg
2161	16	Reg
2162	8	Reg
2163	53	Reg
2164	61	Reg
2165	8	Reg
2166	6	Reg
2167	3	Reg
2168	2	AV
2169	22	Reg
2170	2	Reg
2171	40	Reg
2172	11	Reg
2173	169	Reg
2174	15	Reg
2175	24	Reg
2176	47	Reg
2177	22	Reg
2178	6	Reg
2179	49	Reg
2180	130	Reg
2181	57	Reg
2182	6	Reg
2183	10	Reg
2184	18	Reg
2185	10	Reg
2186	21	Reg
2187	7	Reg
2188	8	Reg
2189	4	Reg
2190	11	Reg
2191	4	Reg
2192	4	Reg
2193	27	Reg
2194	9	Reg
2195	10	Reg
2196	7	Reg
2197	14	Reg
2198	4	Reg
2199	9	Reg
2200	8	Reg
2201	5	Reg
2202	4	Reg
2203	15	Reg
2204	10	Reg
2205	3	Reg
2206	15	Reg
2207	4	Reg
2208	7	Reg
2209	3	Reg
2210	4	Reg
2211	39	Reg

AV Assessor-Valued
Reg Regression

Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
2212	181	Reg
2213	4	Reg
2214	5	Reg
2215	51	Reg
2216	13	Reg
2217	27	Reg
2218	5	Reg
2219	8	Reg
2221	12	Reg
2222	3	Reg
2223	16	Reg
2224	6	Reg
2225	22	Reg
2226	191	Reg
2227	172	Reg
2228	4	Reg
2229	4	Reg
2230	20	Reg
2231	6	Reg
2233	14	Reg
2234	6	Reg
2235	16	Reg
2236	6	Reg
2237	7	Reg
2238	7	Reg
2239	7	Reg
2240	27	Reg
2241	4	Reg
2242	1	Reg
2243	4	Reg
2244	3	Reg
2245	27	Reg
2246	16	Reg
2247	173	Reg
2248	3	Reg
2249	9	Reg
2250	9	Reg
2251	5	Reg
2252	8	Reg
2253	192	Reg
2254	4	Reg
2255	169	Reg
2256	35	Reg
2257	33	Reg
2258	72	Reg
2259	2	Reg
2260	39	Reg
2261	4	Reg
2262	5	Reg
2263	3	Reg
2264	2	Reg
2265	497	Reg
2266	2	Reg
2267	2	Reg
2268	2	Reg
2269	2	Reg
2270	2	Reg
2271	2	Reg
2272	2	Reg
2273	64	Reg
2274	32	Reg
2275	455	Reg
2276	2	Reg
2277	9	Reg
2278	4	Reg
2279	324	Reg
2281	102	Reg
2282	424	Reg
2283	7	Reg
2284	86	Reg
2286	26	Reg
2287	27	Reg
2288	2	Reg
2289	28	Reg
2290	30	Reg
2291	99	Reg
2292	7	Reg
2293	5	Reg
2294	30	Reg
2295	8	Reg
2296	6	Reg
2297	46	Reg
2298	30	Reg
2299	14	Reg
2300	28	Reg
2301	12	Reg
2302	14	Reg
2303	48	Reg
2304	5	Reg
2305	6	Reg
2306	11	Reg
2307	17	Reg
2308	7	Reg
2309	13	Reg
2310	23	Reg
2311	9	Reg
2312	8	Reg
2313	24	Reg
2314	7	Reg
2315	4	Reg
2316	4	Reg
2317	15	Reg
2318	24	Reg
2319	2	Reg
2320	17	Reg
2321	15	Reg
2322	8	Reg
2323	2	Reg
2324	9	Reg
2325	12	Reg
2326	9	Reg
2327	5	Reg
2328	44	Reg
2329	18	Reg
2330	4	Reg
2331	6	Reg
2332	6	Reg
2333	9	Reg
2334	4	Reg
2336	35	Reg
2337	14	Reg
2339	26	Reg
2340	38	Reg
2341	4	Reg
2342	15	Reg
2343	33	Reg
2344	8	Reg
2345	2	Reg
2346	5	Reg
2347	24	Reg
2348	20	Reg
2349	9	Reg
2350	9	Reg
2351	6	Reg
2353	4	Reg
2354	16	Reg
2355	2	Reg
2356	2	Reg
2357	4	Reg
2358	12	Reg
2359	3	Reg

AV Assessor-Valued
Reg Regression

Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
2360	18	Reg
2361	20	Reg
2362	18	Reg
2363	4	Reg
2364	4	Reg
2365	4	Reg
2366	28	Reg
2367	7	Reg
2368	15	Reg
2369	18	Reg
2370	4	Reg
2371	7	Reg
2373	10	Reg
2374	6	Reg
2375	6	Reg
2376	2	Reg
2377	4	Reg
2379	16	Reg
2380	78	Reg
2381	54	Reg
2382	351	Reg
2383	12	Reg
2384	51	Reg
2385	32	Reg
2386	77	Reg
2387	232	Reg
2388	51	Reg
2389	9	Reg
2390	70	Reg
2391	11	Reg
2392	11	Reg
2393	5	Reg
2394	6	Reg
2395	16	Reg
2396	400	Reg
2397	28	Reg
2398	4	Reg
2399	2	Reg
2400	19	Reg
2401	43	Reg
2402	34	Reg
2403	5	Reg
2404	13	Reg
2405	13	Reg
2406	8	Reg
2407	183	Reg
2408	32	Reg
2409	8	Reg
2410	132	Reg
2411	79	Reg
2412	25	Reg
2413	34	Reg
2415	97	Reg
2416	57	Reg
2417	9	Reg
2418	58	Reg
2419	12	Reg
2420	7	Reg
2421	249	Reg
2422	200	Reg
2423	1088	Reg
2424	191	Reg
2425	326	Reg
2426	21	Reg
2427	70	Reg
2428	73	Reg
2430	575	Reg
2431	22	Reg
2432	4	Reg
2433	4	Reg
2434	3	Reg
2440	100	Reg
2441	14	Reg
2442	6	Reg
2444	4	Reg
2446	10	Reg
2447	1	Reg
2448	2	Reg
2452	4	Reg
2455	45	Reg
2456	10	Reg
2458	2	Reg
2465	5	Reg
2466	2	Reg
2468	16	Reg
2469	24	Reg
2470	26	Reg
2472	18	Reg
2476	11	Reg
2478	11	Reg
2479	8	Reg
2480	12	Reg
2481	23	Reg
2485	4	Reg
2486	4	Reg
2487	8	AV
2501	2	Reg
2506	156	Reg
2507	3	Reg
2508	5	Reg
2509	2	Reg
2510	2	Reg
2511	2	Reg
2512	13	Reg
2513	19	Reg
2514	12	Reg
2515	104	Reg
2516	34	Reg
2517	5	Reg
2518	2	Reg
2519	30	Reg
2521	10	Reg
2522	2	Reg
2523	4	Reg
2524	12	Reg
2525	12	Reg
2526	28	Reg
2527	7	Reg
2528	2	Reg
2529	10	Reg
2530	3	Reg
2531	5	Reg
2532	4	Reg
2533	8	Reg
2534	16	Reg
2535	12	Reg
2536	6	Reg
2537	10	Reg
2538	150	Reg
2539	4	Reg
2540	8	Reg
2542	6	Reg
2543	2	Reg
2544	2	Reg
2545	4	Reg
2546	7	Reg
2547	2	Reg
2549	2	Reg
2550	2	Reg
2551	6	Reg
2552	4	Reg

AV Assessor-Valued
Reg Regression

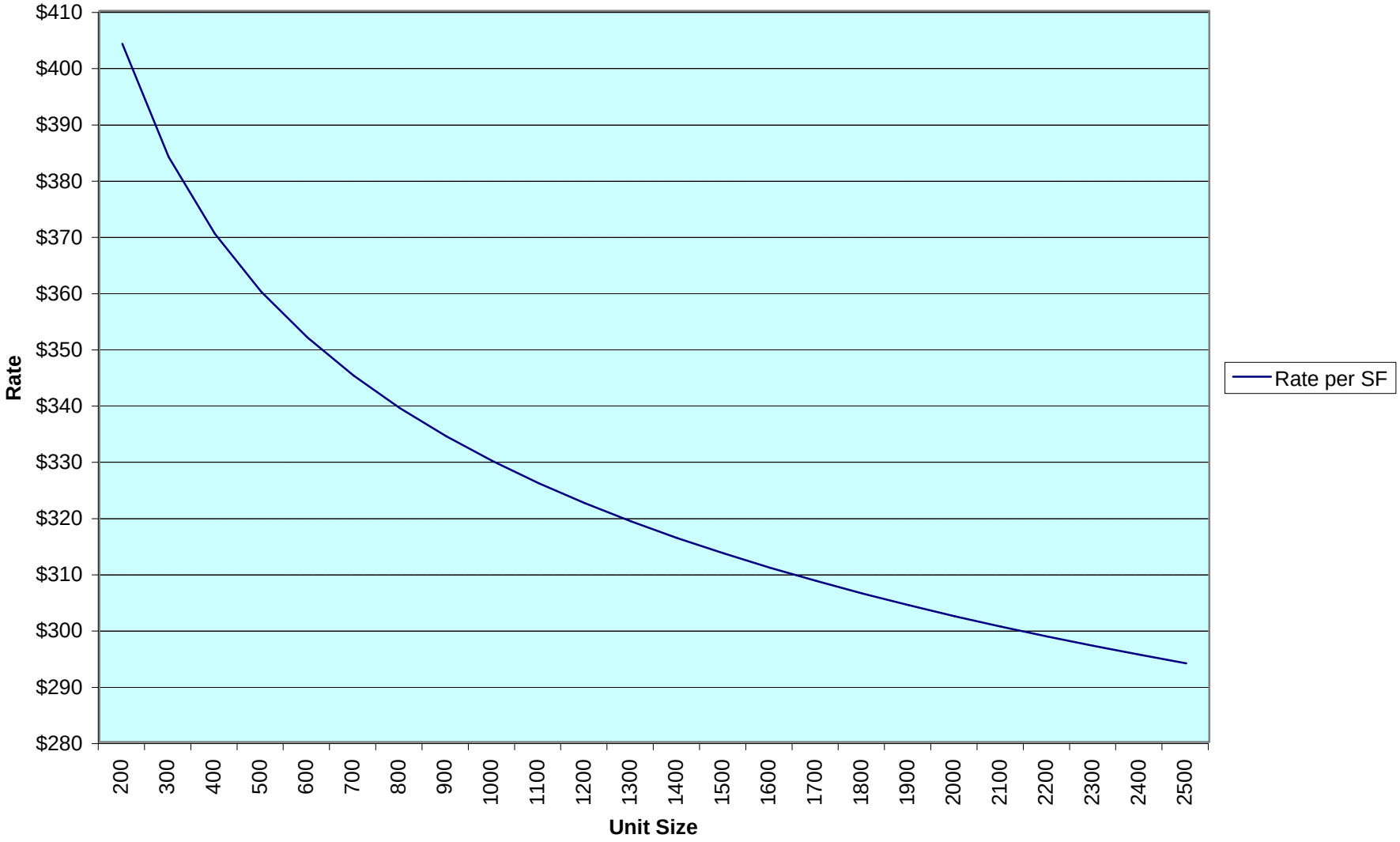
Residential Condominium Regimes – Valuation Method

Regime	# Units	Method
2553	14	Reg
2554	45	Reg
2555	31	Reg
2556	2	Reg
2557	78	Reg
2558	5	Reg
2559	2	Reg
2560	2	Reg
2561	7	Reg
2562	15	Reg
2563	12	Reg
2564	14	Reg
2566	20	Reg
2567	4	Reg
2568	3	Reg
2569	5	Reg
2570	4	Reg
2571	29	Reg
2572	6	AV
2573	14	AV
2574	8	AV
2575	3	AV
2576	33	AV
2577	32	AV
2578	40	AV
2579	4	AV
2580	11	AV
2581	25	AV
2582	4	AV
2583	4	AV
2584	6	AV
2585	6	AV
2586	4	Reg
2587	13	Reg
2588	8	Reg
2589	13	AV
2590	26	AV
2591	3	AV
3001	79	Reg
3002	4	Reg
3003	16	Reg
3004	255	Reg
3005	76	Reg
3006	39	Reg
3007	28	Reg
3008	64	Reg
3009	8	Reg

Regime	# Units	Method
3010	20	Reg
3011	50	Reg
3012	263	Reg
3013	233	Reg
3014	80	Reg
3015	15	Reg
3016	84	Reg
3017	15	Reg
3018	26	Reg
3019	3	Reg
3020	205	Reg
3021	10	Reg
3022	17	Reg
3023	71	Reg
3025	38	Reg
3026	30	Reg
3027	26	Reg
3028	44	Reg
3029	64	Reg
3030	105	Reg
3031	193	Reg
3032	239	Reg
3033	99	Reg
3035	12	Reg
3036	104	Reg
3037	105	Reg
3038	150	Reg
3039	43	Reg
3041	13	Reg
3045	89	Reg
3047	28	Reg
3048	17	Reg
3049	30	Reg
3051	4	AV
3052	8	AV
3054	52	AV
3055	29	AV

AV Assessor-Valued
Reg Regression

Condominium Size Curve



2005 Vision CAMA Residential Valuation Process

The market-derived cost approach to the valuation of real estate follows the generic formula of **Market Value = ((RCN-LD) + land value)**, where **RCN** is Replacement Cost New of the improvements and **LD** means Less Depreciation. When properly developed and calibrated, this approach is a reliable indicator of market value especially suited to mass-appraisal CAMA systems.

The following exercise will attempt to illustrate how the Vision© CAMA system utilized by the District of Columbia, calculates values using the above model. The first portion will illustrate the development of the Replacement Cost New of a typical residence, and the last portion will show the steps involved in determining the amount of depreciation that has accrued to the residence. Land valuation is not discussed in this exercise.

Replacement Cost New

The Vision© CAMA system arrives at a RCN value for residential properties based on a market-calibrated hybrid cost model. The hybrid nature of the model simply means that the model employs both additive and multiplicative variables in its design and specification. The nature of the model will become clearer as we proceed through this exercise. Please also be aware that a model is dynamic in both its specifications and calibration. The specifications, those cost elements that comprise the model, may change from time to time based upon research and market conditions. As you may discover, the dollar rates, or calibrations, contained here most likely are different from the current model in use. The model used in this exercise is as follows:

Building RCN = [(Base Rate + å $ABRV_n$) * Effective Area * Size Adjustment + å $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

Where:
RCN = Replacement Cost New
Base Rate = $ rate based on use code
ABRV = Additive Base Rate Variables
Effective Area = Adjusted SF area of improvement
Size Adjustment = Adjustment factor for deviation from base size
AFRV = Additive Flat Rate Variables
MV = Multiplicative Variables

Several items will be helpful while examining the features of the cost model and they are collected as Appendix “A” of this document. You will need to refer to them often during this exercise. They include the following:

- Sample home’s Property Record Card (PRC)
- Cost.dat printout of the sample home
- 2005 CAMA Residential Construction Valuation Guideline

1. First, let's illustrate the calculation of the Effective Area of our sample home.

Building RCN = [(Base Rate + å ABRV$_n$) * Effective Area * Size Adjustment + å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_n$)

Illustration 1 shows the CAMA sketch of the sample home we'll be using throughout this exercise.

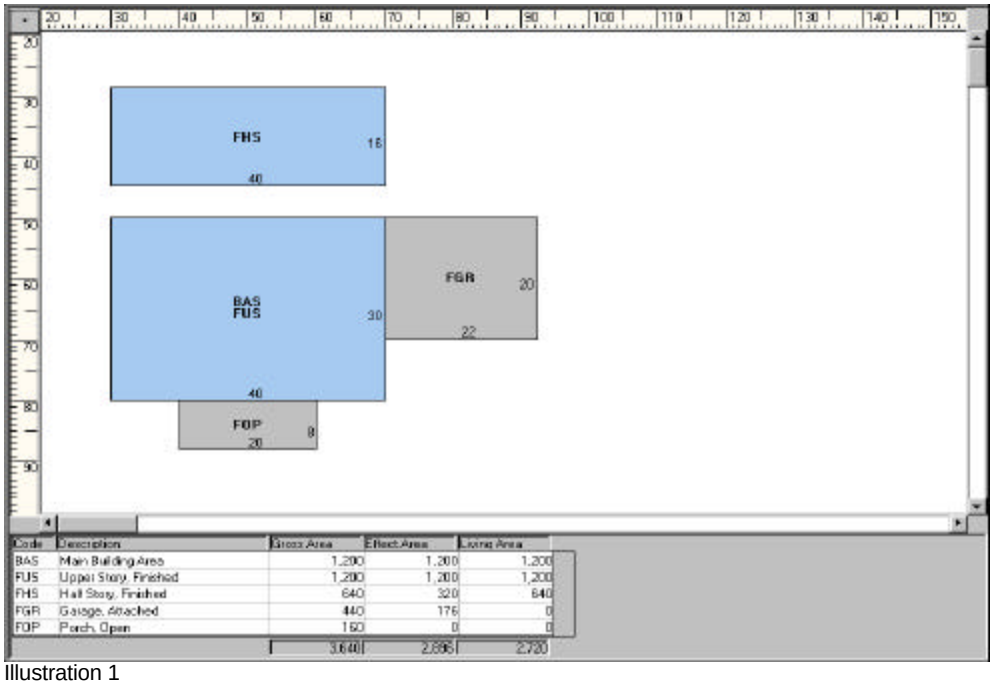


Illustration 1

It is described as a 2½ story single-family detached residence. It is brick veneer, frame construction with a two-car garage and small porch across the front. The bottom of the sketch screen in CAMA provides the information about the sizes of the various areas of the house.

Code	Description	Gross Area	Effect.Area	Living Area
BAS	Main Building Area	1,200	1,200	1,200
FUS	Upper Story, Finished	1,200	1,200	1,200
FHS	Half Story, Finished	640	320	640
FGR	Garage, Attached	440	176	0
FOP	Porch, Open	160	0	0
		3,640	2,896	2,720

Illustration 2

The Effective Area is comprised of the totals of the base area (Main Building Area @ 1,200 SF), the finished second floor area (Upper Story, Finished @ 1,200 SF), the adjusted area of the finished half story (Half Story, Finished @ 50% of 640), and the adjusted area of the garage (Garage @ 40% of 440 SF).

The adjustments to the finished half story and garage take into account these areas are not as expensive as the finished main building area. For example, if

the base rate for the finished main building area is $100/SF, the rate for the garage area may only be $40/SF. The RCN value of the garage would be calculated as follows:

RCN of Garage = $17,600 or (440 SF * $40)

Another way to state the same situation is to adjust the size of the garage to 40% of its measured size and then multiply the resulting, *or effective*, size by the base rate of $100/SF:

RCN of Garage = $17,600 or [(440 * .40) * $100]

Both methods arrive at the same value for the garage. The first method is more intuitive and easier to explain to taxpayers as it adjusts for the differences in costs for the various areas. The second method again provides the same results but is much easier to model and calculate within a CAMA system, thus the effective area calculations shown here represent the methodology employed in the Vision© CAMA system.

The Gross Area shown in Illustration 2 is the total unadjusted size of all the areas that are a part of, and attached to, the home. The Living Area is the unadjusted size of the actual finished living area of the home.

The porch, while attached to the home, is not included in the Effective Area, but is listed as a Special Building Feature and valued separately. See illustration 3 below.

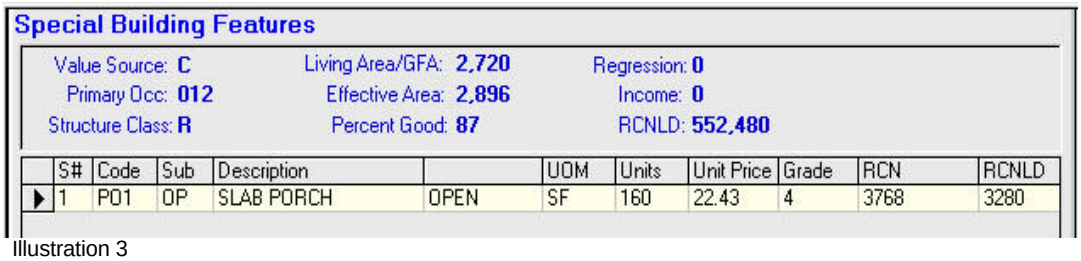


Illustration 3

With the inclusion of the Effective Area calculation, our cost model now looks like this:

Building RCN = [(Base Rate + å $ABRV_n$) * *2,896* * Size Adjustment
Effective Area
+ å $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

2. Next, let's look at the selection of the Base Rate for the sample home.

Building RCN = [(Base Rate + å $ABRV_n$) * Effective Area * Size Adjustment + å $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

The Base Rate is the dollar rate per square foot used in the valuation model that is derived from market analysis and selected based on the Use Code of the building. Our sample home is a "Use Code 012 - Detached", corresponding to a Residential-Detached–Single Family residence. The Base Rate is automatically selected by the CAMA system and the appropriate base rate for the sample home is $ 123.26. Now the cost model looks like this:

Building RCN = [(*$123.26* + å ABRV$_n$) * *2,896* * Size Adjustment
Base Rate **Effective Area**
+ å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_n$)

3. The Base Rate of the home is just the start of the valuation process and it will be further modified as more specific features about the home are taken into consideration. Let's look at the first of two types of modifications that will affect the Base Rate, the Additive Base Rate Variables (ABRV).

Building RCN = [(Base Rate + å ABRV$_n$) * Effective Area * Size Adjustment + å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_n$)

Additive Base Rate Variables represent a variety of features found in residential improvements. For example, the value for air conditioning and floor covering are such features. The typical characteristic of these ABRVs is that the features are usually an integral part, and therefore an integral cost, of the whole house. As such, the value of the particular ABRV is added to the Base Rate. Each ABRV incrementally increases the Base Rate by its own square foot rate. So therefore, the **å ABRV$_n$** literally means the sum of all the rates for individual features are added to the Base Rate.

Highlighted in Illustration 4 are all the fields in the Construction Detail CAMA screen that can modify the selected Base Rate as ABRVs.

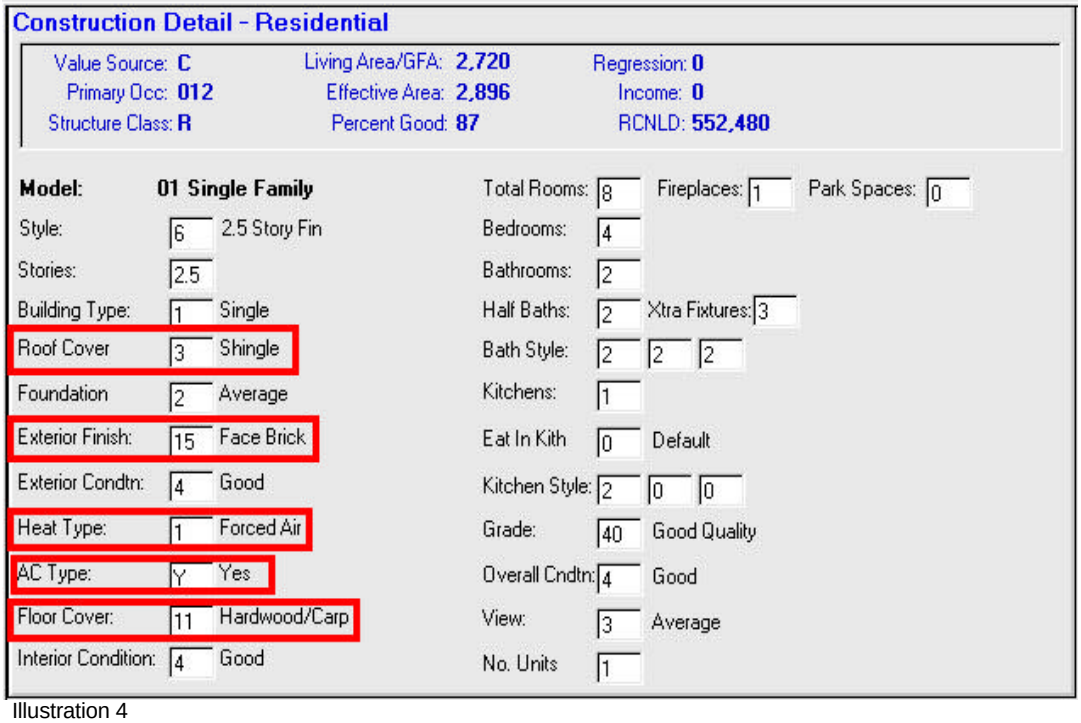


Illustration 4

The Cost.dat sheet of our sample home lists each ABRV under the heading Base Rate Adjustments as follows:

**********Base Rate Adjustments**********
AIR CONDITIONING Y (Yes) = 1.8 + BaseRate
EXTERIOR WALL 15 (Face Brick) = 3.95 + BaseRate
FLOOR COVER 11 (Hardwood/Carp) = 4.67 + BaseRate
ROOF COVER 3 (Shingle) = .68 + BaseRate

The sum, å, is $11.10 (1.80+3.95+4.67+0.68). This will be added to the Base Rate of $123.26 to give a modified Base Rate of $134.36. As with the Base Rate, the value attributed to each variable, and thus each feature, is derived from analysis of the market in the process called model calibration.

Our model now looks like this:

Building RCN = [(*$123.26* + $11.10) * *2,896* * Size Adjustment
Base Rate å ABRV$_n$ Effective Area
+ å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_n$)

4. Next, let us turn our attention to the second type of modification to the Base Rate - the Size Adjustment.

Building RCN = [(Base Rate + å ABRV$_n$) * Effective Area * Size Adjustment + å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_n$)

The Size Adjustment modifies the Base Rate to account for the size difference between the "standard size" for the "typical" house in the model and the actual size of the sample house. The "standard" size of 1,800 SF for the "typical" house, consisting of a 2-story frame residence, is used as the basis for establishing the initial Base Rates used in CAMA. The adjustment in the Base Rate allows the proper square foot rate to be applied to a house based on its size. It is reasonable to expect that as a house becomes larger than typical, the rate per square foot would decrease and conversely, if the house were smaller than typical, the rate would be higher. This Size Adjustment variable is the component in the model that adjusts for this situation. Our sample home's Size Adjustment is 0.96864 as listed on the Cost.dat sheet. Now our Base Rate is calculated to be $130.15 ((123.26+11.10) * 0.96864).

Because the adjustment is less than 1.00, it would be proper to conclude that our sample home is larger than the typical 2-story, frame home in the District of Columbia. Had the sample home been smaller than 1,800 SF, the Size Adjustment would have been greater than 1.00. The use of size adjustments eliminates the need for the traditional cost tables based on size.

The cost model continues to grow, and now looks like this:

Building RCN = [(*$123.26* + *$11.10*) * *2,896* * *0.96864*
Base Rate å $ABRV_n$ Effective Area Size Adjustment
+ å $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

5. We are finished establishing the Base Rate for our sample home and now turn to the Additive Flat Rate Variables (AFRV). This portion of the cost model is relatively straightforward. The individual Additive Flat Rate Variables are summed and the added to the product of the previous calculations.

Building RCN = [(Base Rate + å $ABRV_n$) * Effective Area * Size Adjustment + å $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

Here is where we make allowances for individual extra features contained in the sample house. Illustration 5 shows those features that constitute Additive Flat Rate Variables in the cost model:

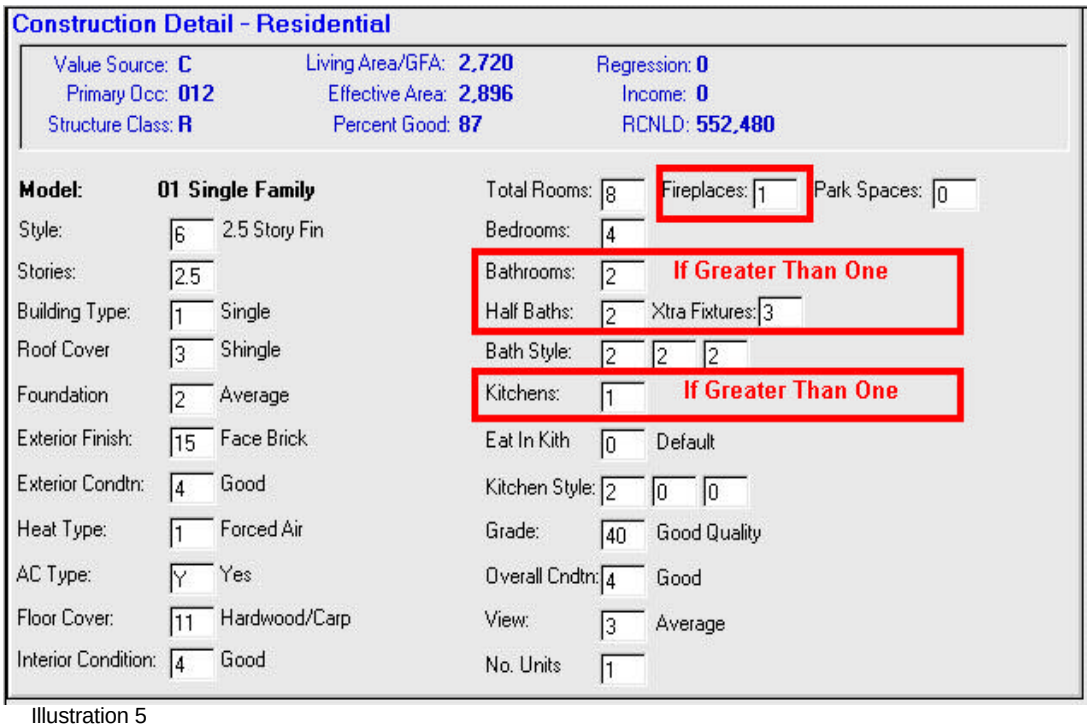


Illustration 5

Unlike the Additive Base Rate Variables (ABRV) described earlier, these features are not an integral portion of the whole house, but stand alone, so to speak. Examples include such items as fireplaces, extra bathrooms, and extra kitchens. Again, as with all other variables in the cost model, the values of these features are derived from market analysis.

Our sample home has several Additive Flat Rate Variables (AFRVs), including additional bathrooms and a fireplace. Always included in the original base rate is the cost for one full bath and one kitchen. Any bathrooms or kitchens over and above the first are accounted for as AFRVs. Illustration 5 shows our sample home also has two half baths. The AFRV for the half baths is $16,000 ($ 8,000 * 2) as shown in a portion of the Cost.dat file below.

```
**********Flat Value Additions**********
        FULL BATHS OVER 1 = 12000 + RCN
        HALF BATHS = 16000 + RCN
        FIREPLACES = 4500 + RCN
```

The sum, å, is $32,500 (12,000+16,000+4500) that will be added to the product of the previous portions of the cost formula.

The cost model is almost finished for our sample home, and now looks like this:

Building RCN = [(*$123.26* + *$11.10*) * *2,896* * *0.96864*
Base Rate å ABRV$_n$ Effective Area Size Adjustment
+ *$32,500*] * (MV$_0$ * MV$_2$ * … * MV$_n$)
å AFRV$_n$

6. The last portion of the cost model used to calculate the RCN are the multiplicative variables (MV).

Building RCN = [(Base Rate + å $ABRV_n$) * Effective Area * Size Adjustment + å $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

This portion of the formula can have the largest influence on the cost model. Each multiplicative variable modifies *all* of the cost data that has preceded it. These variables modify the Base Rate, the sum of all the increases to the Base Rate ($\sum ABRV_n$), the Size Adjustment, and the sum of all the Flat Rate Variables ($\sum AFRV_n$). This is where such important characteristics as the building grade, building condition, remodeling, Neighborhood and Sub Neighborhood factors have their impact.

The sample home is graded “Good Quality - 4”, and consequently has a 1.05 multiplicative variable. This one variable, grade, is going to increase the RCN value of the sample home by 5%. Grade can have a sizable impact on the final value of the building. For example, a "Very Good Quality - 8" increases the final rate by 42% over that of an "Average Quality - 3" house.

The condition of the building is accounted for by the multiplicative variables. The interior, exterior and overall condition of our sample home building is "Good" and the corresponding multiplicative variable is 4.2%. The coefficients for condition are the same for each category and range from -9.2% for "Poor" condition to 9.2% for "Excellent" condition. Illustration "6" shows a portion of the features that constitute the multiplicative variables in the cost model:

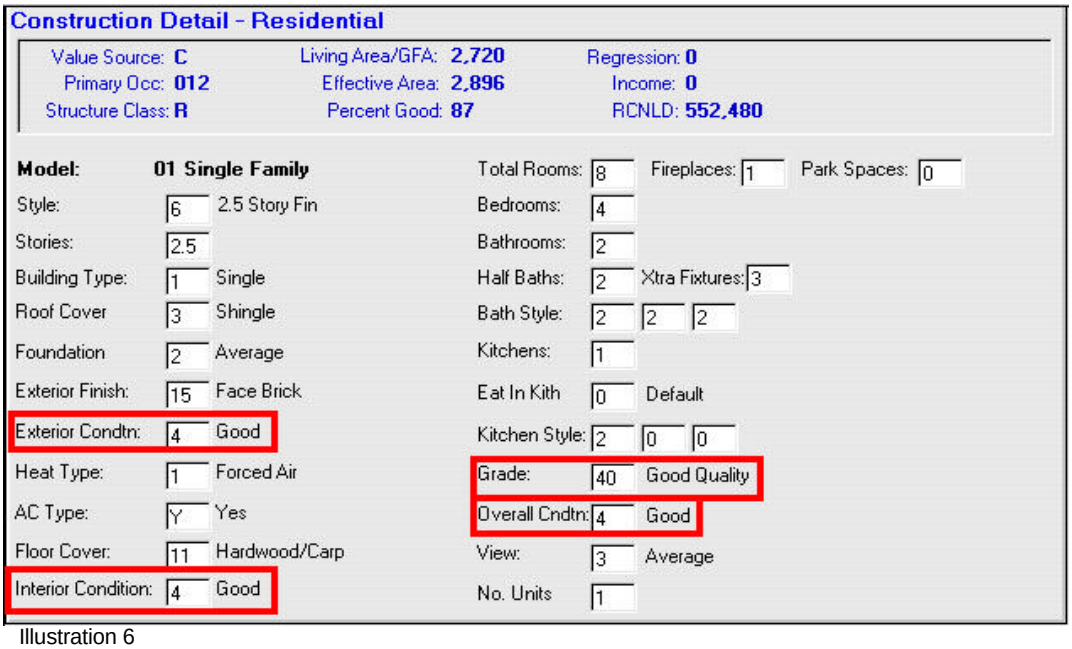


Illustration 6

Another important multiplicative variable, Remodel Type, takes into account whether or not the house has been remodeled and to what extent. In addition,

the age of the remodel factors into the amount of adjustment provided by this multiplicative variable.

Our sample home was remodeled in 2001. The portion of the CAMA record that captures this information is shown in Illustration 7 below.

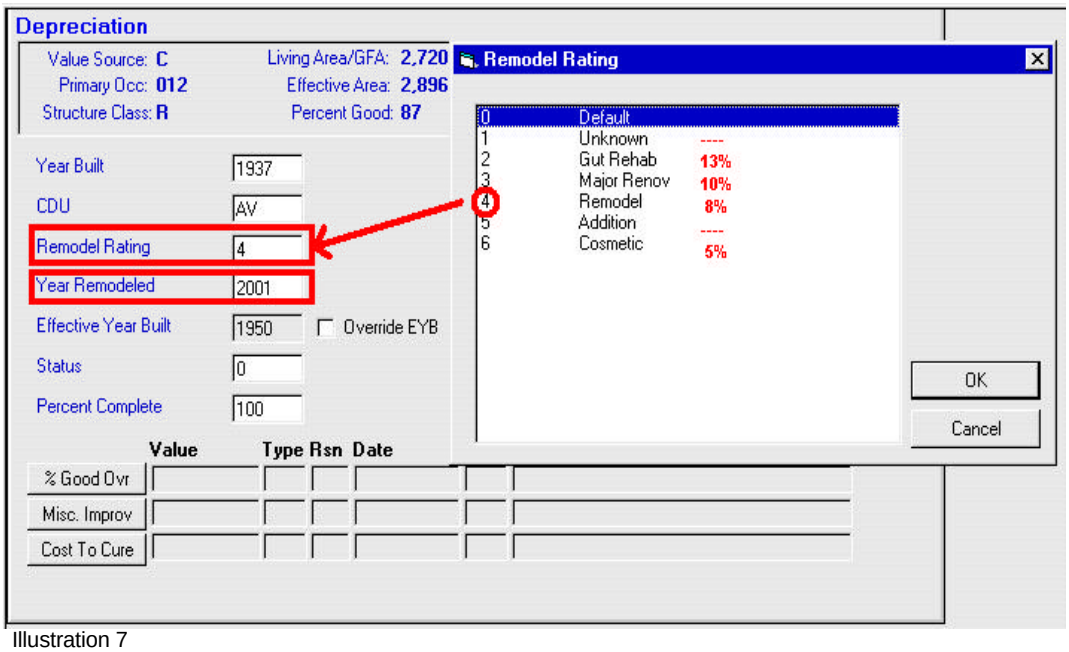


Illustration 7

Obviously, a "Gut Rehab" would increase the value of property more so than just some "Cosmetic" changes and the coefficients listed in the above illustration demonstrate this. Our sample home was remodeled in 2001, indicating that the MV should be eight percent. Eight percent would be the correct amount if the remodel occurred in 2003, but it actually occurred in 2001, two years earlier. The CAMA model takes into consideration how long ago a remodel occurred and reduces the impact, as it becomes older. The rate of reduction of the MV is five percent per year. After twenty years, a remodel has no affect on value. In this example, our sample home's remodel occurred two years ago and thus the MV is reduced by ten percent to 7.2% (8%*.90).

The last multiplicative variable, “Sub-Neighborhood Adj A”, is the local neighborhood multiplier established for the particular neighborhood where the sample home is located. This variable is going to increase the RCN value of the sample home by 21.8%. The “Sub-Neighborhood Adj” reflects the market-derived fact that location is a very significant factor in the value of real estate. Two otherwise identical homes can have a substantial difference in value based on their locations.

The variables for our sample home are summarized in the Cost.dat file as follows:

**********Factor Adjustments**********
OVERALL CONDITION 4 (GOOD) = 1.042 x RCN
EXTERIOR CONDITION 4 (GOOG) = 1.042 x RCN
GRADE 40 (Good Quality) = 1.05 x RCN
INTERIOR CONDITION 4 (GOOD) = 1.042 x RCN
REMODEL FACTOR 4 = 1.072 x RCN
SUB-NEIGHBORHOOD ADJ A = 1.218 x RCN

Each MV is multiplied together to determine the combined, or overall, MV. The sample home's MV is 1.5510811844191 (1.042*1.042*1.05*1.042*1.072*1.218).

7. Finally, the Building RCN model is complete and contains the specific data for the sample home used in this demonstration. The market-derived cost model for the sample home is as follow:

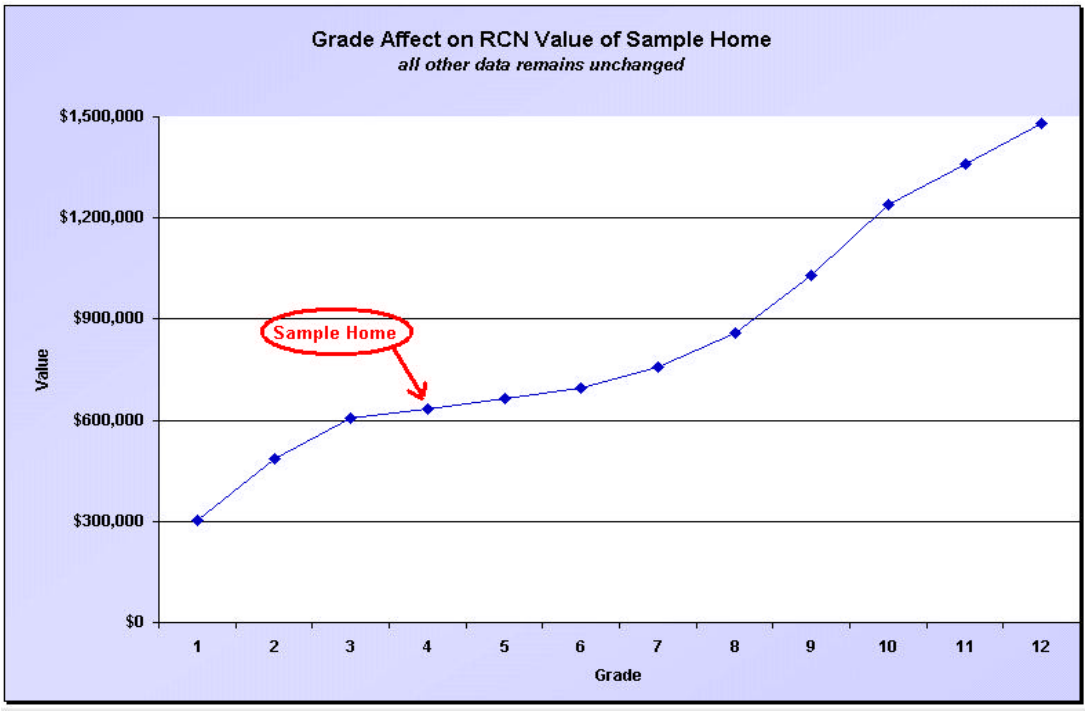
Building RCN = [(Base Rate + å ABRV$_n$) * Effective Area * Size
$ 635,035 = [($123.26 + $11.10) * 2,896 * .96864
Adjustment + å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_n$)
+ $32,500] * (1.55108118441911)

The Cost.dat file shows a summary of the same information.

**********Building #1 Calc Start**********
Cost Calculation for pid, bid = 182803,173587
Account Number = 9999 9999
Use Code = 012
Cost Rate Group = R12
Model ID: R05

Section #
Base Rate: 123.26
Size Adjustment: .96864
Effective Area: 2896
Adjusted Base Rate = (123.26 + 11.1) * .96864
Adjusted Base Rate: 130.50
RCN = ((130.15 * 2896) + 32500) * 1.55108118441911
RCN: 635035

Let's take a moment to show the impact that grade selection has on RCN. Observe the chart below:



The chart illustrates the affect that different grades have on the value of residential property, all other factors remaining equal. For instance, our sample home is a Grade 4 - Good and its RCN is $ 635,035. Had the home been Grade 7 - Very Good, the RCN would be $ 755,994 almost twenty percent higher than the Grade 4 – Good home. The influence of grade on value is derived through the analysis of market sales data.

Back to our sample home. The replacement cost new for our sample home is $635,035. There is still one thing left to address before we turn our attention to depreciation. Recall that the sample home had a small open porch across the front. This item was not costed as a component of the sample home, but rather as a Special Building Feature, with its own unit price of $ 22.43 SF. Also, note that the depreciation applied to the Special Building Features is identical to the amount applied to the main building. See illustration 6 below.

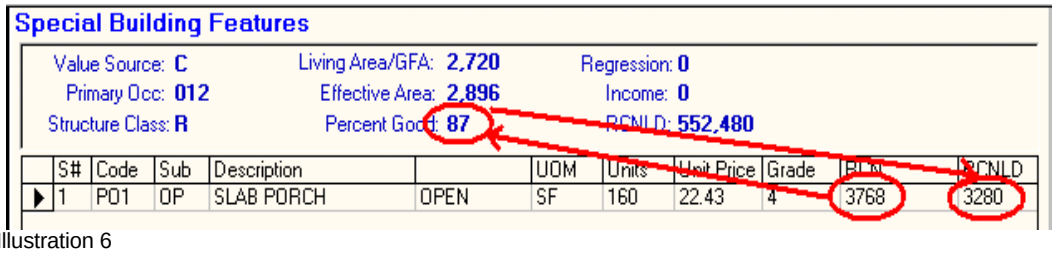


Illustration 6

We now know the total replacement cost new (RCN) of our sample home, including the porch, is $ 638,803 ($635,035 + $3,768).

If the sample home were brand new, we'd be finished, but it was actually built in 1937.

Next, we need to address accrued depreciation . . .

Depreciation

Depreciation is defined as a loss in the upper limits of value from all sources. Typically, three types of depreciation can affect real estate - physical deterioration, functional obsolescence and economic obsolescence. This next portion of the demonstration will illustrate how Vision© calculates the amount of depreciation accrued to our sample home.

Several terms come into use when discussing depreciation in CAMA. They are defined as follows:

- Actual Age: The mathematical difference between the Base Year and the actual year the improvement was built to completion.
- Actual Year Built (AYB): The earliest time the main portion of the building was built. It is not affected by subsequent construction.
- Base Year: The year, usually the current year, that the depreciation table is calibrated, such that the age of a building built during the base year would be 0 years old.
- Depreciation Table: A market-driven table that lists the amount of depreciation corresponding to an Effective Year Built and the Base Year predicated upon a specific economic life.
- Effective Age: The mathematical difference, in years, between the Base Year and the Effective Year Built.
- Effective Year Built (EYB): The calculated or apparent year, that an improvement was built that is most often more recent than AYB. The EYB is determined by the condition and quality of the improvement. Subsequent renovation, additions, upgrades and the like, extend an improvements remaining economic life and therefore cause the EYB to be closer to the Base Year than the AYB.
- Percent Good: The mathematical difference between 100 percent and the percent of depreciation. (100% - depreciation %) = percent good

The RCN model used above indicated that our sample home has an RNC of $638,803. As stated earlier, the home was built in 1937 so there should be some depreciation to deduct from the RCN. We'll uses a five-step process to depreciate improvements:

1. Calculate the Actual Age of the improvement
2. Determine the Effective Age of the improvement
3. Determine the improvement's Effective Year Built
4. Look-up Percent Good corresponding to EYB on depreciation table
5. Apply selected depreciation to RCN to determine RCNLD

1. Our first step is to calculate the Actual Age of our sample home. As you are aware, a valuation is always qualified as of a specific date. For ad valorem purposes in the District of Columbia, the valuation date is January 1 immediately proceeding the tax year. In our example, the tax year is 2005, therefore the valuation date is January 1, 2004. This date is also significant in terms of the depreciation accrued to improvements. In the past, the nature of triennial assessments required that base years within a Tri-Group remain unchanged for a period of three years. Now, however, with the return to annual assessments, the base year coincides with the valuation date. The Base Year is used to determine the Actual Age of the sample home. In this case, the sample home's Actual Age is 67 years (2004-1937).

2. The next step is to determine the sample home's Effective Age. Effective Age may or may not represent actual or chronological age. The premise is simple but the application can be confusing. If a home is built and never maintained (painting, re-roof, etc.) or remodeled, the home would quickly depreciate from physical deterioration. The CAMA system would depreciate the home at the fastest rate possible based on the selected Depreciation Table. For example, CAMA uses a 75-year Economic Life Depreciation Table for residential property. If the home were left to rot, the Effective Age would most likely be the same as the Actual Age.

Let's say the owners of our sample home have completely neglected their property from the time it was built in 1937 to the present. Their home would have an effective age of 67 years as indicated on the Depreciation Table below:

Depreciation Table

Base Year 2004

Effective Age of Building	*% Depr.*	*% Good*	*Effective Year Built*
0	0	100	2004
1	1	99	2003
2	2	98	2002
61	14	86	1943
62	14	86	1942
63	14	86	1941
64	14	86	1940
65	14	86	1939
70	15	85	1934
75	16	84	1929

Illustration 1

The Actual Year Built (1937) and the Effective Year Built (1937) would be the same and consequently the Effective Age is 65 years. Moving across the table, we see that a home with an EYB of 1937 has 14 percent depreciation and

therefore is 86 Percent Good (100%-14%). If the RCN of our sample home is $ 638,803, the depreciated value, RCNLD, is only $ 549,371 (638,803* 0.86).

Note: The depreciation table moves in 5-year periods towards its end; this explains the apparent inconsistencies in 65 years v. 67 years. The Cost.dat file represents the actual numbers used in calculations.

The situation described above rarely, if ever, occurs in the market. People do maintain and renovate their homes and in doing so, extend the home's useful or remaining economic life. As homeowners repair roofs, paint siding, replace windows and furnaces, they *prolong* the life of the home and consequently *decrease* its Effective Age.

Along with the actual age of the sample home, the illustration below shows which variables within CAMA affect the calculation of effective year built.

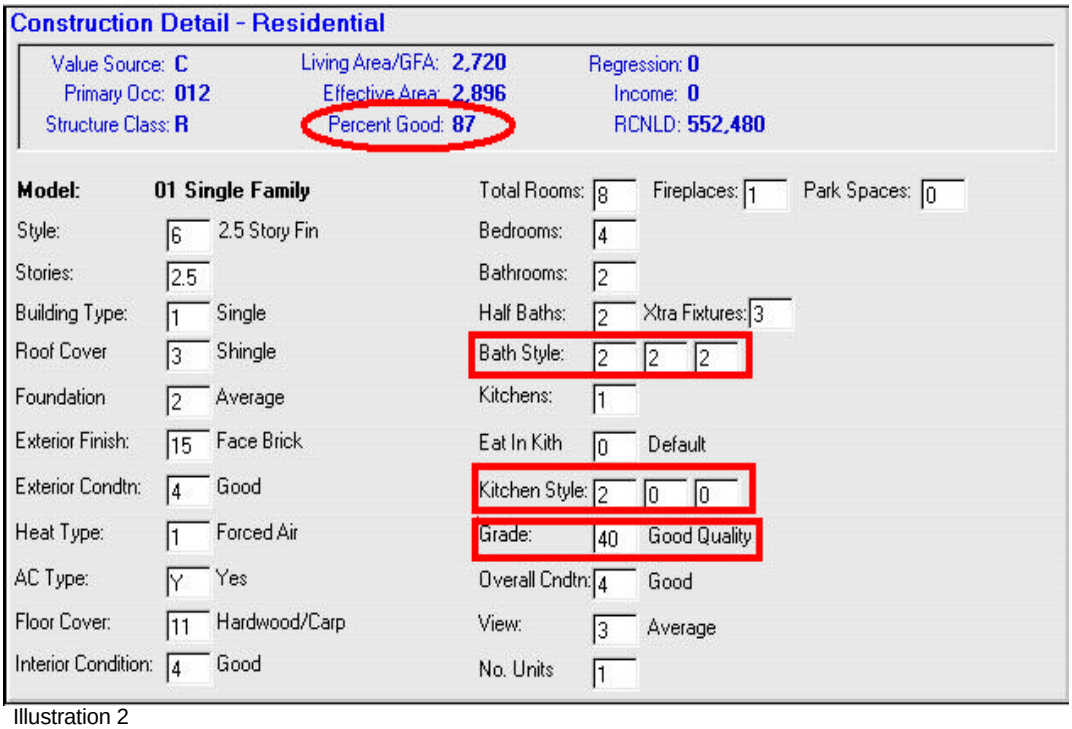


Illustration 2

All of the features or variables dealing with depreciation, highlighted in Illustration 2 are multiplicative variables. As such, they are multiplied one by the other and then the Actual Age is multiplied by the product of the MVs. Below is the portion of the Cost.dat file that summaries these MV for our sample home.

```
**************Effective Age Adjustments***************
      BATH STYLE 2 (Semi-Modern) = .95 * Age
      EFF AGE GRADE 40 (Good Quality) = .95 * Age
      KITCHEN STYLE 2 (Semi-Modern) = .9 * Age
```

The product of each of these MV adjustments is calculated to be 0.81225 (0.95 * * 0.95 * 0.9). This product is then multiplied by the Actual Age to calculate the Effective Age. Recall our sample home's Actual Age is 67 years. The Effective Age is calculated to be 54 years (67 * 0.81225). Instead of CAMA using 67 chronological years to calculated depreciation, it will use 54 years. Below is a portion of the Cost.dat file that shows these calculations.

```
*****************************************************
      Actual Year Built:  1937
      Effective Age = 67 * .81225
      Effective Age:  54
      Percent Good = 87
      RCNLD: 552480
```

3. We're almost finished. Knowing the Effective Age makes the calculation of the Effective Year Built for our sample home very simple. The Effective Year Built is 1950 (2004 – 54).

4. Having established the Effective Year Built, we look up 1950 on the *75 Year Economic Life Depreciation Table* and find that the Percent Good is 87% for that year. See Illustration 3 below.

Depreciation Table

Base Year 2004

Effective Age of Building	*% Depr.*	*% Good*	*Effective Year Built*
0	0	100	2004
1	1	99	2003
2	2	98	2002
3	2	98	2001
4	3	97	2000
51	12	88	1953
52	12	88	1952
53	12	88	1951
54	13	87	1950
55	13	87	1949
56	13	87	1948

Illustration 3

5. The last step in the process is to simply multiple the RCN by 0.87 and we have RCN LD. The depreciated, market-derived cost approach value of the sample home used in this demonstration is $ 552,480.

Some closing comments regarding depreciation are in order. Recall from the outset that we defined depreciation as a loss in value resulting from physical deterioration, functional and/or economic obsolescence. The demonstration above dealt only with depreciation attributed to the physical deterioration of the sample home. This, by far, is the most common type of depreciation that exists in residential property. However, occasions may require additional depreciation because of excessive physical deterioration, functional and/or economic obsolescence. One must use caution when invoking these types of depreciation. The market must support any decision regarding the extent of these adjustments. Below illustrates our sample home with an additional ten percent economic obsolescence. A gas station was built across the street from the home, and a recent sale of the next-door neighbor's house showed the impact of this situation.

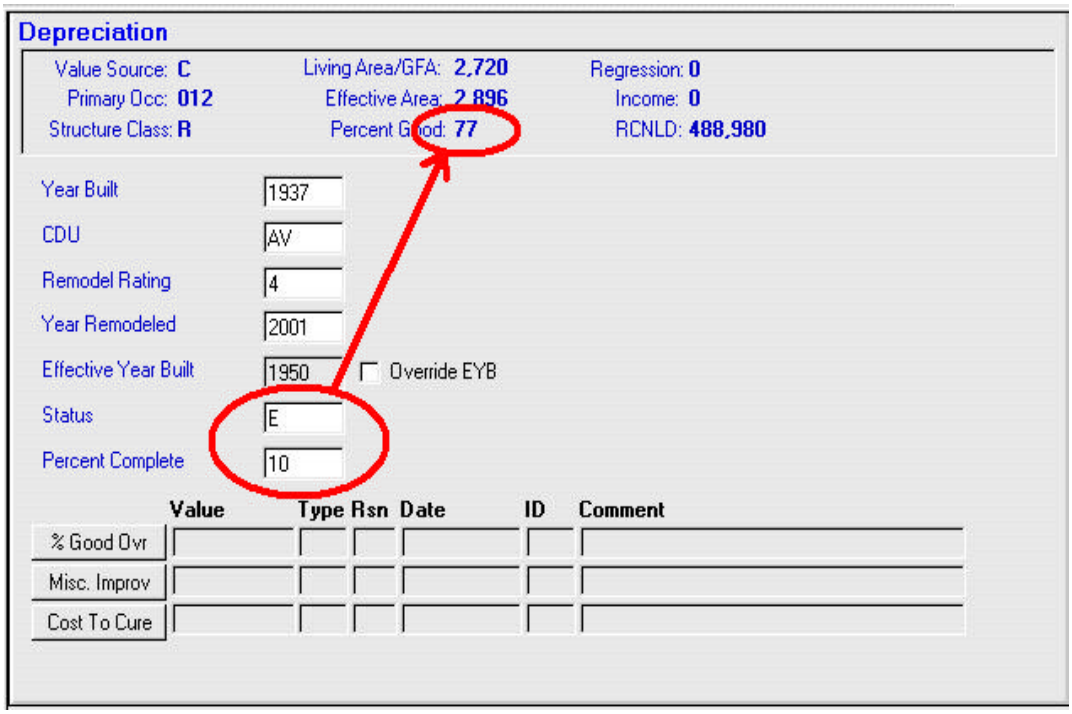


Illustration 4

The actual mechanics of adjusting depreciation for functional or economic obsolescence within CAMA are briefly discussed below. If the situation occurs, seek guidance from your supervisor and/or CAMA manager.

Illustration 5 shows the portion of the CAMA screen used to allow for additional depreciation. It is not necessary to make adjustments in the "CDU" field or to override the EYB field. Nor is it necessary to enter information on the lower 1/3 of the screen. The "Status" and "Percent Complete" fields are the only two fields that are utilized to account for additional depreciation.

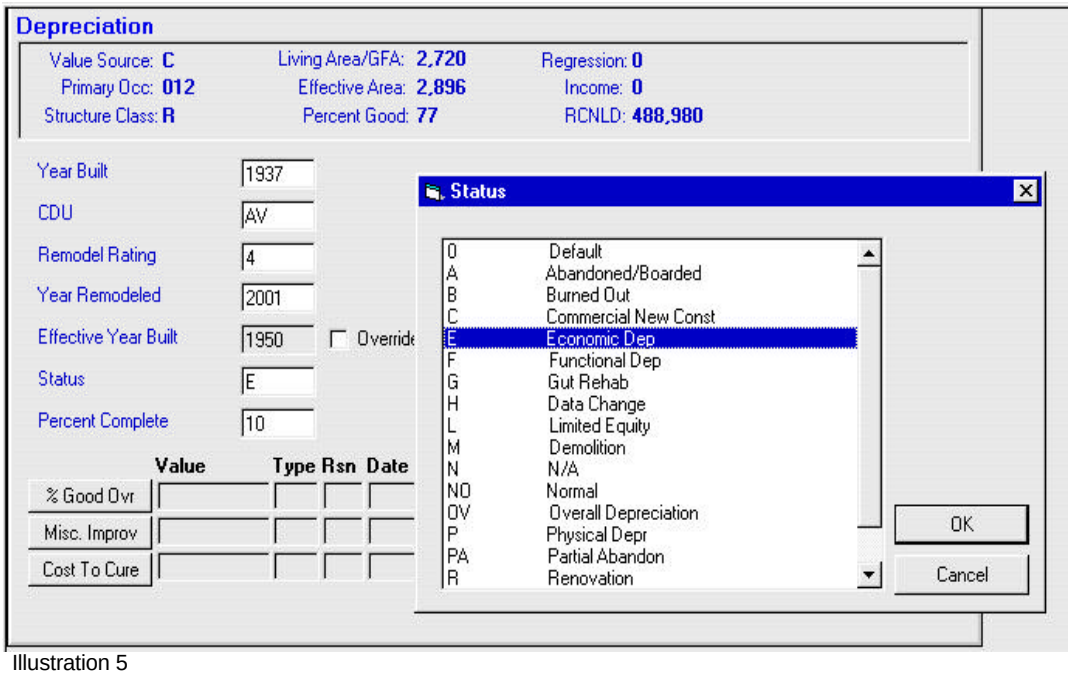


Illustration 5

The “Status” field’s pick-list is expanded in Illustration 6 to show only those types of items that have a direct affect on depreciation and the nature of the affect. Notice that only a limited number of Status Codes are functional within CAMA and their affect on depreciation is either to ***replace*** the existing amount in the “% Good” field or ***decrease*** the “% Good.” The corresponding numeric amount that will affect the “% Good” is entered in the field called “Percent Complete.” Please note that the field name “Percent Complete” is somewhat erroneous because the word “Complete” has no meaning in this context. This is the field that you will enter the amount to either decrease the existing “% Good” or replace the existing “% Good”, based on the Status Code selected.

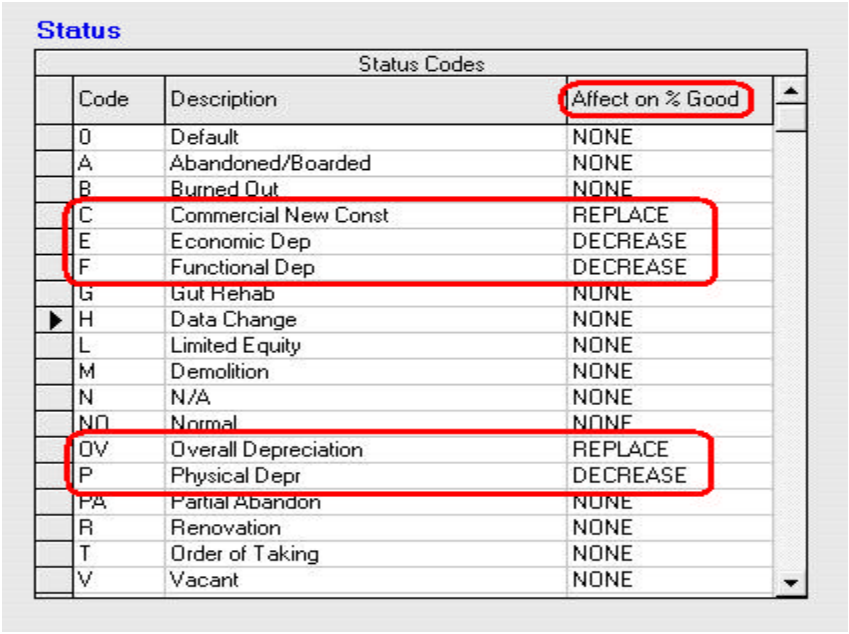


Illustration 6

Recall our example of the gas station. The Percent Complete field has “10” as it’s value. Based on the “E” Status Code, we know that the original depreciation will increase by ten percent resulting in a decrease in Percent Good to 77% (87-10).

Another comment regarding depreciation concerns the impact that the quality of design, material and workmanship have on depreciation. The grade assigned to a home obviously makes a considerable difference in the final RCN, but it also plays a substantial part in determining the amount of depreciation accrued to the home. It is easy to understand that if all other things were equal, a home built with better material and workmanship would age better than one with poorer materials and workmanship. The higher quality the home the more slowly it will deteriorate. Conversely, a shoddily built home will age more quickly than the average home.

Appendix A

1. Property Record Card, SSL 9999 9999
2. Cost.dat print-out, SSL 9999 9999
3. 2005 CAMA Construction Valuation Guideline – Residential

ACCOUNT #: 9999 9999 | Property Location: 9999 9999 ST NW | Batch #:
Internal ID: 182803 | WASHINGTON, DC 99999 | Bldg #: 1 of 1 | Card 1 of 1 | Print Date: 01/28/2004 15:32

CURRENT OWNER

JOSEPH SCHMOH
JANE DOE-SCHMOH
1234 56TH ST

Washington, DC 20000
Additional Owners:

ACCOUNT INFORMATION

Use Type	Use Code	Lot SF	Status Code
R1	012	99,999	0

VISIT/CHANGE HISTORY

Date	ID	Type	Inf. Source	Code	Description
8/8/03	002	C	O	P	Permit Work
7/23/03	002	E	N	P	Permit Work

CURRENT ASSESSMENT

Description	Use	Assessed Value
RESIDNTL	012	555,760
RES LAND	012	221,870
Value Source: C	Total:	777,630

	Value Date	Value Status
Reg	12/30/1899	
Cost	01/27/2004	C

RES

District of Columbia
Real Property
Assessment Division

OWNERSHIP HISTORY

	INSTRUMENT #	SALE DATE	q/u	v/i	SALE PRICE	A.C.
JOSEPH SCHMOH	123456	02/29/2000	Q	I	654,321	01

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Use	Type	Val Source	Land Value	Building Value	Assessed Value
2004	012	R1	O	183,470	439,510	622,980

APPEALS

Appeal #	Decision	Amount	Revised AV

PROPERTY FACTORS

TOPO.	MLT FRONT	ALLEY ACCESS	LANDSCAPE
1 Level	0 Default	2 No	0 Default

TAX TYPE

Year	Type	Description

SUPPLEMENTAL DATA

Type	Description
Base Lot Val	
Neighborhood	
Abbutt Lot	
Part Part	
Dev FAR	
Mixed Use	
Vcnt Lnd Use	12

COMMENTS

PARCEL LOCATION SUMMARY

SSL	NBHD	SUB-NBHD	ZONING	WARD	GROUP	ARN
	9	A				203

VALUE SUMMARY

	Regress (L&B)	Cost (L&B)
	0	777,630

	Factor/Value	Type	Reason	Date	ID
Value Adjust.					
Override					
Comment					

BUILDING PERMIT INFORMATION

Permit ID	Issue Date	Type	Amount	Description	Insp. Date
B654321	04/03/2003	NW	200,000	SFD - Construct a new single family dwelling and two-car gara	08/08/2003
B123456	04/02/2003	RZ	0	SFD - Raze existing building	07/23/2003

DATA ENTRY

Entry Date: _____ **Entry ID:** _____

LAND LINE VALUATION SECTION

B#	Occ	Description	Zone	Frontage	Depth	Units		S.I.	I. Factor	LT	Price	Size Adj	Site Rating		Adjustments/Special Use		Notes	Land Value
1	012	Residential Detached Single Fa				1,500	SF	P	1.00		147.91	0.9608		1.00				221,870
						Total Land Units	1,500	SF									Total Land Value:	221,870

68

ACCOUNT #: 9999 9999 **Property Location:** 9999 9999 ST NW **Batch #:**

Internal ID: 182803 WASHINGTON, DC 99999 **Bldg #:** 1 of 1 **Card** 1 **of** 1 **Print Date:** 01/28/2004 15:32

CONSTRUCTION DETAIL

Element	Cd.	Chng	Description
Occupancy	012		
Model	01		Single Family
Grade	40		Good Quality
Style	6		2.5 Story Fin
Stories	2.5		
Building Type	1		Single
Roof Cover	3		Shingle
Foundation	2		Average
Exterior Wall	15		Face Brick
Exterior Cndtn	4		Good
Heat Type	1		Forced Air
AC	Y		Yes
Floor Cover	11		Hardwood/Carp
Interior Cndtn	4		Good
Total Rooms	8		
Fireplaces	1		
Bedrooms	4		
Full Baths	2		
Half Baths	2		
Extra Fixtures	3		
Bath Style	2		Semi-Modern
Kitchens	1		
Kitchen Style	2		Semi-Modern
Eat-In Kitchen	0		Default
Overall Cndtn	4		Good
View	3		Average
Off Street Parking	0		
No. Units	1		

BUILDING SUMMARY SECTION

Code	Description	Gross	Eff. Area	Living
BAS	Main Building Area	1,200	1,200	1,200
FGR	Garage, Attached	440	176	0
FHS	Half Story, Finished	640	320	320
FOP	Porch, Open	160	0	0
FUS	Upper Story, Finish	1,200	1,200	1,200
	Total:	3,640	2,896	2,720

BUILDING COST

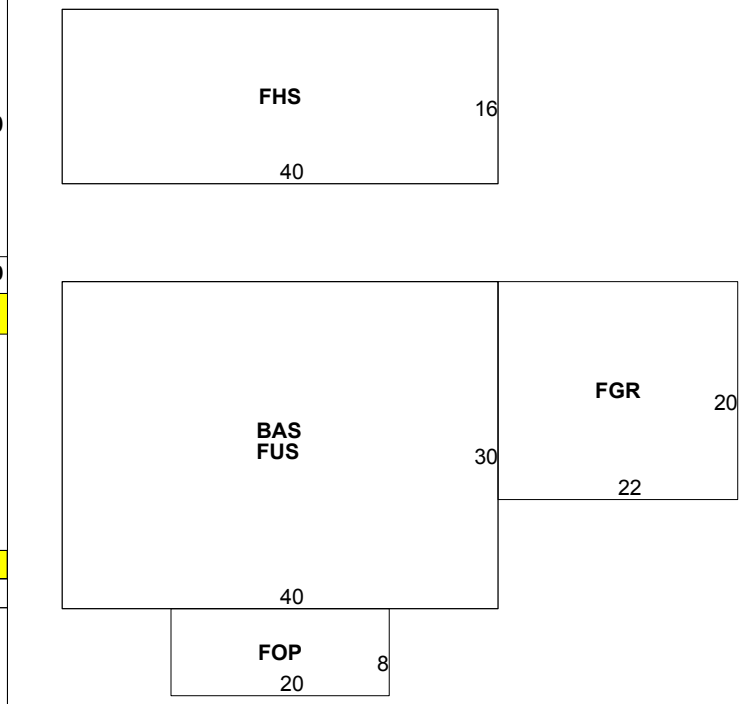
Effective Area	2,896
Building RCN	635,035
Spec.Feature RCN	3,768
Total RCN	638,803
% Good	87
Building Cost	

DEPRECIATION

	Current	Change
Primary OCC	012	
Structure Class	R	
Actual Year Built	1937	
Year Remodeled	2001	
Effective Year Built	1950	
CDU	AV	
Status	0	
% Complete	100	

% GD Override (Cost)	
Type	
Reason	
Date	
ID	
Comment	

SKETCH



SPECIAL FEATURES/AMENITIES

Code	Description	Units	UOM	Unit Price	Grade	RCN
PO1 OP	SLAB PORCH OPEN	160	SF	22.43	4	3,768

DETACHED STRUCTURES

Code	Description	Units	UOM	Unit Price	Grade	Cndtn	RCN	% Gd	Assessed Val

```
OUTPUT FROM STORED PROCEDURE
REPORT GENERATED ON 21-JAN-2004 AT 08:41

**************Building #1 Calc Start******************
Cost Calculation for pid, bid = 182803,173587
Account Number = 9999    9999
Use Code = 012
Cost Rate Group = R12
Model ID: R05

Section #
Base Rate: 123.26
Size Adjustment: .96864
Effective Area: 2896
Adjusted Base Rate = (123.26 + 11.1) * .96864
Adjusted Base Rate: 130.15
RCN = ((130.15 * 2896) + 32500) * 1.55108118441911
RCN: 635035

**************Base Rate Adjustments*******************
AIR CONDITIONING Y (Yes) = 1.8 + BaseRate
EXTERIOR WALL 15 (Face Brick) = 3.95 + BaseRate
FLOOR COVER 11 (Hardwood/Carp) = 4.67 + BaseRate
ROOF COVER 3 (Shingle) = .68 + BaseRate

**************Flat Value Additions********************
FULL BATHS OVER 1 = 12000 + RCN
HALF BATHS = 16000 + RCN
FIREPLACES = 4500 + RCN

**************Factor Adjustments**********************
OVERALL CONDITION 4 (Good) = 1.042 x RCN
EXTERIOR CONDITION 4 (Good) = 1.042 x RCN
GRADE 40 (Good Quality) = 1.05 x RCN
INTERIOR CONDITION 4 (Good) = 1.042 x RCN
REMODEL FACTOR 4 = 1.072 x RCN
SUB-NEIGHBORHOOD ADJ A = 1.218 x RCN

**************Effective Age Adjustments***************
BATH STYLE 2 (Semi-Modern) = .95 * Age
EFF AGE GRADE 40 (Good Quality) = .95 * Age
KITCHEN STYLE 2 (Semi-Modern) = .9 * Age
*************************************************

Actual Year Built:  1937
Effective Age = 67 * .81225
Effective Age:  54
Percent Good = 87
RCNLD: 552480
```

USECODE

(Selects Base Rate)

No.	Description	Value
011	Row	$ 99.86
012	Detached	$123.26
013	Semi-Detached	$102.67
015	Mixed Use	$ 99.86
019	Miscellaneous	$ 99.86
023	Small Apt. Bldg.	$ 57.09
024	Conversion	$104.83
097	Vacant & Aban.	$ 99.86

CONSTRUCTION DETAIL

No.	Description	Value
Style	**(Descriptive)**	
1	1 Story	
2	1.5 Story Unfin	
3	1.5 Story Fin	
4	2 Story	
5	2.5 Story Unfin	
6	2.5 Story Fin	
7	3 Story	
8	3.5 Story Unfin	
9	3.5 Story Fin	
10	4 Story	
11	4.5 Story Unfin	
12	4.5 Story Fin	
13	Bi-Level	
14	Split Level	
94	Outbuildings	
99	Vacant	
Foundation	**(Descriptive)**	
0	No Data	
4	Pier	
5	Wood	
6	Concrete	
View	**(Descriptive)**	
0	Typical	
1	Poor	
2	Fair	
3	Average	
4	Good	
5	Very Good	
6	Excellent	
Building Type	**(Descriptive)**	
0	Default	
1	Single	
2	Multi	
6	Row End	
7	Row Inside	
8	Semi-Detached	
12	Condo	
13	Vacant Land	
14	Condo Garage	
15	Co-op	
Roof	**(Add to Base Rate)**	
0	Typical	
1	Comp Shingle	
2	Built Up	
3	Shingle	$0.68
4	Shake	$0.79
5	Metal-Pre	$0.50
6	Metal Sms	$0.50
7	Metal-Cpr	$0.50
8	Composition Roll	-$0.43
9	Concrete Tile	$1.88
10	Clay Tile	$2.93
11	Slate	$2.86
12	Concrete	$1.88
15	Wood- FS	$0.68
Exterior Finish	**(Add to Base Rate)**	
0	Default	
1	Plywood	
2	Hardboard Lap	
3	Metal Siding	
4	Vinyl Siding	
5	Stucco	
6	Wood Siding	
7	Shingle	
8	SPlaster	
9	Rustic Log	
10	Brick Veneer	$3.95
11	Stone Veneer	$9.38
12	Concrete Block	
13	Stucco Block	
14	Common Brick	$3.95
15	Face Brick	$3.95
16	Adobe	
17	Stone	$9.38
18	Concrete	$3.95
19	Aluminum	
20	Brick/Stone	$6.67
21	Brick/Stucco	$1.98
22	Brick/Siding	$1.98
23	Stone/Stucco	$4.69
24	Stone/Siding	$4.69
Heat Type	**(Add to Base Rate)**	
0	No Data	
1	Forced Air	
2	Air-Oil	$0.55
3	Wall Furnace	-$1.27
4	Electric Rad	-$0.29
5	Elec Base Brd	-$0.20
6	Water Base Brd	$1.42
7	Warm Cool	
8	Ht Pump	
9	Evp Cool	
AC Type	**(Add to Base Rate)**	
0	Default	
N	No	
Y	Yes	$1.80
Floor Covering	**(Add to Base Rate)**	
0	Default	$2.50
1	Resilient	$2.63
2	Carpet	$2.17
3	Wood Floor	$6.06
4	Ceramic Tile	$8.53
5	Terrazzo	$8.30
6	Hardwood	$7.17
7	Parquet	$8.15
8	Vinyl Comp	$1.64
9	Vinyl Sheet	$2.86
10	Lt Concrete	$0.75
11	Hardwood/Carp	$4.67

Per Unit Adjustment (Flat Rate Add)

Full Bath (over 1)	$12,000
Half Bath	$ 8,000
Fireplace	$ 4,500
Kitchen	$ 7,590

Grade (Multiplies Base, Add & Flat)		
0	Default	
10	Fair Quality	-50%
15	Fair Quality	-50%
20	Fair Quality	-20%
25	Fair Quality	
30	Average Quality	
35	Average Quality	5%
40	Average Quality	5%
45	Average Quality	10%
50	Good Quality	10%
55	Good Quality	15%
60	Good Quality	15%
65	Good Quality	25%
70	Very Good Quality	25%
75	Very Good Quality	35%
80	Very Good Quality	42%
85	Very Good Quality	60%
90	Excellent Quality	70%
95	Excellent Quality	95%
A0	Excellent Quality	105%
A5	Excellent Quality	115%
B0	Superior Quality	125%
B5	Superior Quality	135%
C0	Superior Quality	145%

Interior Condition (Multiplies Base, Add & Flat)		
0	Typical	
1	Poor	-9.1%
2	Fair	-9.1%
3	Average	
4	Good	4.2%
5	Very Good	7.7%
6	Excellent	9.1%

Exterior Condition (Multiplies Base, Add & Flat)		
0	Default	
1	Poor	-9.1%
2	Fair	-9.1%
3	Average	
4	Good	4.2%
5	Very Good	7.7%
6	Excellent	9.1%

Overall Condition (Multiplies Base, Add & Flat)		
0	Default	
1	Poor	-9.1%
2	Fair	-9.1%
3	Average	
4	Good	4.2%
5	Very Good	7.7%
6	Excellent	9.1%

Remodel Type (Multiplies Base, Add & Flat)		
0	Default	
1	Unknown	
2	Gut Rehab	13%
3	Major Renovation	10%
4	Remodel	8%
5	Addition	
6	Cosmetic	5%

The effect of this multiplier diminishes at a rate of 5% per year based on the ***Remodel Year***.

DEPRECIATION DETAIL

No.	Description	Value
Grade	**(Adjust EYB)**	
0	Default	
10	Fair Quality	20%
15	Fair Quality	20%
20	Fair Quality	10%
25	Fair Quality	--
30	Average Quality	--
35	Average Quality	-05%
40	Average Quality	-05%
45	Average Quality	-10%
50	Good Quality	-10%
55	Good Quality	-15%
60	Good Quality	-15%
65	Good Quality	-25%
70	Very Good Quality	-25%
75	Very Good Quality	-35%
80	Very Good Quality	-35%
85	Very Good Quality	-45%
90	Excellent Quality	-45%
95	Excellent Quality	-50%
A0	Excellent Quality	-50%
A5	Excellent Quality	-50%
B0	Superior Quality	-50%
B5	Superior Quality	-50%
C0	Superior Quality	-50%
Bath Style	**(Adjust EYB)**	
0	Default	
1	No Remodeling	
2	Semi-Modern	- 05%
3	Modern	- 10%
Kitchen Style	**(Adjust EYB)**	
0	Default	
1	No Remodeling	
2	Semi-Modern	- 10%
3	Modern	- 20%
4	Luxury	- 40%

Building RCN = [(Base Rate + å ABRV$_n$) * Effective Area * Size Adjustment + å AFRV$_n$] * (MV$_0$ * MV$_2$ * … * MV$_N$)

Where:

RCN = Replacement Cost New
Base Rate = $ rate based on use and style
ABRV = Additive Base Rate Variables
Effective Area = Adjusted SF area of improvement
Size Adjustment = Adjustment factor for deviation from base size
AFRV = Additive Flat Rate Variables
MV = Multiplicative Variables

Depreciation Table

Base Year 2004

Effective Age of Building	*% Depr.*	*% Good*	*Effective Year Built*
0	0	100	2004
1	1	99	2003
2	2	98	2002
3	2	98	2001
4	3	97	2000
5	3	97	1999
6	4	96	1998
7	4	96	1997
8	4	96	1996
9	4	96	1995
10	5	95	1994
11	5	95	1993
12	5	95	1992
13	5	95	1991
14	6	94	1990
15	6	94	1989
16	6	94	1988
17	6	94	1987
18	6	94	1986
19	7	93	1985
20	7	93	1984
21	7	93	1983
22	7	93	1982
23	7	93	1981
24	8	92	1980
25	8	92	1979
26	8	92	1978
27	8	92	1977
28	8	92	1976
29	9	91	1975
30	9	91	1974
31	9	91	1973
32	9	91	1972
33	9	91	1971
34	9	91	1970
35	10	90	1969
36	10	90	1968
37	10	90	1967
38	10	90	1966
39	10	90	1965
40	10	90	1964
41	11	89	1963
42	11	89	1962
43	11	89	1961
44	11	89	1960
45	11	89	1959
46	11	89	1958
47	11	89	1957
48	12	88	1956
49	12	88	1955
50	12	88	1954
51	12	88	1953
52	12	88	1952
53	12	88	1951
54	13	87	1950
55	13	87	1949
56	13	87	1948
57	13	87	1947
58	13	87	1946
59	13	87	1945
60	14	86	1944
61	14	86	1943
62	14	86	1942
63	14	86	1941
64	14	86	1940
65	14	86	1939
70	15	85	1934
75	16	84	1929

2005 Vision Commercial CAMA Valuation Process

The market-derived cost approach to the valuation of real estate follows the generic formula of **Market Value = ((RCN LD) + land value)**, where **RCN** is Replacement Cost New of the improvements and **LD** means Less Depreciation. When properly developed and calibrated, this approach is a reliable indicator of market value especially suited to mass-appraisal CAMA systems.

The following exercise will attempt to illustrate how the Vision© CAMA system utilized by the District of Columbia, calculates values using the above model. The first portion will illustrate the development of the Replacement Cost New of a small commercial building, and the last portion will show the steps involved in determining the amount of depreciation that has accrued to the building. Land valuation is not discussed in this exercise.

Replacement Cost New

The Vision© CAMA system arrives at a RCN value for commercial properties based on a market-calibrated hybrid cost model. The hybrid nature of the model simply means that the model employs both additive and multiplicative variables in its design and specification. The nature of the model will become clearer as we proceed through this exercise. Please also be aware that a model is dynamic in both its specifications and calibration. The specifications, those cost elements that comprise the model, may change from time to time based upon research and market conditions. As you may discover, the dollar rates, or calibrations, contained here most likely are different from the current model in use. The model used in this exercise is as follows:

$$\text{Building RCN} = [\text{Section}_1\ (\text{Base Rate} * \text{Effective Area} * \text{Size Adjustment}) * (MV_1 * MV_2 * \ldots * MV_n)] + [\text{Section}_n\ (\text{Base Rate} * \text{Effective Area} * \text{Size Adjustment}) * (MV_1 * MV_2 * \ldots * MV_n)] + [?\text{Special Building Features}]$$

Where:
RCN = Replacement Cost New
Base Rate = $ rate based on occupancy (use) code and construction class
Section_n = Each separate building or section of building
Effective Area = Adjusted SF area of improvement
Size Adjustment = Adjustment factor for deviation from base size
MV = Multiplicative Variables

Several items will be helpful while examining the features of the cost model and they are collected as Appendix “A” of this document. You will need to refer to them often during this exercise. They include the following:

- Sample building’s Property Record Card (PRC)
- Cost.dat printout of the sample building
- Depreciation Schedule
- 2005 CAMA Construction Valuation Guideline – Commercial

The commercial building designed for this exercise is typical of a small commercial property in the District. It consists of a one-story full service restaurant and an adjoining two-story building. The two-story section consists of a package goods store and a small apartment on the second floor. The building is of good quality and is constructed of brick veneer over concrete block. For this exercise, the building has been logically sectioned into two sections. Section 1 covers the restaurant and Section 2 covers the package goods/apartment portion.

Below shows the Construction Detail in the CAMA record of the building. The first illustration depicts Section 1 – the restaurant and the second represents Section 2 – the package goods store and apartment.

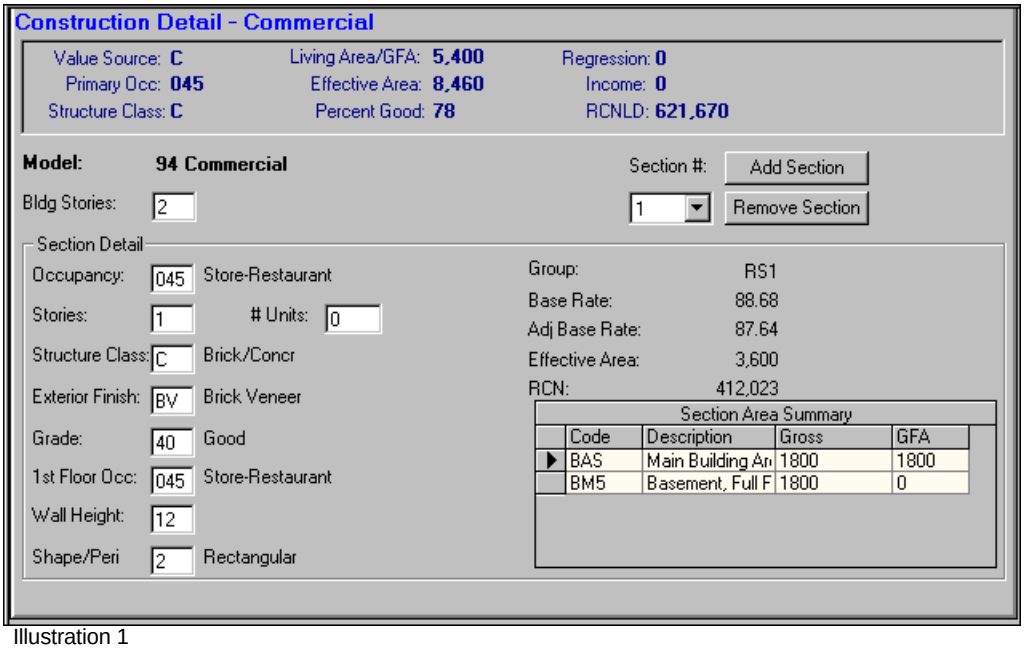


Illustration 1

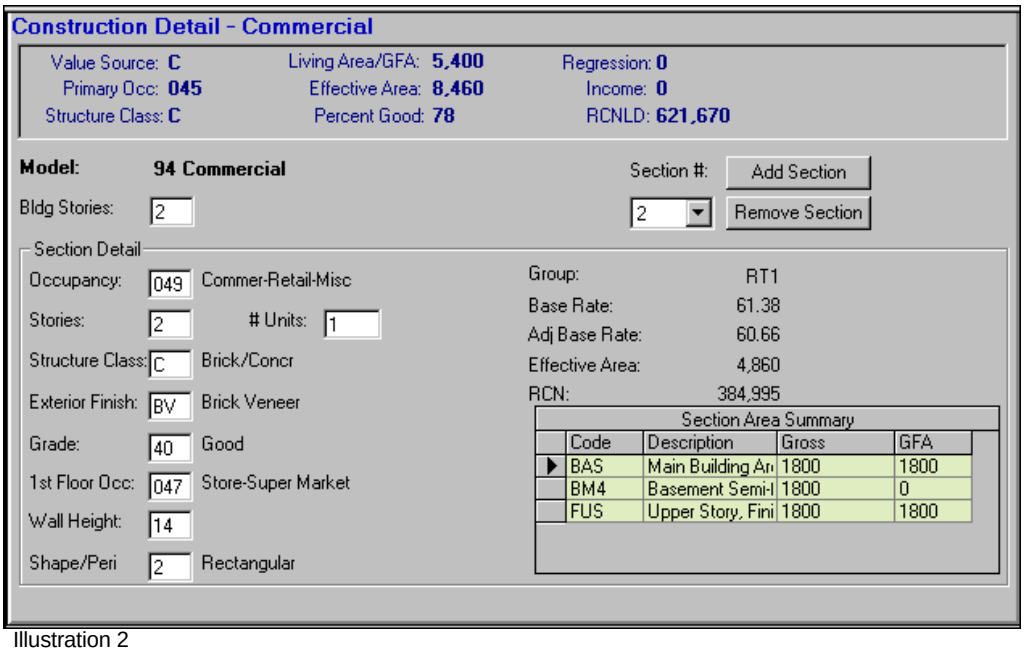


Illustration 2

Illustration 3 shows the CAMA sketch of the sample building we'll be using throughout this exercise.

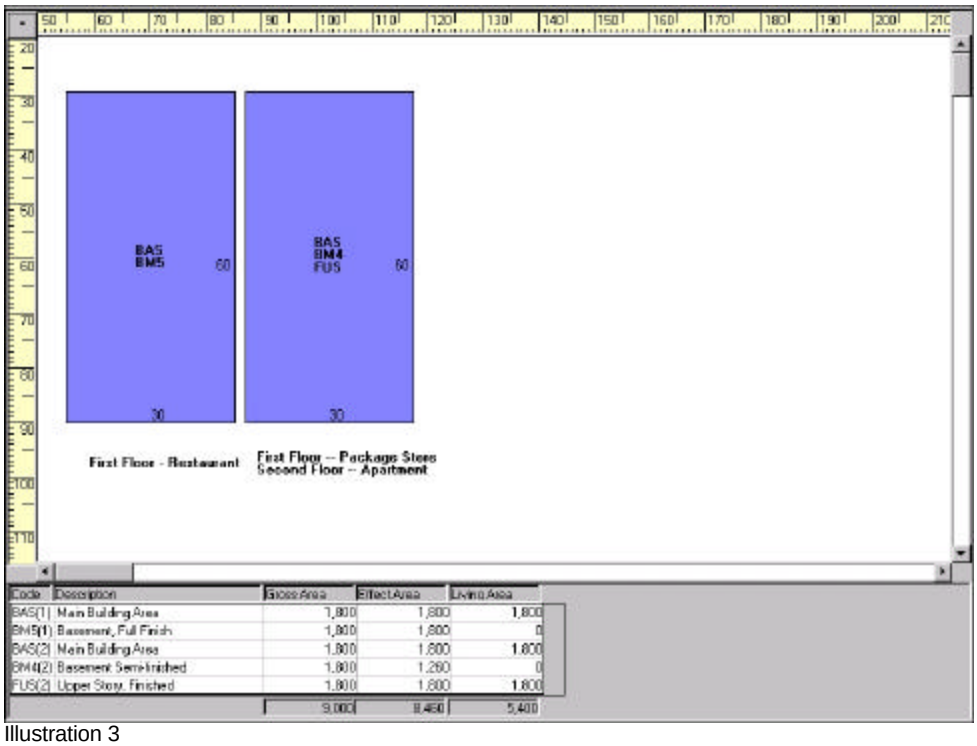


Illustration 3

The bottom of the sketch screen in CAMA provides the information about the sizes of the different areas that comprise the two sections of the building. Each section is denoted as (1) or (2) under the Code column.

Code	Description	Gross Area	Effect.Area	Living Area
BAS(1)	Main Building Area	1,800	1,800	1,800
BM5(1)	Basement, Full Finish	1,800	1,800	0
BAS(2)	Main Building Area	1,800	1,800	1,800
BM4(2)	Basement Semi-finished	1,800	1,260	0
FUS(2)	Upper Story, Finished	1,800	1,800	1,800
		9,000	8,460	5,400

Illustration 4

1. First, let's illustrate the calculation of the Effective Area of our sample building's first section, the restaurant.

Building RCN = [Section$_1$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] + [Section$_n$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] + [?Special Building Features]

Code	Description	Gross Area	Effect.Area	Living Area
BAS(1)	Main Building Area	1,800	1,800	1,800
BM5(1)	Basement, Full Finish	1,800	1,800	0
BAS(2)	Main Building Area	1,800	1,800	1,800
BM4(2)	Basement Semi-finished	1,800	1,260	0
FUS(2)	Upper Story, Finished	1,800	1,800	1,800
		9,000	8,460	5,400

Illustration 5

The Effective Area is comprised of the totals of the Bas(1) Main Building Area @ 1,800 SF and the BM5(1) Basement, Full Finish @ 1,800 SF for a total of 3,600 SF.

The second section's Effective Area is calculated in the same manner.

Code	Description	Gross Area	Effect.Area	Living Area
BAS(1)	Main Building Area	1,800	1,800	1,800
BM5(1)	Basement, Full Finish	1,800	1,800	0
BAS(2)	Main Building Area	1,800	1,800	1,800
BM4(2)	Basement Semi-finished	1,800	1,260	0
FUS(2)	Upper Story, Finished	1,800	1,800	1,800
		9,000	8,460	5,400

Illustration 6

BAS(2) Main Building Area, BM4 (2)Basement Semi-finished, and FUS (2) Upper Story, Finished total 4,860 SF. The adjustment to the semi-finished basement takes into account this area is not as expensive as the finished main building area. For example, if the base rate for the finished main building area is $100/SF, the rate for the semi-finished basement area may only be $70/SF. The RCN value of the basement would be calculated as follows:

RCN of Basement = $126,000 or (1800 SF * $70)

Another way to state the same situation is to adjust the size of the basement to 70% of its measured size and then multiply the resulting, *or effective*, size by the base rate of $100/SF:

RCN of Basement = $126,000 or [(1800 * .70) * $100]

Both methods arrive at the same value for the basement. The first method is more intuitive and easier to explain to taxpayers as it adjusts for the differences in costs for the various areas. The second method again provides the same results but is much easier to model and calculate within a CAMA system, thus the effective area calculations shown here represent the methodology employed in the Vision© CAMA system.

The Gross Area shown in Illustration 2 is the total unadjusted size of all the areas that are a part of the building. The Living Area is more properly called "Gross Floor Area" and is the unadjusted size of the actual finished floor area above grade in the building.

With the inclusion of the Effective Area calculation, our cost model now looks like this:

Building RCN = [Section$_1$ (Base Rate * 3600 * Size Adjustment) *
Effective Area
(MV_0 * MV_2 * … * MV_n)] +
[Section$_n$ (Base Rate * 4860 * Size Adjustment) *
Effective Area
(MV_0 * MV_2 * … * MV_n)] +
[?Special Building Features]

2. Next, let's look at the selection of the Base Rate for the sample building. There will be two rates because there are two different sections. Each section's RCN will be independently calculated.

Building RCN = [Section$_1$ (Base Rate * Effective Area * Size Adjustment) *
(MV_0 * MV_2 * … * MV_n)] +
[Section$_n$ (Base Rate * Effective Area * Size Adjustment) *
(MV_0 * MV_2 * … * MV_n)] +
[?Special Building Features]

The Base Rate is the dollar rate per square foot used in the valuation model that is derived from tables within the CAMA system. It is selected based on the building's Building Occupancy (Use) Code and Construction Class. Our sample's first section is a "45-Store-Restaurant" constructed as a Class "C", concrete block/brick building. Based on this information, the Base Rate of $ 88.68 is automatically selected.

The second section, "49-Commercial Retail-Misc.", also constructed as a Class "C", concrete block/brick building, has a Base Rate of $61.38.

With the inclusion of the selected Base Rates, our model now looks like this:

Building RCN = [Section$_1$ ($88.68 * 3600 * Size Adjustment) *
Base Rate Effective Area
(MV_0 * MV_2 * … * MV_n)] +
[Section$_n$ ($61.38 * 4860 * Size Adjustment) *
Base Rate Effective Area
(MV_0 * MV_2 * … * MV_n)] +
[?Special Building Features]

3. Next, let us turn our attention to a modification to the Base Rate - the Size Adjustment.

Building RCN = [Section$_1$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] + [Section$_n$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] + [?Special Building Features]

The Size Adjustment modifies the Base Rate to account for the size difference between the "standard size" for the "typical" building of a particular occupancy type and the actual size of the sample building. The comparison is based on the building's "gross floor area." The "standard" size of 5,000 square feet for the "typical" restaurant is used as the basis for establishing the initial Base Rates used in Section 1 of this appraisal. The "standard" size of 4,000 square feet for the "typical" retail-misc. is used as the basis for establishing the initial Base Rates used in Section 2.

The adjustment in the Base Rate allows the proper square foot rate to be applied to a building based on its size. It is reasonable to expect that as a building becomes larger than typical, the rate per square foot would decrease and conversely, if the building were smaller than typical, the rate would be higher. The Size Adjustment variable is the component in the model that adjusts for this situation. Our sample building's size, the "gross floor area," is the total area of both sections, 5,400 square feet. Our building is only slightly larger than the standard size of 5,000 square feet. The Size Adjustment is 0.98825. Now our Adjusted Base Rate is calculated to be \$87.64(88.68 * 0.98825) for Section 1 and \$ 60.66 (61.38 * 0.98825) for Section 2 of our example.

Because the adjustment is less than 1.00, it would be proper to conclude that our sample building is larger than the typical building of its type in the District of Columbia. Our sample building was compared to the larger of the two "standard" sizes, 5,000 square feet. Had the sample building been smaller than 5,000 square feet, the Size Adjustment would have been greater than 1.00. The use of size adjustments eliminates the need for the traditional cost tables based on size.

The cost model continues to grow, and now looks like this:

Building RCN = [Section$_1$ (\$88.68 * 3600 * 0.98825) * (MV_0 * MV_2 * … * MV_n)] + [Section$_n$ (\$61.38 * 4860 * 0.98825) * (MV_0 * MV_2 * … * MV_n)] + [?Special Building Features]

Base Rate Effective Area Size Adjustment

Base Rate Effective Area Size Adjustment

4. The next portion of the cost model used to calculate the RCN are the multiplicative variables (MV).

Building RCN = [Section$_1$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] +
[Section$_n$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] +
[?Special Building Features]

This portion of the formula can have the largest influence on the cost model. Each multiplicative variable modifies *all* of the cost data that has preceded it. These variables modify the Base Rate and Size Adjustment. This is where such important characteristics as the building grade, local cost multipliers, Neighborhood and Sub Neighborhood factors have their impact.

The sample building is graded "Good Quality - 4", and consequently has a 1.12 multiplicative variable. This one variable, grade, is going to increase the RCN value of the sample building by 12%. It can not be stated often enough, grading, along with proper effective area, are extremely significant in terms of accurate appraisals. Another MV, "DC Local Multiplier C" modifies costs to account for the small additional costs incurred in construction of "C" class buildings in the in the DC area. The other multiplicative variable, "COMM NBHD 9", is the local neighborhood multiplier established for the particular neighborhood where the sample building is located. This variable is going to increase the RCN value of the sample building by 10%. The "COMM NBHD" adjustment reflects the market-derived fact that location is a very significant factor in the value of real estate. Two otherwise identical buildings can have a substantial difference in value based on their locations.

These three variables are summarized in the Cost.dat file as follows:

****************Factor Adjustments************************
GRADE 40 (Good) = 1.12 x RCN
DC LOCAL MULTIPLIER C = 1.06 x RCN
COMM NBHD 9 = 1.1 x RCN

Each MV is multiplied together to determine the combined, or overall, MV. The sample building's MV is 1.30592 (1.12 * 1.06 * 1.1).

5. Except for the Special Building Features, our RCN model is complete and contains the specific data for the sample building used in this demonstration. The RCN cost model for the sample building is as follow:

Building RCN = [Section$_1$ ($88.68 * 3600 * 0.98825) *
Base Rate Effective Area Size Adjustment
(1.30592)] +
Multiplicative Variables
[Section$_n$ ($61.38 * 4860 * 0.98825) *
Base Rate Effective Area Size Adjustment
(1.30592)] +
Multiplicative Variables
[?Special Building Features]

The RCN for Section 1, the restaurant is $ 412,023 ($88.68 * 3600 * 0.98825 * 1.30592). The package goods store's RCN is $384,995 ($61.38 * 4860 * 0.98825 * 1.30592).

The Cost.dat file shows a summary of the same information as follows:

Section #1
Base Rate: 88.68
Size Adjustment: .98825
Effective Area: 3600
Adjusted Base Rate = (88.68 + 0) * .98825
Adjusted Base Rate: 87.64
RCN = ((87.64 * 3600) + 0) * 1.30592
RCN: 412023
Section #2
Base Rate: 61.38
Size Adjustment: .98825
Effective Area: 4860
Adjusted Base Rate = (61.38 + 0) * .98825
Adjusted Base Rate: 60.66
RCN = ((60.66 * 4860) + 0) * 1.30592
RCN: 384995

So far, the RCN of the building is $ 797,018 (412,023+384,995). We still have Special Features to add to complete the cost model.

6. The Special Features component is the last portion of the cost model. This is the place where such things as sprinklers and HVAC systems are accounted for and valued in the building.

Building RCN = [Section$_1$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] +
[Section$_n$ (Base Rate * Effective Area * Size Adjustment) * (MV_0 * MV_2 * … * MV_n)] +
[?Special Building Features]

Take a look at illustration 7. Here we see that both sections are sprinklered and heated and cooed with a complete HVAC system. Both of these Special Building features are calculated based on the size, in square feet, of the area affected. Their value is determined by the size, dollar rate and quality grade for each

feature. Finally, the Special Building Features are depreciated at the same rate as the main buildings.

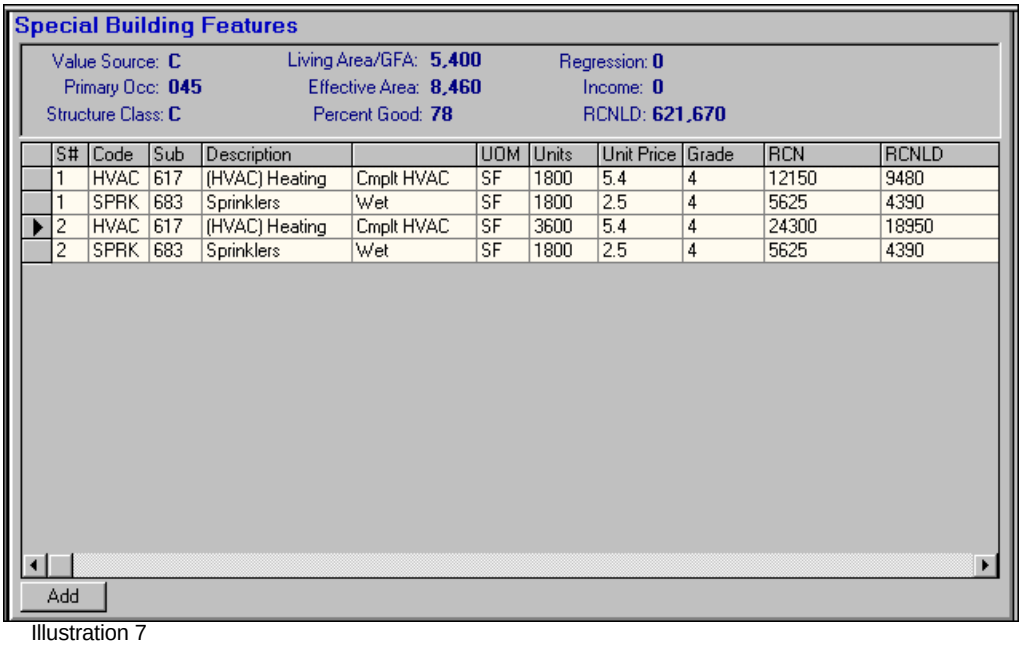


Illustration 7

Illustration 8 shows the data-entry screen, as it would look if we were to add an elevator to the building.

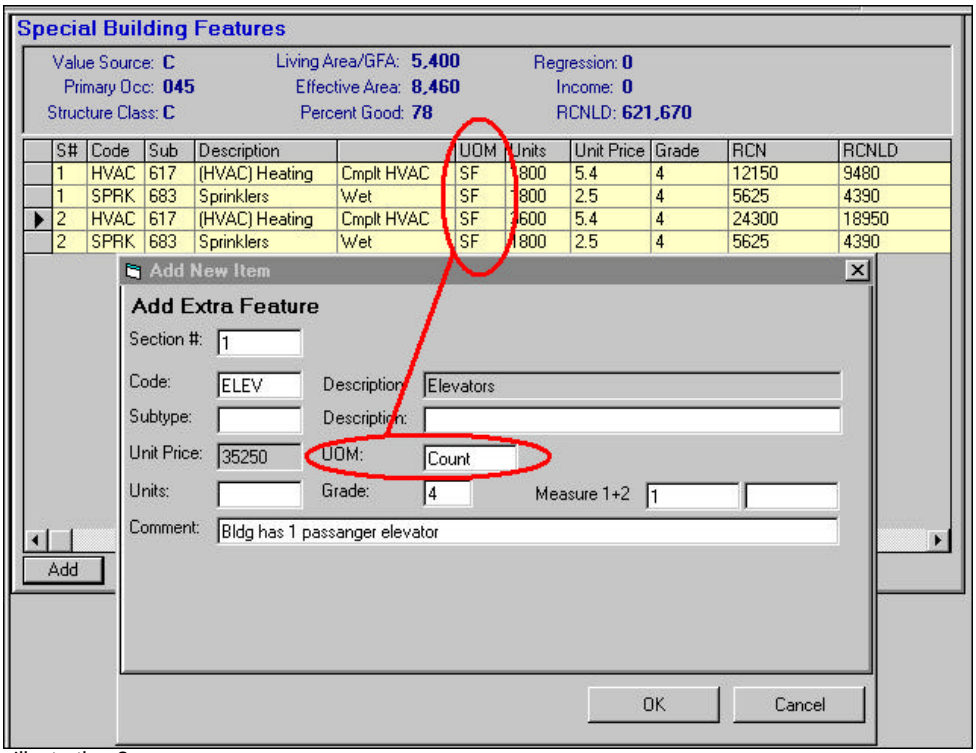


Illustration 8

Note that this extra feature's UOM (unit of measurement) is by count and not SF. For each count, the unit price is $35,250. Be sure that the UOM is proper for the individual special feature included in the building.

The total RCN of the Special Feature in this sample is $ 47,700 (?Special Building Features =12,150 + 5,625 +24,300 + 5,625).

We now know the total replacement cost new (RCN) of our sample building, including Special Features, is $ 844,718 ($797,018 + $47,700).

$844,718 **Building RCN**	**= [Section$_1$ ($88.68 * 3600 * 0.98825) * (1.30592)] +**
	[Section$_n$ ($61.38 * 4860 * 0.98825) * (1.30592)] +
	[$47,700]

Base Rate | Effective Area | Size Adjustment | Multiplicative Variables | Base Rate | Effective Area | Size Adjustment | Multiplicative Variables | [?Special Building Features]

If the sample building were brand new, we'd be finished, but it was actually built in 1953.

Next, we need to address accrued depreciation . . .

Depreciation

Depreciation is defined as a loss in the upper limits of value from all sources. Typically, three types of depreciation can affect real estate - physical deterioration, functional obsolescence and economic obsolescence. This next portion of the demonstration will illustrate how Vision© calculates the amount of depreciation accrued to our sample building.

Several terms come into use when discussing depreciation in CAMA. They are defined as follows:

- Actual Age: The mathematical difference between the Base Year and the actual year the improvement was built to completion.

- Actual Year Built (AYB): The earliest time the main portion of the building was built. It is not affected by subsequent construction.

- Base Year: The year, usually the current year, that the depreciation table is calibrated, such that the age of a building built during the base year would be 0 years old.

- Depreciation Table: A market-driven table that lists the amount of depreciation corresponding to an Effective Year Built and the Base Year predicated upon a specific economic life.

- Economic Life: The useful life span for a structure based on its occupancy (use) code and its construction class.

- Effective Age: The mathematical difference, in years, between the Base Year and the Effective Year Built.

- Effective Year Built (EYB): The calculated or apparent year, that an improvement was built that is most often more recent than AYB. The EYB is determined by the condition and quality of the improvement. Subsequent renovation, additions, upgrades and the like, extend an improvements remaining economic life and therefore cause the EYB to be closer to the Base Year than the AYB.

- Percent Good: The mathematical difference between 100 percent and the percent of depreciation. (100% - depreciation %) = percent good

The RCN model used above indicated that our sample building has an RNC of $844,718. As stated earlier, the building was built in 1953, so there should be some depreciation to deduct from the RCN. We'll use a seven-step process to depreciate the improvements:

1. Calculate the Actual Age of the improvement.
2. Determine the Effective Age of the improvement.
3. Determine the improvement's Effective Year Built.
4. Look-up Depreciation corresponding to EYB on depreciation table.
5. If required, multiply the depreciation by the variable generated by the CDU factor.
6. If required, modify the depreciation by the amount given for obsolescence.
7. Apply final depreciation to RCN to determine RCNLD.

1. Our first step is to calculate the Actual Age of our sample building. As you are aware, a valuation is always qualified as of a specific date. For ad valorem purposes in the District of Columbia, the valuation date is January 1 immediately proceeding the tax year. In our example, the tax year is 2005, therefore the valuation date is January 1, 2004. This date is also significant in terms of the depreciation accrued to improvements. In the past, the nature of triennial assessments required that base years within a Tri-Group remain unchanged for a period of three years. Now, however, with the return to annual assessments, the base year coincides with the valuation date. The base year is used to determine the Actual Age of the sample building. In this case, the sample building's Actual Age is 51 years (2004-1953).

2. The next step is to determine the sample building's Effective Age. Effective Age may or may not represent actual or chronological age. The premise is simple but the application can be confusing. If a building is built and never maintained (painting, re-roof, etc.) or remodeled, the building would quickly depreciate from physical deterioration. The CAMA system would depreciate the building at the fastest rate possible based on the selected Depreciation Table. For example, our building has an economic life of sixty years. If the building were left to rot, the Effective Age would most likely be the same as the Actual Age.

Let's say the owners of our sample building have completely neglected their property from the time it was built in 1953 to the present. Their building would have an effective age of 51 years as indicated on the Depreciation Table below:

Economic Life Depreciation Tables

Base Year 2004

		60 Year Economic Life		50 Year Econmic Life	
Age of Building	*Effective Year Built*	*Percent of Depreciation*	*Percent Good*	*Percent of Depreciation*	*Percent Good*
0	2004	0	100	0	100
1	2003	0	100	0	100
2	2002	1	99	2	98
3	2001	1	99	2	98
47	1957	56	44	75	25
48	1956	58	43	77	23
49	1955	59	41	78	22
50	1954	61	39	82	18
51	1953	64	36		
52	1952	65	35		
53	1951	68	33		
54	1950	69	31		
55	1949	71	29		
56	1948	73	28		
57	1947	75	25		

Illustration 9

The Actual Year Built (1953) and the Effective Year Built (1953) would be the same and consequently the Effective Age would be 51 years. Moving across the table, we see that a building with an EYB of 1953 has 64 percent depreciation and therefore is 36 Percent Good (100%-64%). If the RCN of our sample building is $ 844,718, the depreciated value, RCNLD, is only $ 304,098 (844,718 * 0.39).

The situation described above rarely, if ever, occurs in the market. People do maintain and renovate their buildings and in doing so, extend the building's useful or remaining economic life. As building owners repair roofs, paint siding, replace windows and furnaces, they *prolong* the life of the building and consequently *decrease* its Effective Age.

A recent building remodel, renovation or rehabilitation will go a long way to extend its useful life. As the useful life is extended, the Effective Age is reduced and therefore the Effective Year Built is more recent than the building's Actual Year Built.

Our sample building had a major renovation done in 1998. The portion of the CAMA record that captures this information is shown in Illustration 10 below.

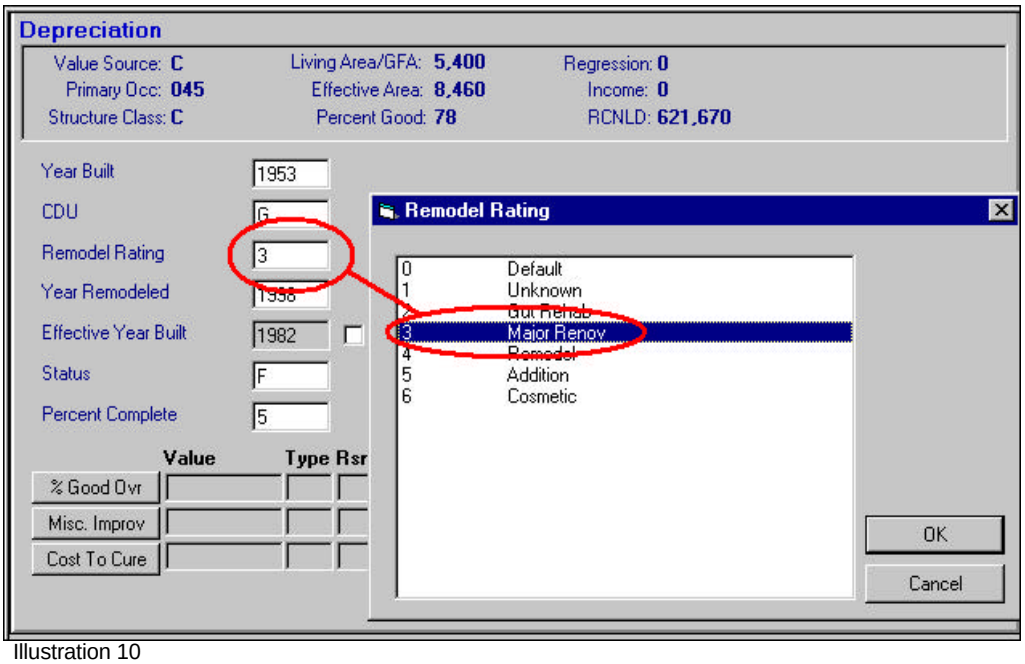


Illustration 10

Two factors come together to determine the impact a remodel has on the amount of depreciation calculated for the building – the Remodel Rating and the Year Remodeled. How extensive the remodel is and how recently it has occurred combines to determine its overall affect on its effective year built, and in turn, the building's depreciation. A brand-new gut rehab would substantially decrease the effective age of a building much more so than an older remodel. Conversely, an older remodel may have little or no affect on the depreciation.

We'll see the significance of that renovation in a moment, but first, back to our sample building's Effective Age calculation.

The construction class of the building also affects the calculation of Effective Age. It is only natural that an "A" class structure would have a longer economic life than a "D" class building (recall the story of the three little pigs). The Structure Class Age Factor makes allowance for this situation by reducing the effective age of an "A" class building by more than, say, a "D" building. As an example, CAMA reduces the effective age by 20% for "A" buildings, 15% for "B" structures, 10% on "C" buildings, and no adjustment for the "D" class buildings.

The features or variables dealing with the effective age calculation are multiplicative variables. As such, they are multiplied one by the other and then the Actual Age is multiplied by the product of the MVs. Below is the portion of the Cost.dat file that summaries these MV for our sample building.

**********Effective Age Adjustments**********
REHAB FACTOR 3 = .45 * Age
STRUCTURE CLASS AGE FACTOR C = .9 * Age
REHAB YEAR = 1.05 * Age

The product of each of these MV adjustments is calculated to be 0.42525 (0.45 * 0.90 * 1.05). This product is then multiplied by the Actual Age to calculate the Effective Age. Recall our sample building's Actual Age is 51 years. The Effective Age is calculated to be 21 years (51 * 0.42525). Instead of CAMA using 51 chronological years to calculated depreciation, it will use 21 years, based on the building's quality and renovation. The portion of the Cost.dat file that illustrates this information is below:

****

Actual Year Built: 1953
Effective Age = 51 * .42525
Effective Age: 21
Percent Good = 78
RCNLD: 621670

Back to our renovation, the 1998 gut rehab done to the building reduced the effective age to 47.25% (Rehab Factor 3 =.45 * Rehab Year = 1.05) of the 51 years of actual age, resulting in an effective age of 24 years old. What impact on the effective age would there be if just a small remodel occurred in 1990? We would expect the effective age not to shorten, or decrease, as much as a result. Let's see what happens.

As you know, CAMA has many calibrated variables associated with all of the calculations it makes to determine the RCN and calculate depreciation. Again, the two variables that come into play here are the Rehab Factor and the Rehab Year. We've just seen the values of those variables were with regard to the recent gut rehab example. For the 1990 remodel the values are: Rehab Factor 4= 0.55 and Rehab Year = 1.25. This combination will reduce the effective age to 68.75% (0.55 * 1.25) of the 51 years of actual age, as a result, making the effective age now 35 years old.

The difference between the two scenarios is eleven years. Without doing all math, the difference in the appraised value as a result an effective age of 35 years verses 24 years is about $100,000 on a building with a RCN of $844,718. The proper documentation of remodel activity is significant when arriving at proper appraised values.

3. We're almost finished. Knowing the Effective Age makes the calculation of the Effective Year Built for our sample building very simple. The Effective Year Built is 1983 (2004 – 21).

4. Having established the Effective Year Built, we look up 1983 on the *60 Year Economic Life Depreciation Table* and find that the Depreciation is 16% for that year. See Illustration 11.

Economic Life Depreciation Tables

Base Year 2004

Age of Building	Effective Year Built	60 Year Economic Life		50 Year Econmic Life	
		Percent of Depreciation	Percent Good	Percent of Depreciation	Percent Good
0	2004	0	100	0	100
1	2003	0	100	0	100
2	2002	1	99	2	98
3	2001	1	99	2	98
4	2000	3	98	3	97
17	1987	13	88	17	83
18	1986	14	86	18	82
19	1985	15	85	20	80
20	1984	16	84	22	78
21	1983	16	84	22	78
22	1982	18	83	23	77
23	1981	19	81	25	75
24	1980	20	80	27	73
25	1979	21	79	28	72
26	1978	23	78	30	70
27	1977	24	76	32	68

Illustration 11

You may notice that there is a conflict between the Cost.dat file and the depreciation table with regards to "Percent Good." The Cost.dat file report that our building's percent good is 79, whereas the depreciation table says it's 84. The explanation is addressed in step 6, dealing with obsolescence and direct adjustments to depreciation, not effective year built calculations.

5. If an entry other than "AV-Average" was made to the CDU (condition, desirability, utility) factor, the current depreciation is multiplied by the CDU's corresponding variable. In the case of our sample building, the CDU was Good. The factor is 0.97 per the Cost.dat file.

**********Depreciation Adjustments**********
CDU DEPREC FACTOR G = .97 * Depreciation

This is actually a very insignificant adjustment to the calculated depreciation. The calculated depreciation from Step 4 was 16%. When multiplied by 0.97 the result is still 16% because of rounding (16 * 0.97= 15.52, say 16).

6. If the assessor notes any obsolesce, this is where it is addressed. Recall from the outset that we defined depreciation as a loss in value resulting from physical deterioration, functional and/or economic obsolescence. The demonstration up to this point has dealt only with depreciation attributed to the physical deterioration of the sample building. This, by far, is the most common type of depreciation that exists in commercial property. However, occasions may require additional depreciation because of excessive physical deterioration, functional and/or economic obsolescence. One must use caution when invoking these types of depreciation. The market must support any decision regarding the extent of these adjustments.

Our sample building is suffering from a small amount of functional obsolescence. The assessor has noted that the interior design of the building contains many

support columns interrupting the efficient use of the floor space. As a result, the restaurant has a few less tables and the package goods store does not have a good aisle layout. Consequently, it is appropriate to allow for a small amount of functional obsolescence – five percent.

Illustration 12 shows the results of this additional allowance for functional obsolescence. Whereas the depreciation table in illustration 3 shows the percent good for 16 years at 84%, by subtracting the 5% attributed to functional obsolescence, we are left with 79% as the percent good for our building. This matches the figure shown in the Cost.dat file.

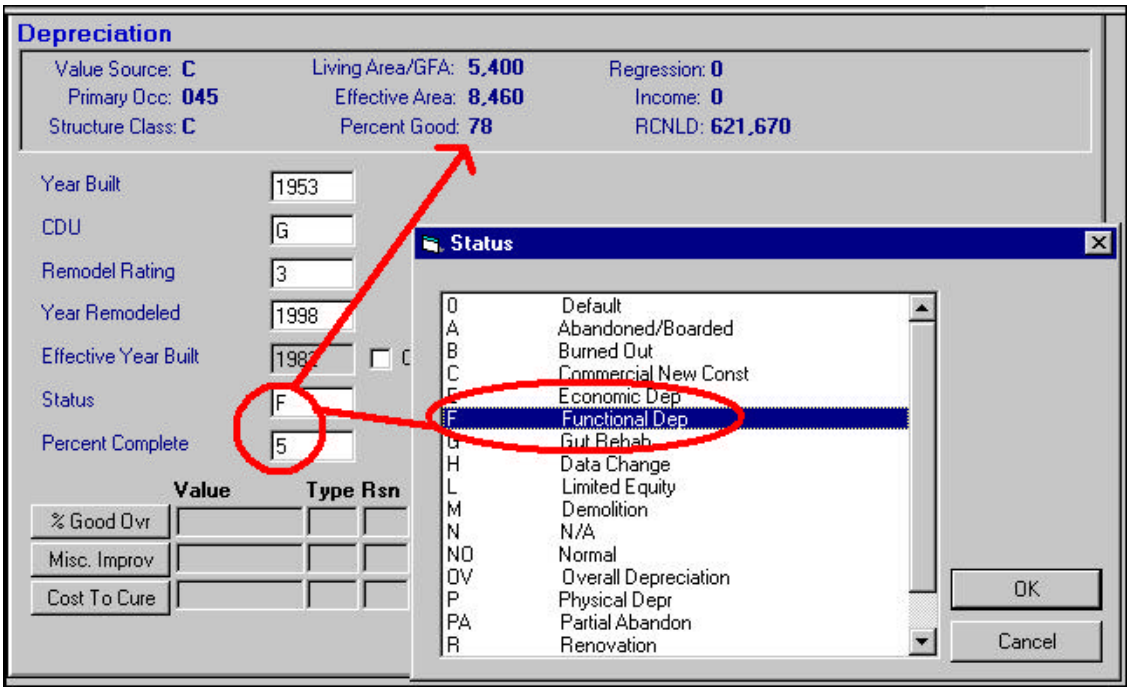
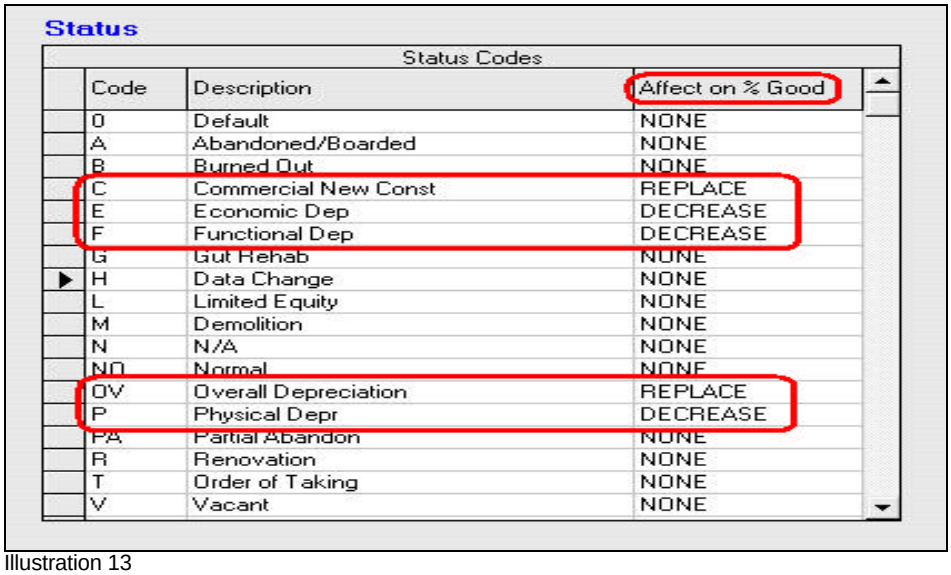


Illustration 12

The actual mechanics of adjusting depreciation for functional or economic obsolescence within CAMA are briefly discussed below. If the situation occurs, seek guidance from your supervisor and/or CAMA manager.

The "Status" field's pick-list is expanded in Illustration 13 to show only those types of items that have a direct affect on depreciation and the nature of the affect. Notice that only a limited number of Status Codes are functional within CAMA and their affect on depreciation is either to ***replace*** the existing amount in the "% Good" field or ***decrease*** the "% Good." The corresponding numeric amount that will affect the "% Good" is entered in the field called "Percent Complete." Please note that the field name "Percent Complete" is somewhat erroneous because the word "Complete" has no meaning in this context. This is the field that you will enter the amount to either decrease the existing "% Good" or replace the existing "% Good", based on the Status Code selected.



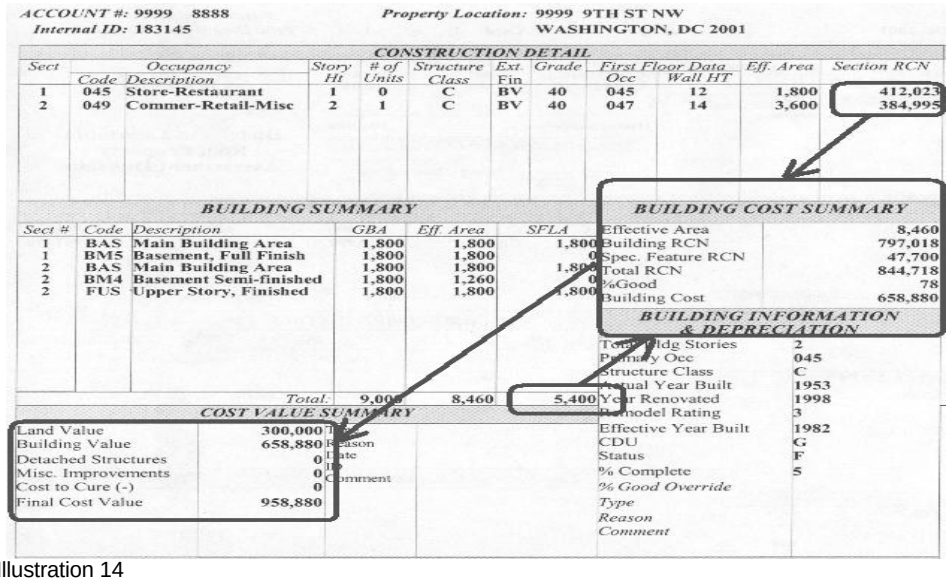
Status

Status Codes

Code	Description	Affect on % Good
0	Default	NONE
A	Abandoned/Boarded	NONE
B	Burned Out	NONE
C	Commercial New Const	REPLACE
E	Economic Dep	DECREASE
F	Functional Dep	DECREASE
G	Gut Rehab	NONE
H	Data Change	NONE
L	Limited Equity	NONE
M	Demolition	NONE
N	N/A	NONE
NO	Normal	NONE
OV	Overall Depreciation	REPLACE
P	Physical Depr	DECREASE
PA	Partial Abandon	NONE
R	Renovation	NONE
T	Order of Taking	NONE
V	Vacant	NONE

Illustration 13

7. The last step in the process is to simply multiple the RCN by 0.78 and we have RCN LD of the building. Knowing the total RCN of our sample building is $844,718, the RCN LD is $658,880 (844,718 * 0.78). Below is a portion of the Property Record Card that illustrates this information.



ACCOUNT #: 9999 8888 — Property Location: 9999 9TH ST NW
Internal ID: 183145 — WASHINGTON, DC 2001

CONSTRUCTION DETAIL

Sect	Occupancy Code	Description	Story Ht	# of Units	Structure Class	Ext. Fin	Grade	First Floor Data Occ	First Floor Data Wall HT	Eff. Area	Section RCN
1	045	Store-Restaurant	1	0	C	BV	40	045	12	1,800	412,023
2	049	Commer-Retail-Misc	2	1	C	BV	40	047	14	3,600	384,995

BUILDING SUMMARY

Sect #	Code	Description	GBA	Eff. Area	SFLA
1	BAS	Main Building Area	1,800	1,800	1,800
1	BM5	Basement, Full Finish	1,800	1,800	0
2	BAS	Main Building Area	1,800	1,800	1,800
2	BM4	Basement Semi-finished	1,800	1,260	0
2	FUS	Upper Story, Finished	1,800	1,800	1,800
		Total:	9,000	8,460	5,400

BUILDING COST SUMMARY

Effective Area	8,460
Building RCN	797,018
Spec. Feature RCN	47,700
Total RCN	844,718
%Good	78
Building Cost	658,880

BUILDING INFORMATION & DEPRECIATION

Total Bldg Stories	2
Primary Occ	045
Structure Class	C
Actual Year Built	1953
Year Renovated	1998
Remodel Rating	3
Effective Year Built	1982
CDU	G
Status	F
% Complete	5
% Good Override	
Type	
Reason	
Comment	

COST VALUE SUMMARY

Land Value	300,000
Building Value	658,880
Detached Structures	0
Misc. Improvements	0
Cost to Cure (-)	0
Final Cost Value	958,880

Illustration 14

Conclusion

This exercise has been prepared to assist the commercial assessor understand some of the concepts, features and techniques employed by the Vision© CAMA system in arriving at a cost approach to valuation of commercial properties in the District of Columbia. It does not serve as an exhaustive training manual. Any specific questions regarding the features and operations of this CAMA should be directed to your supervisor or the CAMA manager.

Appendix "A"

1. Vision© Property Record Card, SSL 9999 8888.

2. "Cost.dat" printout of sample building.

3. Economic Life Depreciation Tables, Base Year 2004.

4. 2005 CAMA Commercial Construction Valuation Guideline.

ACCOUNT # 9999 8888 | Property Location 9999 9TH ST NW | Batch #:
Internal ID 183145 | WASHINGTON, DC 2001 | Bldg #: 1 of 1 | Card 1 of 1 | Print Date: 02/23/2004 16:36

CURRENT OWNER

ACCOUNT INFORMATION

Use Type	Use Code	Lot SF	Status Code
C	045	999,999	F

VISIT/CHANGE HISTORY

Date	ID	Type	Inf. Source	Code	Description

CURRENT ASSESSMENT

Description	Use	Assessed Value
COMMERCL	045	658.880
COM LAND	045	300,000

Value Sourc C | Tota 958,880

DATA ENTRY

Entry ID:_____ Entry Date: / /

COMM

District of Columbia
Real Property
Assessment Division

OWNERSHIP HISTORY

INSTRUMENT #	SALE DATE	Vu	Vi	SALE PRICE	A.C

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Use	Type	Val Source	Land Value	Building Value	Assessed Value
2005	047	C	C	300,000	658,710	958,710
2004	047	C	C	300,000	562,370	862,370

MIXED USE

Code	Description	%
	Res Land	%
	Res Building	%
	Cmrcl Land	%
	Cmrcl Building	%

APPEALS

Appeal #	Decision	Amount	Revised AV

ASSOCIATED PARCELS

Primary SSL	SSL	USE	Lot Size	%	Total Value

TAX TYPE

Year	Type	Description

SUPPLEMENTAL DATA

Type	Description
Neighborhood	
Part Part	
Mixed Use	
Vcnt Lnd Use	
Model Type	
Base Lot Val	
Abbutt Lot	
Dev FAR	

COMMENTS

PARCEL LOCATION SUMMARY

SSL	NBHD	SUB NBHD	ZONING	WARD	GROUP	ARN
	9	0				014

BUILDING PERMIT INFORMATION

Permit ID	Issue Date	Type	Amount	Description	Insp. Date

cket NBHD: 0 — **LAND LINE VALUATION SECTIO**

B#	Occ	Description	Zone	Frontag	Depth	Units		S.I.	I. Factor	LT	Price	Size Adj	Site Rating	Adjustments/Special Use	Notes	Land Value
1	045	Store-Restaurant				10,000	SF	0	1.00		30.00	0.0000				300,000
					Total Land Units:	10,000	SF								Total Land Value:	300,000

92

ACCOUNT # 9999 8888 | Property Location 9999 9TH ST NW | Batch #:
Internal ID 183145 | WASHINGTON, DC 2001 | Bldg #: 1 of 1 | Card 1 of 1 | Print Date: 02/23/2004 16:36

CONSTRUCTION DETAIL

Sect	Occupancy Code	Occupancy Description	Story Ht	# of Units	Structure Class	Ext. Fin	Grade	First Floor Data Occ	First Floor Data Wall HT	Eff. Area	Section RCN
1	045	Store-Restaurant	1	0	C	BV	40	045	12	1,800	412,023
2	049	Commer-Retail-Mis	2	1	C	BV	40	047	14	3,600	384,995

BUILDING SUMMARY

Sect #	Code	Description	GBA	Eff. Area	SFLA
1	BAS	Main Building Area	1,800	1,800	1,800
1	BM5	Basement, Full Finish	1,800	1,800	0
2	BAS	Main Building Area	1,800	1,800	1,800
2	BM4	Basement Semi-finish	1,800	1,260	0
2	FUS	Upper Story, Finished	1,800	1,800	1,800
		Total:	9,000	8,460	5,400

BUILDING COST SUMMARY

Effective Area	8,460
Building RCN	797,018
Spec. Feature RCN	47,700
Total RCN	844,718
%Good	78
Building Cost	658,880

BUILDING INFORMATION & DEPRECIATION

Total Bldg Stories	2
Primary Occ	045
Structure Class	C
Actual Year Built	1953
Year Renovated	1998
Remodel Rating	3
Effective Year Built	1982
CDU	G
Status	F
% Complete	5
% Good Override	
Type	
Reason	
Comment	

COST VALUE SUMMARY

Land Value	300,000	Type	
Building Value	658,880	Reason	
Detached Structures	0	Date	
Misc. Improvements	0	ID	
Cost to Cure (-)	0	Comment	
Final Cost Value	958,880		

BUILDING SPECIAL FEATURES/AMENITIES

Sect #	Code	Description	Units	UOM	Unit Price	Grade	RCN
1	HVAC 6	(HVAC) Heating Cmplt HVAC	1,800	SF	5.40	4	12,150
1	SPRK 68	Sprinklers Wet	1,800	SF	2.50	4	5,625
2	HVAC 6	(HVAC) Heating Cmplt HVAC	3,600	SF	5.40	4	24,300
2	SPRK 68	Sprinklers Wet	1,800	SF	2.50	4	5,625

DETACHED STRUCTURES

Code	Description	Units	UOM	Unit Price	Grade	Cndtn	RCN	% Ga	Assessed Val

SKETCH

No Photo On Record

ACCOUNT # **9999 8888** *Property Location* **9999 9TH ST NW** *Batch #:*

Internal II **183145** **WASHINGTON, DC 2001** *Bldg #:* **1 of 1** *Card* **1** *of* **1** *Print Date:* **02/23/2004 16:36**

INCOME APPROACH

Bldg #	*Style*	*Style Desc*	*FL*	*Tenants*	*# of Units*	*Use Adj*	*Loc Adj*	*Rent/Unit*	*Gross Income*	*Vac Adj*	*Vacancy %*	*Exp Adj*	*Expense %*	*NOI*

INCOME NOTES

.

INCOME SUMMARY

Primary Occ	**045**
Total Rentable Units	
Total Gross Income	
Vacancy $	
Expense $	
Total NOI	
Cap Code	
Cap Adj.	
Cap Rate	
Income Value	
Excess Land	
Total Income Value:	

OUTPUT FROM STORED PROCEDURE
REPORT GENERATED ON 01-JAN-2004 AT 06:26

**********Building #1 Calc Start**********
Cost Calculation for pid, bid = 183145,173784
Account Number = 9999 8888
Use Code = 045
Cost Rate Group = RS1
Occupancy Type = 045 (Store-Restaurant)
Model ID: DCC

Section #1
Base Rate: 88.68
Size Adjustment: .98825
Effective Area: 3600
Adjusted Base Rate = (88.68 + 0) * .98825
Adjusted Base Rate: 87.64
RCN = ((87.64 * 3600) + 0) * 1.30592
RCN: 412023

**********Factor Adjustments**********
GRADE 40 (Good) = 1.12 x RCN
DC LOCAL MULTIPLIER C = 1.06 x RCN
COMM NBHD 9 = 1.1 x RCN

Section #2
Base Rate: 61.38
Size Adjustment: .98825
Effective Area: 4860
Adjusted Base Rate = (61.38 + 0) * .98825
Adjusted Base Rate: 60.66
RCN = ((60.66 * 4860) + 0) * 1.30592
RCN: 384995

**********Factor Adjustments**********
GRADE 40 (Good) = 1.12 x RCN
DC LOCAL MULTIPLIER C = 1.06 x RCN
COMM NBHD 9 = 1.1 x RCN

**********Effective Age Adjustments**********
REHAB FACTOR 3 = .45 * Age
STRUCTURE CLASS AGE FACTOR C = .9 * Age
REHAB YEAR = 1.05 * Age

**********Depreciation Adjustments**********
CDU DEPREC FACTOR G = .97 * Depreciation
****

Actual Year Built: 1953
Effective Age = 51 * .42525
Effective Age: 21
Percent Good = 78
RCNLD: 621670

Economic Life Depreciation Tables

Base Year 2004

Age of Building	Effective Year Built	70 Year Economic Life		60 Year Economic Life		50 Year Econmic Life	
		Percent of Depreciation	Percent Good	Percent of Depreciation	Percent Good	Percent of Depreciation	Percent Good
0	2004	0	100	0	100	0	100
1	2003	0	100	0	100	0	100
2	2002	1	99	1	99	2	98
3	2001	1	99	1	99	2	98
4	2000	2	98	3	98	3	97
5	1999	2	98	3	98	3	97
6	1998	3	97	4	96	5	95
7	1997	4	96	5	95	7	93
8	1996	4	96	5	95	7	93
9	1995	5	95	6	94	8	92
10	1994	5	95	6	94	8	92
11	1993	6	94	8	93	10	90
12	1992	7	93	9	91	12	88
13	1991	8	92	10	90	13	87
14	1990	8	92	10	90	13	87
15	1989	9	91	11	89	15	85
16	1988	10	90	13	88	17	83
17	1987	10	90	13	88	17	83
18	1986	11	89	14	86	18	82
19	1985	12	88	15	85	20	80
20	1984	13	87	16	84	22	78
21	1983	13	87	16	84	22	78
22	1982	14	86	18	83	23	77
23	1981	15	85	19	81	25	75
24	1980	16	84	20	80	27	73
25	1979	17	83	21	79	28	72
26	1978	18	82	23	78	30	70
27	1977	19	81	24	76	32	68
28	1976	20	80	25	75	33	67
29	1975	21	79	26	74	35	65
30	1974	22	78	28	73	37	63
31	1973	23	77	29	71	38	62
32	1972	24	76	30	70	40	60
33	1971	25	75	31	69	42	58
34	1970	27	73	34	66	45	55
35	1969	28	72	35	65	47	53
36	1968	29	71	36	64	48	52
37	1967	30	70	38	63	50	50
38	1966	32	68	40	60	53	47
39	1965	33	67	41	59	55	45
40	1964	35	65	44	56	58	42
41	1963	36	64	45	55	60	40
42	1962	38	62	48	53	63	37
43	1961	39	61	49	51	65	35
44	1960	41	59	51	49	68	32
45	1959	42	58	53	48	70	30
46	1958	44	56	55	45	73	27
47	1957	45	55	56	44	75	25
48	1956	46	54	58	43	77	23
49	1955	47	53	59	41	78	22
50	1954	49	51	61	39	82	18
51	1953	51	49	64	36		
52	1952	52	48	65	35		
53	1951	54	46	68	33		
54	1950	55	45	69	31		
55	1949	57	43	71	29		
56	1948	58	42	73	28		
57	1947	60	40	75	25		
58	1946	61	39	76	24		
59	1945	63	37	79	21		
60	1944	64	36	80	20		
61	1943	65	35				
62	1942	67	33				
63	1941	68	32				
64	1940	70	30				
65	1939	71	29				
70	1932	76	24				
75	1927	80	20				

CONSTRUCTION DETAIL

Section Detail

No.	Description	Value

Building Stories
As Indicated.

Occupancy
As Indicated.
Select from list.

Stories and #Units
As Indicated.

Structure Class

0	Default
A	Fireproof Steel
B	Reinforced Concrete
C	Con. Block/Solid Brick
D	Wood Frame
P	Wood Pole
S	Steel/Sheet Metal

Exterior Finish

0	Typical
AS	Asphalt Siding
BR	Brick (Solid)
BV	Brick Veneer
C	Concrete
CB	Concrete Block
MS	Metal Siding
S	Stone
SU	Stucco
SV	Stone Veneer
WS	Wood Siding

Grade (Multiplies Base, Features)

0	Default	--
0	Poor Quality	-30%
15	Poor+ Quality	-20%
20	Fair Quality	-10%
25	Fair+ Quality	-05%
30	Average Quality	--
35	Average+ Quality	06%
40	Good Quality	12%
45	Good+ Quality	21%
50	Very Good Quality	30%
55	Very Good + Quality	28%
60	Excellent	45%

Story Height (Multiplies Base)
Currently not in use

Wall Height (Adds to Base Rate)
Currently not in use

DEPRECIATION DETAIL

No.	Description	Value

Structure Class (Adjust EYB)

0	Default	0
A	Fireproof Steel	-20%
B	Reinforced Conc.	-15%
C	Con. Block/Brick	-10%
D	Wood Frame	0
S	Steel/Sheet Metal	0

CDU Condition, Desirability, Utility (Adjust Calc'd Deprec.)

EX	Excellent	-12%
VG	Very Good	-08%
G	Good	-03%
AV	Average	--
F	Fair	06%
P	Poor	12%
VP	Very Poor	18%
US	Unsound	30%

Remodel Rating (Adjusts EYB)

0	Default	--
1	Unknown	-10%
2	Gut Rehab	-70%
3	Major Renovation	-55%
4	Remodel	-45%
5	Addition	-30%
6	Cosmetic	-10%

Year Remodeled (Adjust EYB)

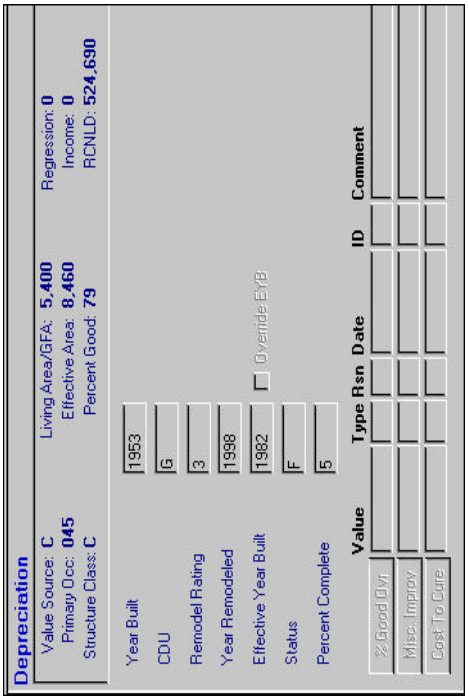
1999-2003	0%
1997-1998	5%
1992-1996	15%
1987-1991	25%
Earlier -1986	50%

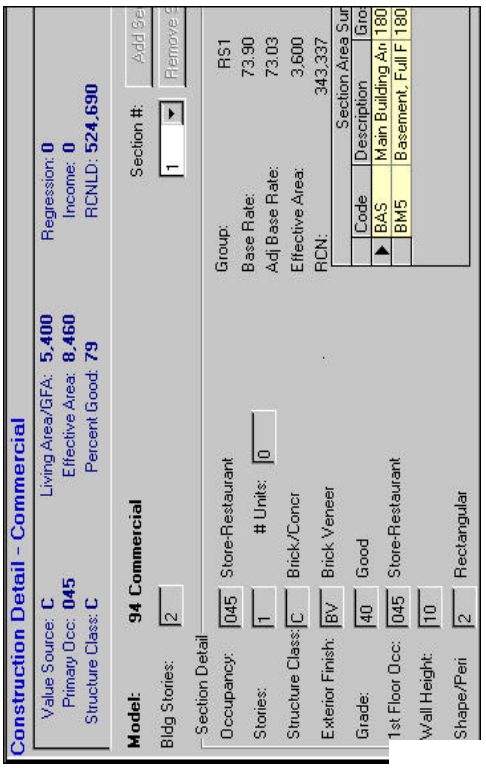
Extra Features (Flat and Sq Ft Add)

BL	Balcony	Flat
ELEV	Elevators	Flat
HVAC	Heat & Cool	Sq. Ft.
MZ	Mezzanines	Sq. Ft.
SPRK	Sprinklers	Sq. Ft.

Building RCN = [Section$_1$ (Base Rate * Effective Area * Size Adjustment) * ($MV_0 * MV_2 * \ldots * MV_N$)] + [Section$_n$ (Base Rate * Effective Area * Size Adjustment) * ($MV_0 * MV_2 * \ldots * MV_N$)] + [?Special Building Features]

Where:
RCN = Replacement Cost New
Base Rate = $ rate based on occupancy (use) code and construction class
Section$_n$ = Each separate building or section of building
Effective Area = Adjusted SF area of improvement
Size Adjustment = Adjustment factor for deviation from base size
MV = Multiplicative Variables





(A)

TY	2005			626 BREAKAWAY DR, NW - SQ/LOT:626-76			
RET ER	AREA	L-T RETAIL	OFC ER	AREA	L-T OFFICE	VACANT/ST SPACE	
						OFFICE	RETAIL
(1)	(4)	(6)	(9)	(12)	(14)	(16)	(23)
		$0			$0		
$ -	0	$0			$0		0
$ -	0	$0			$0		0
$ -	0	$0			$0		0
$ -		$0	$ -		$0		0
$ -		$0	$ -	0	$0		0
$ -		$0	$ -	0	$0		0
$ -		$0	$ -	0	$0		0
$ -		$0	$ -	0	$0		0
$ -		$0	$ -	0	$0		0
$ -		$0	$ -	0	$0	0	0
$ -		$0	$ -	0	$0	0	0
$ -		$0	$ -	0	$0	0	0
		(7b)			(15b)	(17)	(24)
		(7)			(15)	(18)	(25)
	(5)	(7a)		(13)	(15a)	(19)	(26)
(2) #VALUE!			(10)			(20)	(27)
VAC MEZZ	(3)	(8)	(11)			(21)	(28)
						(22)	(29)

OFC-MKT RATE

VACANT/ST LL

LL INCOME

(B)

VACANT AND S-T OFFICE LEASE-UP COSTS

2004	2005	2006	
(1)	(14)	(27)	
		0	
		0	
0		0	
0	0	0	
0	0	0	
(2)	(15)	(28)	
(3)	(16)	(29)	
(4)	(17)	(30)	
(5)	(18)	(31)	PGI
(6)	(19)	(32)	
(7)	(20)	(33)	
(8)	(21)	(34)	NOI LOSS
(9)	(22)	(35)	
(10)	(23)	(36)	DISCOUNT FACTORS @ 12% (10)
(11)	(24)	(37)	
(12)	(25)	(38)	
(13)	(26)	(39)	

(D)

ASSUMPTIONS

LEASE GROWTH RATE:	(1)
LEASE-UP ASSUMPTION:	
USE 50% IF 6 MO. PERIOD	(2)
USE 100% IF 12 MO. PERIOD	
STANDARD TENANT IMP:	(3)
RENEWAL TENANT IMP:	(4)
NEW TENANT COMM:	(5)
RENEWAL COMM:	(6)
EGI-VAC RATE:	(7)
OP EXP:	(8)
VACATE PROBABILITY:	(9)

$0 PV OF(11)

EX. VAC

$0 PV TI's(12)

$0 PV COMM (13)

$0 PV OF LEASE-UP (14)

(E)

NRA: (1) SF OF OFC/RETAIL

VALUE CALCULATION

PGI	(2)	#VALUE!	(14)	#VALUE!	STAB VALUE
CONCESSIONS	(3)	$0	(15)	$0	PV OF LEASE UP COSTS
VAC	(4) (7)		(16)	$0	REHAB COSTS
SUBTOTAL	(5)	#VALUE!	(17)	#VALUE!	MARKET VALUE AS IS
PARKING	(6)		(18)	#VALUE!	VALUE PER SF
ROOF	(7)				
STORAGE	(8)				
OTHER	(9)				
OP EXP	(10)	$0.00 (11)			
NOI	(12)	#VALUE!			
OAR	(13)				

RETAIL-MKT RATE

THIS WORKPAPER IS CONFIDENTIAL

(C)

RETAIL-VACANT/ST SPACE LEASE UP COSTS

				Retail Totals
(1)	(6)	(11)	PV OF COMMISSIONS	(15)
(2)	(7)	(12)	EXCESS VACANCY	(16)
(3)	(8)	(13)		(17)

VACANT AND S-T RETAIL LEASE UP

2004	2005	2006	
(4)	(9)	(14)	
0	0	0	
0	0	0	
0	0	0	
0	0	0	
(5a)	(10a)	(15a)	
(5)	(10)	(15)	TOTAL VACANT AND S-T RETAIL

(F)

ADDITIONAL L-T RETAIL REVENUE

RET ER	AREA	L-T RETAIL
(1)	(2)	(3)
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
	0	**(4)**

(G)

ADDITIONAL L-T OFFICE REVENUE

OFC ER	AREA	L-T OFFICE
(1)	(2)	(3)
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -	0	$0
$ -		$0
	0	**(4)**

(H)

ADD'L VAC/SHORT TERM SPACE

OFFICE	RETAIL
(1)	(2)
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
(3)	**(4)**

LEASE-UP ANALYSIS

ADD'L VAC/ST SPACE

OFFICE	RETAIL
2004	**2004**
(5)	(6)
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
(7)	(8)
2005	**2005**
(9)	(10)
0	0
0	0
0	0
0	0
0	0
0	0
0	0
0	0
(11)	(12)
2006	**2006**
(13)	(14)
0	0
0	0
0	0
0	0
(15)	(16)

OFFICE MKT LEASE RATE-
RECENT OFFICE LEASES SIGNED IN BLDG

(I)

LEASE DATE	RATE	AREA	LEASE REVENUE	COMP SQ/LOT
(1)	(2)	(3)	(4)	(5)
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
	$ -		$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
		0	$0	
		(6)	**(7)**	**(8)** WT AVG

RETAIL MKT LEASE RATE-
RECENT LEASES SIGNED IN BLDG

(J)

LEASE DATE	RATE	AREA	LEASE REVENUE	COMP SQ/LOT
(1)	(2)	(3)	(4)	(5)
	$ -	0	$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
			$0	
		(6)	**(7)**	**(8)** WT AVG

(K)

Selection of Overall Rate of Capitalization				
Using Mortgage Equity & Capitalization				
Holding Period in Years			10.00	(1)
Annual Rate -- Equity Yield			13.000%	(2)
Annual Rate -- Mortgage			8.500%	(3)
Term of Mortgage in Years			25.00	(4)
Loan to Value Ratio			75.0%	(5)
Change in Property Value: Annual / Total	(6)	**2.500%**	28.0%	(6a)
Change in Income: Annual / Total	(7)	**3.000%**	34.4%	(7a)
Calculations Using Inputs:				
Weighted Cost of Capital			0.10497	(8)
Monthly Mortgage Rate			0.00708	(9)
Annual Loan Constant -- Full Term			0.09663	(10)
Annual Loan Constant -- Hold Period			0.14878	(11)
Part Paid Off			0.18229	(12)
Equity Sinking Fund Factor				
Step 1 (equity yield%to the power of the holding period)		3.39457	(13)	
Step 2 (step 1 minus 1)		2.39457	(14)	
Step 3 (step 2 divided by the equity yield)		18.41975	(15)	
SF Factor (one divided by step 3)			0.05429	(16)
J-Factor -- Ellwood				
Step 1 (1 minus the inverse of step one above)		0.70541	(17)	
Step 2 (holding period divided by step 1)		14.17612	(18)	
Step 3 (step 2 minus inverse of equity yield)		6.48381	(19)	
J-Factor (step 2 times sinking fund)			0.35200	(20)
OAR -- Akerson Format				
Loan Ratio x Annual Constant		0.07247	(21)	
Equity Ratio x Equity Yield Rate		0.03250	(22)	
Loan Ratio x PP Off x SF Factor		0.00742	(23)	
Adjustment for Change in Property Value		0.01521	(24)	
Adj. for Change in Income -- J-Factor		0.89201	(25)	
OAR before Adding R.E. Tax Rate			**7.35%**	(26)
Effective Rate of Taxation			**1.85%**	(27)
OAR Loaded for R.E. Taxes			**9.1950%**	(28)

(L)

FACTORS		12% (1)		
Year		Estimated Loss	PV Factor	PV of Loss(es)
	1	(2)	0.89286	(3) (4)
	2	$0	0.79719	$0
	3	$0	0.71178	$0
	4	$0	0.63552	$0
	5	$0	0.56743	$0
	6	$0	0.50663	$0
	7	$0	0.45235	$0
	8	$0	0.40388	$0
	9	$0	0.36061	$0
	10	$0	0.32197	$0
			(5)	

#	Field Name	Description	Calc	Calculation
A-1	Retail Effective Rates	Long term (beyond 3 years) Retail, Rental Rates from Rent Roll	NO	
A-2		Weighted Average Long Term Retail Rental Rate X Lease Growth Rate	YES	Total of Long Term Retail Income divided by Total Long Term Retail Area
A-3	Vacant Mezzanine Area	Vacant or Short Term Mezzanine Area from Rent Roll	NO	
A-4	Area	Long Term (Beyond 3 Years) Retail Area From Rent Roll (col 3)	NO	
A-5		Total of Long Term Retail Area from A-4	YES	Sum of Long Term Leases
A-6	Long Term Retail	Actual Reported Income from Long Term Retail Leases	YES	Rental Rate X Area
A-7		Total of Long Term Retail Income	YES	Sum of Actual Long Term Retail Leases
A-7a		Total of Long Term Retail Income	YES	Total of Long Term Retail Income X Lease Growth Rate
A-7b		Total of all Long Term Retail Rent from Additional Revenue Worksheet	YES	Brings Total Long Term Retail Leases from Additional Revenue Worksheet (F4)
A-8		Market Rental Rate Assigned to Vacant/Short Term Mezzanine Area	NO	
A-9	Office Effective Rents	Long Term Office Rental Rate From Rent Roll	NO	
A-10		Weighted Average Long Term Office Rental Rate X Lease Growth Rate	YES	Total of Long Term Office Income X Lease Growth Rate/Total Area Long Term Office
A-11		Vacant or Short Term Market Mezzanine Income	YES	Vacant/Short Term Mezzanine Area X Mezzanine Market Rental Rate
A-12	Area	Long Term Office Area From Rent Roll	NO	
A-13		Total of Long Term Office Area from A12	YES	Sum of Long Term Office Leases
A-14	Long Term Office	Actual Rental Income From Long Term Office Leases	YES	Office Rental Rate X Area
A-15		Total of Long Term Office Income	YES	Sum of Actual Long Term Office Leases
A15a		Total of Long Term Office Income Increased by Lease Growth Rate	YES	Sum of Actual Long Term Office Leases X Lease Growth Rate
A15b		Total of all Long Term Office Rent from Additional Revenue Worksheet	YES	Brings Total Long Term Office Leases from Additional Revenue Worksheet (G4)
A-16	Vacant/Short Term Space	Vacant or Expiring (Within 3 Years)Office Leases	NO	
A-17		Additional Vacant/Short Term Office Space from Additional Spaces Worksheet	YES	Sum of Additional Vacant/Short Term Office From Additional Spaces Worksheet (H3)
A-18		Total of Vacant/Short Term Office Space	YES	Sum of Vacant/Short Term Office Spaces
A-19		Vacant/Short Term Office Market Income	YES	Vacant/Short Term Office Area X Office Market Rate
A-20	Vacant/Short Term Lower Level	Vacant/Short Term Lower Level Office Space	NO	
A-21		Vacant/Short Term Lower Level Office Market Rental Rate	NO	
A-22	Lower Level Income	Vacant/Short Term Lower Level Office Market Income	YES	Vacant/Short Term Lower Level Office Area X Market Rental Rate
A-23	Vacant/ Short Term Space	Vacant or Expiring(Within 3 Years) Retail Leases	NO	
A-24		Additional Retail Space from Additional Revenue Worksheet	YES	Adds Total Retail from Additional Revenue Worksheet (H-4)
A-25		Total of Vacant/Short Term Retail Spaces	YES	Sum of Vacant/Short Term Retail Leases
A-26		Vacant/Short Term Retail Market Income	YES	Sum of Vacant/Short Term Retail Leases X Retail Market Rate
A-27	Vacant/Short Term Lower Level Retail	Vacant/Short Term Lower Level Retail Space	NO	
A-28		Vacant/Short Term Lower Level Retail Market Rental Rate	NO	
A-29	Lower Level Income	Vacant/Short Term Lower Level Retail Market Income	YES	Vacant /Short term Retail Area X Market Retail Rate
B-1		Office Leases Scheduled to Expire in Year 1 of Valuation	NO	
B-2		Additional Office Leases Scheduled to Expire in Year 1 of Valuation	YES	Sum of Additional Office Leases from Lease Worksheet (H7)
B-3		Total of Office Leases Scheduled to Expire in Year 1 of Valuation	YES	Sum of Office Leases from Lease Worksheet
B-4	Office Market Rate	Market Rental Rate for Vacant Short Term Office Space for Year 1 of Valuation	NO	
B-5	Potential Gross Income	Market Office Income From Leases to Expire in Year 1 of Valuation	YES	Sum of Office Leases Scheduled to Expire in Year 1 X Office Market Rental Rate
B-6		Effective Office Gross Income From Leases to Expire in Year 1 of Valuation	YES	Potential Gross Income(PGI) - Vacancy Rate
B-7		Estimated Expenses for Office Leases Scheduled to Expire in Year 1 of Valuation	YES	Total Off Leased Area to Expire in Year 1 X Reduced Op Ex X Occupancy Rate
B-8	NOI Loss	EGI Less Estimated Expenses for Office Leases to Expire in Year 1 of Valuation	YES	Effective Gross Income(EGI) - Estimated Expenses
B-9		Income Loss Adjusted for Lease-up Time and Vacate Probability for Year 1 of Valuation	YES	Net Operating Income(NOI) Loss X Lease-up Assumption X Vacate Probability Rate
B-10	Discount Factor	Converts To Present Value(PV)	NO	
B-11		Present Value of Excess Vacancy for Year 1 of Valuation	YES	NOI Loss X Discount Rate
B-12		Present Value of Tenant Improvements for Year 1 of Valuation	YES	Expiring or Vacant Office Space X Occupancy Rate X Tenant Improvement Cost X Vacate Probability X Discount Rate
B-13		Present Value of Leasing Commissions for Year 1 of Valuation	YES	Office Market Rate X Expiring Year 1 Lease Area X Occupancy Rate X Average Commission Rate X 7.5 Years X Discount Rate
B-14		Office Leases Scheduled to Expire in Year 2 of Valuation	NO	
B-15		Additional Office Space to Expire in Year 2 of Valuation	YES	Sum of Additional Year 2 Office Leases from Additional Worksheet (H11)
B-16		Total of Office Leases Scheduled to Expire in Year 2 of Valuation	YES	Sum of Office Leases to Expire in Year 2
B-17	Office Market Rate	Market Rental Rate Adjusted by CPI for Vacant Office Space in Year 2 of Valuation	NO	
B-18	Potential Gross Income	Office Market Income From Leases To Expire in Year 2 of Valuation	YES	Sum of Office Leases Scheduled to Expire in Year 2 X Year 2 Market Rental Rate
B-19		Effective Office Gross Income From Leases to Expire in Year 2 of Valuation	YES	Potential Gross Income - Vacancy Rate
B-20		Estimated Expenses for Office Leases Scheduled to Expire in Year 2 of Valuation	YES	Total Office Leased Space To Expire in Year 2 X Reduced OpEX Rate X Occ Rate
	)I Loss	Effective Gross Income Less Expenses for Office Space to Expire in Year 2 of Valuation	YES	Effective Gross Income - Estimated Expenses
		Income Loss Adjusted for Lease Up Time & Vacate Probability for Year 2 of Valuation	YES	NOI Loss X Leaseup Assumption X Vacate Probability Rate
	scount Rate	Converts To Present Value	NO	
		Present Value of Excess Vacancy for Year 2 of Valuation	YES	NOI Loss X Discount Factor

#	Field Name	Description	Calc	Calculation
B-25		Present Value of Tenant Improvements for Year 2 of Valuation	YES	Year 2 Expiring or Vacant Office Space X Occupancy Rate X Tenant Improvement Cost X Vacate Probality X Discount Rate
B-26		Present Value of Leasing Commissions for Year 2 of Valuation	YES	Office Market Rate X Expiring Year 2 Lease Area X Occupancy Rate X Average Commision Rate X 7.5 YearsX Discount Rate
B-27		Office Leases Scheduled to Expire in Year 3 of Valuation	NO	
B-28		Additional Office Space to Expire in Year 3 of Valuation	YES	Sum of Additional Year 3 Office Leases from Additional Worksheet (H15)
B-29		Total of Office Leases Scheduled to Expire in Year 3 of Valuation	YES	Sum of Office Leases to Expire in Year 3 of Valuation
B-30	Office Market Rate	Market Rental Rate Adjusted by CPI for Vacant Office Space in Year 3 of Valuation	NO	
B-31	Potential Gross Income	Office Market Income From Leases To Expire in Year 3 of Valuation	YES	Sum of Office Leases Scheduled to Expire in Year 3 X Year 3 Market Rental Rate
B-32		Effective Office Gross Income From Leases to Expire in Year 3 of Valuation	YES	Potential Gross Income - Vacancy Rate
B-33		Estimated Expenses for Office Leases Scheduled to Expire in Year 3 of Valuation	YES	Total Office Leased Space To Expire Year 3 X Reduced OpEX Rate X Occupancy Rate
B-34	NOI Loss	EGI Less Expenses for Office Space to Expire in Year 3 of Valuation	YES	Effective Gross Income - Estimated Expenses
B-35		Income Loss Adjusted for Lease Up Time & Vacate Probability for Year 3 of Valuation	YES	NOI Loss X Leaseup Assumption X Vacate Probability Rate
B-36	Discount Rate	Converts To Present Value	NO	
B-37		Present Value of Excess Vacancy for Year 3 of Valuation	YES	NOI Loss X Discount Factor
B-38		Present Value of Tenant Improvements for Year 3 of Valuation	YES	Year 3 Expiring or Vacant Office Space X Occupancy Rate X Tenant Improvement Cost X Vacate Probality X Discount Rate
B-39		Present Value of Leasing Commissions for Year 3 of Valuation	YES	Office Market Rate X Expiring Year 3 Lease Area X Occupancy Rate X Average Commision Rate X 7.5 YearsX Discount Rate
C-1		Present Value of Retail Leasing Commissions for Year 1	YES	Retail Market Rate X Retail Area Expiring in Year 1 X Occupancy % X Commission % X 7.5 Years X Discount Rate
C-2		Retail Excess Vacancy for Year 1	YES	Retail Rental Rate X Area X Occupancy Rate X Leaseup Assumption % X Vacate % X Discount Rate
C-3	Rental Market Rate	Market Rate for Vacant/Short Term Retail Space for Year 1	NO	
C-4		Retail Leases Scheduled to Expire in Year 1	NO	
C-5		Total of Retail Leases Scheduled to Expire in Year 1	YES	Sum of Retail Leases Scheduled to Expire in Year 1
C5a		Additional Retail Area from Additional Revenue Worksheet	YES	Adds Total Area from Additional Revenue Worksheet Section (H-8)
C-6		Present Value of Retail Leasing Commissions for Year 2	YES	Retail Market Rate X Retail Area Expiring in Year 2 X Occupancy % X Commission % X 7.5 Years X Discount Rate
C-7		Retail Excess Vacancy for Year 2	YES	Retail Rental Rate X Area X Occupancy Rate X Leaseup Assumption % X Vacate % X Discount Rate
C-8	Rental Market Rate	Market Rate for Vacant/Short Term Retail Space for Year 2	NO	
C-9		Retail Leases Scheduled to Expire in Year 2	NO	
C-10		Total of Retail Leases Scheduled to Expire in Year 2	YES	Sum of Retail Leases Scheduled to Expire in Year 2
C-10a		Additional Retail Area from Additional Revenue Worksheet	YES	Adds Total Area from Additional Revenue Worksheet Section (H-12)
C-11		Present Value of Retail Leasing Commissions for Year 3	YES	Retail Market Rate X Retail Area Expiring in year 3 X Occupancy % X Commission % X 7.5 Years X Discount Rate
C-12		Retail Excess Vacancy for Year 3	YES	Retail Rental Rate X Area X Occupancy Rate X Leaseup Assumption % X Vacate % X Discount Rate
C-13	Rental Market Rate	Market Rate for Vacant/Short Term Retail Space for Year 3	NO	
C-14		Retail Leases Scheduled to Expire in Year 3	NO	
C-15		Total of Retail Leases Scheduled to Expire in Year 3	YES	Sum of Retail Leases Scheduled to Expire in Year 3
C-15a		Additional Retail Area from Additional Revenue Worksheet	YES	Adds Total Area from Additional Revenue Worksheet Section (H-16)

#	Field Name	Description	Calc	Calculation
D-1	Lease Growth Rate	Selected Yearly Lease Growth Rate	NO	
D-2	Lease-up Assumption	Used to Estimate Excess Vacancy	NO	
D-3	Standard Tenant Improvement	Tenant Improvement Cost Applied to New Leased Space	NO	
D-4	Renewal Tenant Improvement	Tenant Improvement Cost Applied to Renewal Leased Space	NO	
D-5	New Tenant Commission	Leasing Commission Applied to New Leased Space	NO	
D-6	Renewal Commission	Leasing Commission Applied to Renewal Leased Space	NO	
D-7	Vacancy Rate	Selected Vacancy Rate to Determine Effective Gross Income	NO	
D-8	Op Exp Saved Per Square Foot	Expenses Used to Determine NOI Loss for Excess Vacancy	NO	
D-9	Vacate Probability	If Tenant is Leaving 100% is Used This Effects Vacancy, TI's & Leasing Commissions	NO	
D-10	Discount Rate	Used to Calculate Discount Factors	NO	
D-11	Present Value of Excess Vacancy	Sum of Present Value Office Excess Vacancy for Years 1 to 3	YES	Sum of Present Value Office Excess Vacancy for Years 1 to 3
D-12	Present Value of Tenant Improvement's	Sum of Present Value of Office Tenant Improvements for Years 1 to 3	YES	Sum of Present Value of Office Tenant Improvements for Years 1 to 3
D-13	Present Value of Leasing Commissions	Sum of Office Commissions for Years 1 to 3	YES	Sum of Present Value Office Leasing Commissions for Years 1 to 3
D-14	Present Value of Lease-up	Sum of Present Value of Office Excess Vacancy, Tenant Improvements & Commissions	YES	Sum of Present Value of Office Excess Vacancy, Tenant Improvements & Commissions
D-15	Present Value of Leasing Commissions	Sum of Present Value of Retail Leasing Commissions for Years 1 to 3	YES	Sum of Present Value of Retail Commissions for Years 1 to 3
D-16	Excess Vacancy	Sum of Retail Excess Vacancy for Years 1 to 3	YES	Sum of Present Value of Retail Excess Vacancy for Years 1 to 3
D-17	Total Present Value of Retail	Present Value of Total Retail Leasing Commissions & Retail Excess Vacancy	YES	Total of Present Value of Retail Commissions & Retail Excess Vacancy
E-1	NRA	Total Square Footage of Office and Retail	YES	Total of all Square Feet in Section A (Office, Retail, Mezz, Lower Level)
E-2	PGI	Potential Office Mezzanine Retail Gross Income	YES	Total of all Income in Section A (Off, Retail, Mezz and Lower Level)
E-3	Concessions	Enter Lease Concessions	NO	
E-4	Vacancy Rate	Vacancy Percentage	YES	Vacancy from Section D
E-5	Subtotal	Office and Retail Income Minus	YES	Potential Gross Income-Concessions-Vacancy
E-6	Parking	Estimated Parking Income	NO	
E-7	Roof	Typical Antenna Income	NO	
E-8	Storage	Storage Income	NO	
E-9	Other	Other Income	NO	
E-10	Op Expenses	Operating Expenses	NO	
E-11		Operating Expenses Per Square Foot	YES	Operating Expenses divided by Net Rentable Area
E-12	Net Operating Income (NOI)	Net Operating Income	YES	SubTotal Income minus Operating Expenses
E-13	Overall Rate (OAR)	Selected Capitalization Rate	NO	
E-14	Stabilized Value	Value before Any Lease-up Costs	YES	Net Operating Income divided by Overall Rate
E-15	Present Value of Lease-up Cost	Present Value of All Office & Retail Lease-up Cost	YES	Present Value of Office Lease-up Cost + Present Value of Retail Lease-up Cost
E-16	Present Value of Rehab Cost	Present Value of Rehab Cost, PV of Above or Below Market Rent Difference	NO	
E-17	Market Value	Total Estimated Market Value	YES	Stabilized Value minus Present Value of Lease-up Cost minus Present Value of Rehab $
E-18	Value Per Square Foot	Market Value Per Square Foot of Net Rentable Areas (NRA)	YES	Market Value divided by NRA
F-1	Long Term Retail Rent	Continuation from Income Worksheet Of Long Term Retail Rents	NO	
F-2	Long Term Retail Area	Leased Area for Retail Tenants With Long Term Rents	NO	
F-3	Long Term Retail Annual Rent	Annual Rent From Long Term Retail Tenants	YES	Long Term Retail Rent X Leased Square Feet
F-4	Total Long Term Retail Rent	Sum of all Retail Tenants in this Section	YES	Totals all Annual Rents in this Section to be added to Worksheet in Section A7-b
G-1	Long Term Office Rent	Continuation from Income Worksheet Of Long Term Office Rents	NO	
G-2	Long Term Office Area	Leased Area for Office Tenants With Long Term Rents	NO	
G-3	Long Term Office Annual Rent	Annual Rent From Long Term Office Tenants	YES	Long Term Office Rent X Leased Square Feet
G-4	Total Long Term Office Rent	Sum of all Office Tenants in this Section	YES	Totals all Annual Rents in this Section to be added to Worksheet in Section A15-b

#	Field Name	Description	Calc	Calculation
H-1	Office Short Term Area	Continuation from Income Worksheet of Short Term/Vacant Office Area	NO	
H-2	Retail Short Term Area	Continuation from Income Worksheet of Short Term/Vacant Retail Area	NO	
H-3	Total Office Area	Total of all Office Area in this Section	YES	Sums all Short Term or Vacant Office Space in this Section added to A-17
H-4	Total Retail Area	Total of all Retail Area in this Section	YES	Sums all Short Term or Vacant Retail Space in this Section added to A-24
H-5	Office Short Term Year 1	Area of Office Tenants Whose Leases Expire in Year 1	NO	
H-6	Retail Short Term Year 1	Area of Retail Tenants Whose Leases Expire in Year 1	NO	
H-7	Total Office Short Term Year 1	Total Area of Office Tenants Whose Leases Expire in Year 1	YES	Sums Office Area in this Section to be added to Section B-2
H-8	Total Retail Short Term Year 1	Total Area of Retail Tenants Whose Leases Expire in Year 1	YES	Sums Retail Area in this Section to be added to Section C-5a
H-9	Office Short Term Year 2	Area of Office Tenants Whose Leases Expire in Year 2	NO	
H-10	Retail Short Term Year 2	Area of Retail Tenants Whose Leases Expire in Year 2	NO	
H-11	Total Office Short Term Year 2	Total Area of Office Tenants Whose Leases Expire in Year 2	YES	Sums Office Area in this Section to be added to Section B-15
H-12	Total Retail Short Term Year 2	Total Area of Retail Tenants Whose Leases Expire in Year 2	YES	Sums Retail Area in this Section to be added to Section C-10a
H-13	Office Short Term Year 3	Area of Office Tenants Whose Leases Expire in Year 3	NO	
H-14	Retail Short Term Year 3	Area of Retail Tenants Whose Leases Expire in Year 3	NO	
H-15	Total Office Short Term Year 3	Total Area of Office Tenants Whose Leases Expire in Year 3	YES	Sums Office Area in this Section to be added to Section B-28
H-16	Total Retail Short Term Year 3	Total Area of Retail Tenants Whose Leases Expire in Year 3	YES	Sums Retail Area in this Section to be added to Section C-15a
I-1	Office Market Leases Date	Date Signed for Office Market Leases to be Used as Comparables	NO	
I-2	Office Market Leases Rent	Rent per Square Foot for Office Market Leases to be Used as Comparables	NO	
I-3	Office Market Leases Area	Square Foot Area for Office Market Leases to be Used as Comparables	NO	
I-4	Office Market Leases Annual $	Annual Rent for Office Market Leases to be Used as Comparables	YES	Office Area X Market Rent
I-5	Office Market Comps Square and Lot	Square & Lot for Comparable Lease if not from Subject	NO	
I-6	Total Area Office Market Leases	Total Area of Office Leases in this Section	YES	Sums Total Rented Area in this Section
I-7	Total Rent Office Market Leases	Total Rent for Office Leases in this Section	YES	Sums Total Office Annual Rent For This Section
I-8	Weighted Avg Office Market Leases	Average of all Office Leases in this section	YES	Divides Total Annual Rent By Total Office Area For Weighted Average
J-1	Retail Market Leases Date	Date Signed for Retail Market Leases to be Used as Comparables	NO	
J-2	Retail Market Leases Rent	Rent per Square Foot for Retail Market Leases to be Used as Comparables	NO	
J-3	Retail Market Leases Area	Square Foot Area for Retail Market Leases to be Used as Comparables	NO	
J-4	Retail Market Leases Annual $	Annual Rent for Retail Market Leases to be Used as Comparables	YES	Retail Area X Market Rent
J-5	Retail Market Comps Square and Lot	Square & Lot for Comparable Lease if not from Subject	NO	
J-6	Total Area Retail Market Leases	Total Area of Retail Leases in this Section	YES	Sums Total Rented Area in this Section
J-7	Total Rent Retail Market Leases	Total Rent for Retail Leases in this Section	YES	Sums Total Retail Annual Rent For This Section
J-8	Weighted Avg Retail Market Leases	Average of all Retail Leases in this section	YES	Divides Total Annual Rent By Total Retail Area For Weighted Average
K-1	Holding Period in Years	Estimated Holding Period	NO	
K-2	Annual Rate -- Equity Yield	Estimated Annual Equity Rate	NO	
K-3	Annual Rate -- Mortgage	Estimated Annual Mortgage Rate	NO	
K-4	Term of Mortgage in Years	Estimated Term of Mortgage	NO	
K-5	Loan to Value Ratio	Estimated Loan to Value Ratio	NO	
K-6	Change in Property Value: Annual	Estimated Change in Annual Property Value	NO	
K-6a	Change in Property Value: Total	Change in Total Value over Holding Period Based on Estimated Annual %	YES	One Plus Annual Property Percent Increase to the Power of the Holding Period
K-7	Change in Income: Annual	Estimated Change in Annual Income	NO	
K-7a	Change in Income: Total	Change in Total Income Over Holding Period Based on Estimated Annual %	YES	One Plus Annual Income Percent Increase to the Power of the Holding Period
K-8	Weighted Cost of Capital	Determines the Overall Cost Including Equity Yield and Mortgage Rate	YES	1-Loan to Value Ratio x Equity Yield + Mortgage Term X Annual Loan Constant
K-9	Monthly Mortgage Rate	Monthly Mortgage Rate	YES	Mortgage Rate Divided by 12
K-10	Annual Loan Constant -- Full Term	Total Annual Debt Service for the Term of the Mortgage	YES	((Monthly Mortgage Rate Divided By (1+ Monthly Mortgage Rate to the Power of the Mortgage Term in Months) -1)+ Monthly Mortgage Rate) x 12

#	Field Name	Description	Calc	Calculation
K-11	Annual Loan Constant -- Hold Period	Total Annual Debt Service for the Holding Period	**YES**	((Monthly Mortgage Rate Divided By (1+ Monthly Mortgage Rate to the Power of the Holding Period in Months) -1)+ Monthly Mortgage Rate) x 12
K-12	Part Paid Off	Portion of Loan Paid Off During the Holding Period	**YES**	(Annual Loan Constant - Mortgage Rate) divided by (Annual Loan Constant for the Holding Period - Mortgage Rate)
K-13		Step 1 (Equity Yield%to the Power of the Holding Period)	**YES**	(1 + Annual Equity Yield Rate) to the Power of The Holding Period
K-14		Step 2 (Step 1 minus 1)	**YES**	((1 + Annual Equity Yield Rate) to the Power of The Holding Period) - 1
K-15		Step 3 (Step 2 Divided by the Equity Yield)	**YES**	(((1 + Annual Equity Yield Rate) to the Power of The Holding Period) - 1) divided by the Annual Equity Yield)
K-16	Sinking Fund Factor	Sinking Fund is Used to Determine the J-Factor	**YES**	1 divided by((1 + Annual Equity Yield Rate) to the Power of The Holding Period -1)divided by the Annual Equity Yield
K-17	Step 1	Step 1 for Determining the J-Factor-Used When Income Growth is Expected	**YES**	1- (1 divided by (1 + Equity Yield) to the Power of the Holding Period)
K-18	Step 2	Holding Period Divided by Step 1	**YES**	Holding Period/(1- (1 / (1 + Equity Yield) to the Power of the Holding Period)
K-19	Step 3	Step 2 Minus Inverse of Equity Yield	**YES**	Holding Period/(1- (1 / (1 + Equity Yield) to the Power of the Holding Period) minus (1 divided by the Equity Yield Rate)
K-20	J-Factor	J-Factor-used in Determining Cap Rates when Income Growth is Expected Step 2 times Sinking Fund	**YES**	(Holding Period/(1- (1 / (1 + Equity Yield) to the Power of the Holding Period) minus (1 divided by the Equity Yield Rate)) X Sinking Fund
K-21	Loan Ratio x Annual Constant	Mortgage Portion of Overall Rate- in Mortgage Equity Cap Rate	**YES**	Loan Ratio x Annual Constant
K-22	Equity Ratio x Equity Yield Rate	Equity Portion of Overall Rate- in Mortgage Equity Cap Rate	**YES**	Equity Ratio x Equity Yield Rate
K-23	Loan Ratio x PP Off x SF Factor	Part of Overall Rate- Accounts for Portion of Loan Paid Off in Holding Period	**YES**	Loan Ratio x Part Paid Off x Sinking Fund Factor
K-24	Adjustment for Change in Property Value	Part of Overall Rate- Accounts for Increase in Property Value	**YES**	Total Annual Property Value Increases Over Holding Period x Sinking Fund
K-25	J-Factor	Part of Overall Rate- Accounts for Increase in Income during Holding Period	**YES**	1 divided by Total annual Income Increase over Holding Period X J Factor
K-26	OAR before Adding Real Estate Tax Rate	Overall Capitalization Rate ((K21+K22)-K23-K24)*K25	**YES**	Loan Ratio x Annual Constant+Equity RatioxEquity Yield Rate-Part Of Mortgage Paid Off - Annual Property Increase x Sinking Fund x J Factor
K-27	Effective Rate of Taxation	Added to Overall Rate for Tax Loaded Cap Rate	**NO**	
K-28	OAR Loaded for Real Estate Taxes	Real Estate Tax Loaded Capitalization Rate	**YES**	Adds Effective Tax Rate to Overall Capitalization Rate
L-1	Discount Rate	Discount Rate Used to Estimate Present Value of Losses	**NO**	
L-2	Estimated Loss	Year 1 of Loss of Estimated Loss, Capitalized Expense or Excess Rent	**NO**	
L-3	Present Value Factor	Present Value Formula for Discount Rate in L1	**YES**	Present Value Formula for Discount Rate in L1
L-4	Present Value of Loss(es)	Present Value times Annual Loss	**YES**	Present Value times Annual Loss
L-5	Total Present Value of Losses	Totals Present Value of Losses	**YES**	Totals Present Value of Losses Over Holding Period

2005 Cost Occupancy / Use Codes

Occ. Code	Land Class	Description	Bldg. Model	Bldg. Occ.	Cost Group	Cost Adjustment	Size Adj. Table	Standard Size	Standard Wall Height	Wall Height Adjustment	Run Cost?
001	C	Non-conform residential-single	94	001	RH1	1.00	S90	2000	8	0.015	-1
002	R	Non-conform residential-multi-	03	002	AP1	1.00	S90	1500	8	0.020	-1
003	R	Residential Transient	05	003	RH1	1.00	S90	8000	10	0.015	-1
004	C	Commercial-Retail (NC)	94	004	RT1	1.00	S90	5000	12	0.010	-1
005	C	Commercial-Office (NC)	94	005	OF1	1.00	S90	6000	10	0.015	-1
006	C	Commercial-Spec Purpose (NC)	94	006	GS1	1.00	S90	6000	8	0.015	-1
007	C	Industrial (NC)	96	007	MN2	1.00	S90	20000	8	0.015	-1
008	C	Special Purpose (NC)	94	008	GS1	1.00	S90	8000	8	0.015	-1
011	R	Residential Row Single Family	01	011	R11	1.00	SG3	1800	8	0.015	-1
012	R	Residential Detached Single Fa	01	012	R12	1.00	SG3	1800	8	0.015	-1
013	R	Residential-Semi-Detached Sing	01	013	R13	1.00	SG3	1800	8	0.015	-1
014	R	Residential Garage	00	014		1.00	S90	10000	0	0.015	-1
015	R	Residential-Mixed Use	01	015	R15	1.00	SG3	1800	8	0.020	-1
016	R	Residential-Condo-Horizontal	05	016	CND	1.00	S90	1000	8	0.015	-1
017	R	Residential-Condo-Vertical	05	017	CND	1.00	S90	1000	8	0.015	-1
018	R	Residential-Condo-Garage	00	018		1.00	S90	10000	8	0.015	-1
019	R	Residential-Single Family-Misc	01	019	R19	1.00	SG3	1800	8	0.015	-1
021	C	Residential Apartment-Walk-Up	94	021	AP1	1.00	S90	10000	8	0.020	-1
022	C	Residential-Apartment-Elevator	94	022	AP2	1.00	S90	50000	8	0.015	-1
023	R	Res Flats-Less than 5 Units	03	023	R23	1.00	SG4	3000	8	0.015	-1
024	R	Res-Coversions less than 5 Uni	02	024	R24	1.00	SG3	1800	8	0.015	-1
025	C	Res-Coversions 5 Units	94	025	AP1	1.00	S90	10000	8	0.020	-1
026	C	Res-Cooperative-Horizo	94	026	AP2	1.00	S90	10000	8	0.015	-1
027	C	Res-Cooperative-Verical	94	027	AP2	1.00	S90	50000	8	0.015	-1
028	C	Res-Conversions-mr than 5	94	028	AP1	1.00	S90	20000	8	0.015	-1
029	C	Res-Multi-family Misc	94	029	AP1	1.00	S90	10000	8	0.015	-1
031	C	Hotel-Small	94	031	HT1	1.00	S90	20000	9	0.010	-1
032	C	Hotel-Large	94	032	HT2	1.00	S90	135000	9	0.010	-1
033	C	Motel	94	033	HT1	0.80	S90	20000	9	0.010	-1
034	C	Private Club	94	034	GS1	1.00	S90	4000	14	0.015	-1
035	C	Tourist Homes	94	035	RH1	1.00	S90	8000	10	0.015	-1
036	C	Dormitory	94	036	RH2	1.00	S90	8000	8	0.015	-1
037	C	Inn	94	037	HT1	0.80	S90	12000	10	0.010	-1
038	C	Fraternity/Sorority House	94	038	RH2	1.00	S90	8000	10	0.015	-1
039	C	Res-Transient Misc	94	039	RH1	1.00	S90	5000	8	0.015	-1
041	C	Store-Small 1 Story	94	041	RT1	1.00	S90	10000	14	0.010	-1
042	C	Store-Misc	94	042	RT1	1.00	S90	4000	14	0.010	-1
043	C	Store-Department	94	043	RT3	1.00	S90	40000	14	0.010	-1
044	C	Store-Shopping Center/Mall	94	044	RT2	1.00	S90	60000	18	0.010	-1
045	C	Store-Restaurant	94	045	RS1	1.00	S90	5000	12	0.010	-1
046	C	Store-Barber/Beauty Shop	94	046	RT4	1.00	S90	4000	14	0.010	-1
047	C	Store-Super Market	94	047	RT2	0.88	S90	22000	14	0.010	-1
048	C	Commer-Retail-Condo	94	048	RT1	1.00	S90	3000	14	0.010	-1
049	C	Commer-Retail-Misc	94	049	RT1	1.00	S90	4000	14	0.010	-1
051	C	Commercial-Office-Small	94	051	OF1	1.00	S90	6000	10	0.015	-1
052	C	Commercial-Office-Large	94	052	OF3	1.00	S90	60000	10	0.015	-1
053	C	Commercial-Planned-Development	94	053	OF3	1.00	S90	300000	10	0.015	-1
056	C	Office-Condo-Horizontal	94	056	OF1	1.00	S90	3000	10	0.015	-1
057	C	Office-Condo-Vertical	94	057	OF1	1.00	S90	3000	10	0.015	-1
058	C	Commercial-Office-Condo	94	058	OF3	1.00	S90	6000	10	0.015	-1
059	C	Commercial-Office-Misc	94	059	OF2	1.00	S90	6000	10	0.015	-1
061	C	Commercial-Banks_Financial Svc	94	061	BN1	1.00	S90	3000	14	0.015	-1
062	C	Commercial-Garage_ Vehicle Sal	94	062	PK1	1.00	S90	5000	8	0.015	-1
063	C	Commercial-Parking Garage	94	063	PK2	1.00	S90	55000	8	0.015	-1
064	C	Parking Lot Special Purpose	00	064		1.00	S90	25000	0	0.000	-1
065	C	Vehicle Svc Station_ Vintage	94	065	SV1	1.00	S90	5000	12	0.010	-1
066	C	Theaters_ Entertainment	94	066	GS2	1.00	S90	20000	22	0.010	-1
067	C	Commercial-Restaurant	94	067	RS1	1.00	S90	5000	12	0.010	-1
068	C	Commercial-Restaurant-Fast Foo	94	068	RS2	1.10	S90	3000	12	0.010	-1
069	C	Commercial-Specific Purpose	94	069	RT1	1.00	S90	10000	14	0.010	-1
071	C	Industrial-Raw Material	94	071	MN1	1.00	S90	15000	14	0.015	-1

2005 Cost Occupancy / Use Codes

Occ. Code	Land Class	Description	Bldg. Model	Bldg. Occ.	Cost Group	Cost Adjustment	Size Adj. Table	Standard Size	Standard Wall Height	Wall Height Adjustment	Run Cost?
072	C	Industrial-Heavy Manufacturing	94	072	MN2	1.00	S90	30000	12	0.015	-1
073	C	Industrial-Light	94	073	MN1	1.00	S90	22000	12	0.015	-1
074	C	Industrial-Warehouse-1-story	94	074	WH2	1.00	S90	25000	16	0.010	-1
075	C	Industrial-Warehouse-Multistor	94	075	WH1	1.00	S90	20000	16	0.010	-1
076	C	Industrial-Truck Teminal	94	076	WH3	1.00	S90	20000	16	0.010	-1
078	C	Warehouse-Condo	94	078	WH2	1.00	S90	5000	16	0.010	-1
079	C	Industrial -Misc	94	079	MN1	1.00	S90	22000	12	0.015	-1
081	C	Religious	94	081	PS1	1.00	S90	15000	24	0.010	-1
082	C	Medical	94	082	MC1	1.00	S90	15000	10	0.010	-1
083	C	Educational	94	083	ED1	1.00	S90	80000	12	0.010	-1
084	C	Public Service	94	084	PS1	1.00	S90	12000	12	0.010	-1
085	C	Embassy_ Chancery	94	085	PS2	1.00	S90	12000	12	0.010	-1
086	C	Museum_ Library_ Gallery	94	086	GS3	1.00	S90	14000	14	0.010	-1
087	C	Recreational	94	087	RB1	1.00	S90	20000	24	0.010	-1
088	C	Healthcare Facitlity	94	088	MC2	1.00	S90	8000	12	0.010	-1
089	C	Special Purpose	94	089	GS2	1.00	S90	2000	8	0.010	-1
091	R	Vacant	00	091		1.00	S90		0	0.015	-1
092	R	Vacant-with permit	00	092		1.00	S90		0		-1
093	R	Vacant-zoning limits	00	093		1.00			0		-1
094	R	Vacant-false abutting	00	094		1.00			0		-1
095	R	Vacant-Commercial Use	00	095		1.00			0		-1
096	R	Vacant-Unimproved Parking	00	096		1.00			0		-1
097	R	Vacant-Improved and Abandoned	01	097	R97	0.50	SG3	1800	8	0.015	-1
116	R	Condo-Horizontal Combined	05	116	CND	1.00	S90	3000	8	0.015	-1
117	R	Condo-Vertictal Combined	05	117	CND	1.00	S90	2000	8	0.015	-1
126	C	Coop-Horizontal-Mixed Use	94	126	AP2	1.00	S90	10000	8	0.015	-1
127	C	Coop-Vertical-Mixed Use	94	127	AP2	1.00	S90	10000	8	0.015	-1
165	C	Vehicle Svc Station_ Kiosk	94	165	SS1	1.00	S90	5000	14	0.010	-1
189	C	Special Pupose-Memorial	94	189	GS1	1.00	S90	10000	8	0.010	-1
191	C	Vacant	00	191		1.00					-1
192	C	Vacant-with permit	00	192		1.00					-1
193	C	Vacant-zoning limits	00	193		1.00					-1
194	C	Vacant-false abutting	00	194		1.00					-1
195	C	Vacant-Commercial Use	00	195		1.00					-1
196	C	Vacant-Unimproved Parking	00	196		1.00					-1
197	C	Vacant-Improved and Abandoned	94	197	MN1	0.50	S90	5000	8	0.015	-1
214	C	Garage-Multi-family	00	214		1.00	S90	10000	0	0.015	-1
216	C	Condo-Investment-Horizontal	94	216	AP2	1.00	S90	10000	8	0.015	-1
217	C	Condo-Investment-Vertical	94	217	AP2	1.00	S90	50000	8	0.015	-1
265	C	Vehicle Svc Station_ Kiosk	94	265	SS1	1.00	S90	5000	12	0.010	-1
316	R	Condo-Duplex	05	316	CND	1.00	S90	5000	8	0.015	-1
365	C	Vehicle Svc Station_ Market	94	365	SS2	1.00	S90	5000	12	0.010	-1
417	R	Condo-Vertical-Parking-Unid	00	417		1.00		2000	0		-1
465	C	Vehicle Svc Station_ Market	94	465	SS2	1.00	S90	5000	14	0.010	-1
516	R	Condo-Detached	01	516	SIN	1.00	S90	2000	8	0.015	-1

2005 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
AP1	0	59.13	5	60	80	99
AP1	A	81.25	5	70	80	99
AP1	B	70.00	5	70	80	99
AP1	C	59.13	5	60	80	99
AP1	D	58.33	5	50	80	99
AP2	0	103.74	5	60	80	99
AP2	A	135.28	5	70	80	99
AP2	B	129.93	5	70	80	99
AP2	C	103.74	5	60	80	99
AP2	D	101.42	5	50	80	99
BN1	0	123.73	5	60	80	99
BN1	A	159.25	5	70	80	99
BN1	B	154.36	5	70	80	99
BN1	C	123.73	5	60	80	99
BN1	D	117.40	5	50	80	99
BN1	S	112.20	5	50	80	99
BS1	0	123.20	5	60	80	99
BS1	A	160.60	5	70	80	99
BS1	B	143.00	5	70	80	99
BS1	C	123.20	5	60	80	99
BS1	D	112.20	5	50	80	99
BS1	S	44.00	5	50	80	99
CD	R	82.50	5	99	80	99
CND	R	115.00	5	50	0	99
CW1	0	101.20	5	60	80	99
CW1	A	119.90	5	70	80	99
CW1	B	114.40	5	70	80	99
CW1	C	101.20	5	60	80	99
CW1	D	90.20	5	50	80	99
CW1	S	90.20	5	50	80	99
ED1	0	96.46	5	60	80	99
ED1	A	123.83	5	70	80	99
ED1	B	118.97	5	70	80	99
ED1	C	96.46	5	60	80	99
ED1	D	92.75	5	50	80	99
ED1	S	90.17	5	50	80	99
GEN	0	105.60	5	60	80	99
GEN	A	146.40	5	70	80	99
GEN	B	134.40	5	70	80	99
GEN	C	105.60	5	60	80	99
GEN	D	90.00	5	50	80	99
GEN	S	90.00	5	50	80	99
GS1	0	105.60	5	60	80	99
GS1	A	134.40	5	70	80	99
GS1	B	124.80	5	70	80	99
GS1	C	105.60	5	60	80	99
GS1	D	99.60	5	50	80	99
GS1	S	48.00	5	50	80	99
GS2	0	77.46	5	60	80	99
GS2	A	125.23	5	70	80	99
GS2	B	122.18	5	70	80	99
GS2	C	77.46	5	60	80	99
GS2	D	73.34	5	50	80	99
GS2	S	71.64	5	50	80	99

2005 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
GS3	0	99.98	5	60	80	99
GS3	A	138.92	5	70	80	99
GS3	B	134.75	5	70	80	99
GS3	C	99.98	5	60	80	99
GS3	D	95.95	5	50	80	99
GS3	S	89.72	5	50	80	99
HT1	0	78.83	5	60	80	99
HT1	A	98.00	5	70	80	99
HT1	B	95.47	5	70	80	99
HT1	C	78.83	5	60	80	99
HT1	D	74.98	5	50	80	99
HT1	S	74.20	5	50	80	99
HT2	0	108.42	5	60	80	99
HT2	A	125.89	5	70	80	99
HT2	B	122.84	5	70	80	99
HT2	C	108.42	5	60	80	99
HT2	D	102.69	5	50	80	99
HT2	S	102.69	5	50	80	99
MC1	0	110.96	5	60	80	99
MC1	A	141.60	5	70	80	99
MC1	B	136.19	5	70	80	99
MC1	C	110.96	5	60	80	99
MC1	D	107.02	5	50	80	99
MC1	S	98.25	5	50	80	99
MC2	0	77.82	5	60	80	99
MC2	A	100.24	5	70	80	99
MC2	B	100.24	5	70	80	99
MC2	C	77.82	5	60	80	99
MC2	D	74.14	5	50	80	99
MC2	S	69.71	5	50	80	99
MLT	R	50.40	5	70	80	70
MN1	0	37.58	5	60	80	99
MN1	A	60.04	5	70	80	99
MN1	B	57.90	5	70	80	99
MN1	C	37.58	5	60	80	99
MN1	D	34.03	5	50	80	99
MN1	S	32.75	5	50	80	99
MN2	0	82.88	5	60	80	99
MN2	A	108.32	5	70	80	99
MN2	B	105.02	5	70	80	99
MN2	C	82.88	5	60	80	99
MN2	D	74.22	5	50	80	99
MN2	S	73.82	5	50	80	99
MN4	0	116.60	5	60	80	99
MN4	A	148.50	5	70	80	99
MN4	B	127.60	5	70	80	99
MN4	C	116.60	5	60	80	99
MN4	D	107.80	5	50	80	99
MN4	S	107.80	5	50	80	99
OF1	0	81.52	5	60	80	99
OF1	A	116.69	5	70	80	99
OF1	B	113.36	5	70	80	99
OF1	C	81.52	5	60	80	99
OF1	D	77.94	5	50	80	99

2005 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
OF1	S	71.85	5	50	80	99
OF2	0	97.98	5	60	80	99
OF2	A	138.92	5	70	80	99
OF2	B	133.68	5	70	80	99
OF2	C	97.98	5	60	80	99
OF2	D	93.62	5	50	80	99
OF2	S	104.94	5	50	80	99
OF3	0	116.15	5	60	80	99
OF3	A	136.85	5	70	80	99
OF3	B	128.80	5	70	80	99
OF3	C	116.15	5	60	80	99
OF3	D	103.50	5	50	80	99
OF3	S	103.50	5	50	80	99
OFF	0	80.50	5	60	80	99
OFF	A	105.80	5	70	80	99
OFF	B	98.90	5	70	80	99
OFF	C	80.50	5	60	80	99
OFF	D	73.60	5	50	80	99
OFF	S	73.60	5	50	80	99
PK1	0	40.61	5	60	80	99
PK1	A	58.57	5	70	80	99
PK1	B	58.57	5	70	80	99
PK1	C	40.61	5	60	80	99
PK1	D	36.46	5	50	80	99
PK1	S	34.09	5	50	80	99
PK2	0	33.84	5	60	80	99
PK2	A	34.96	5	70	80	99
PK2	B	33.84	5	70	80	99
PK2	C	33.84	5	60	80	99
PK2	D	25.15	5	50	80	99
PK2	S	25.15	5	50	80	90
PS1	0	89.24	5	60	80	99
PS1	A	120.63	5	70	80	99
PS1	B	116.78	5	70	80	99
PS1	C	89.24	5	60	80	99
PS1	D	85.31	5	50	80	99
PS1	S	79.93	5	50	80	99
PS2	0	117.70	5	60	80	99
PS2	A	133.10	5	70	80	99
PS2	B	128.70	5	70	80	99
PS2	C	117.70	5	60	80	99
PS2	D	106.70	5	50	80	99
PS2	S	106.70	5	50	80	99
R11	R	99.86	6	75	80	75
R12	R	123.26	6	75	80	75
R13	R	102.67	6	75	80	75
R15	R	99.86	6	75	80	75
R19	R	99.86	6	75	80	75
R23	R	57.09	6	75	80	75
R24	R	104.83	6	75	80	75
R97	R	99.86	6	75	80	75
RB1	0	78.46	5	60	80	99
RB1	A	110.78	5	70	80	99
RB1	B	107.35	5	70	80	99

2005 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
RB1	C	78.46	5	60	80	99
RB1	D	74.28	5	50	80	99
RB1	S	71.95	5	50	80	99
RES	R	60.00	5	70	80	70
RH1	0	104.83	5	70	80	99
RH1	A	104.83	5	70	80	99
RH1	B	104.83	5	70	80	99
RH1	C	104.83	5	70	80	99
RH1	D	104.83	5	70	80	99
RH1	S	104.83	5	70	80	99
RH2	0	89.99	5	60	80	99
RH2	A	125.42	5	70	80	99
RH2	B	121.46	5	70	80	99
RH2	C	89.99	5	60	80	99
RH2	D	85.42	5	50	80	99
RH2	S	83.51	5	50	80	99
RS1	0	88.68	5	60	80	99
RS1	A	109.42	5	70	80	99
RS1	B	109.42	5	70	80	99
RS1	C	88.68	5	60	80	99
RS1	D	83.84	5	50	80	99
RS1	S	80.33	5	50	80	99
RS2	0	99.30	5	60	80	99
RS2	A	126.83	5	70	80	99
RS2	B	126.83	5	70	80	99
RS2	C	99.30	5	60	80	99
RS2	D	93.78	5	50	80	99
RS2	S	90.68	5	50	80	99
RT1	0	61.38	5	60	80	99
RT1	A	78.66	5	70	80	99
RT1	B	77.32	5	70	80	99
RT1	C	61.38	5	60	80	99
RT1	D	59.05	5	50	80	99
RT1	S	56.88	5	50	80	99
RT2	0	64.00	5	60	80	99
RT2	A	64.00	5	70	80	99
RT2	B	64.00	5	70	80	99
RT2	C	64.00	5	60	80	99
RT2	D	64.00	5	50	80	99
RT2	S	60.73	5	50	80	99
RT3	0	88.87	5	60	80	99
RT3	A	92.72	5	70	80	99
RT3	B	90.30	5	70	80	99
RT3	C	88.87	5	60	80	99
RT3	D	77.22	5	50	80	99
RT3	S	77.22	5	50	80	99
RT4	0	58.85	5	60	80	99
RT4	A	78.70	5	70	80	99
RT4	B	78.70	5	70	80	99
RT4	C	58.85	5	60	80	99
RT4	D	55.44	5	50	80	99
RT4	S	53.04	5	50	80	99
SIN	R	68.77	5	70	80	70
SS1	0	135.34	5	70	80	99

2005 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
SS1	A	135.34	5	70	80	99
SS1	B	135.34	5	70	80	99
SS1	C	135.34	5	70	80	99
SS1	D	135.34	5	70	80	99
SS1	S	135.34	5	70	80	99
SS2	0	65.63	5	60	80	99
SS2	A	79.28	5	70	80	99
SS2	B	79.28	5	70	80	99
SS2	C	65.63	5	60	80	99
SS2	D	63.01	5	50	80	99
SS2	S	60.84	5	50	80	99
SV1	0	88.87	5	60	80	99
SV1	A	88.87	5	70	80	99
SV1	B	88.87	5	70	80	99
SV1	C	88.87	5	60	80	99
SV1	D	73.62	5	50	80	99
SV1	S	88.87	5	50	80	99
TM1	0	57.20	5	60	80	99
TM1	A	70.40	5	70	80	99
TM1	B	63.80	5	70	80	99
TM1	C	57.20	5	60	80	99
TM1	D	52.80	5	50	80	99
TM1	S	52.80	5	50	80	99
UT1	0	100.10	5	60	80	99
UT1	A	113.30	5	70	80	99
UT1	B	105.60	5	70	80	99
UT1	C	100.10	5	60	80	99
UT1	D	85.80	5	50	80	99
UT1	S	85.80	5	50	80	99
WH1	0	32.44	5	60	80	99
WH1	A	49.09	5	70	80	99
WH1	B	46.38	5	70	80	99
WH1	C	32.44	5	60	80	99
WH1	D	29.44	5	50	80	99
WH1	S	28.75	5	50	80	99
WH2	0	40.92	5	60	80	99
WH2	A	45.38	5	70	80	99
WH2	B	45.38	5	70	80	99
WH2	C	40.92	5	60	80	99
WH2	D	33.83	5	50	80	99
WH2	S	40.92	5	50	80	99
WH3	0	44.26	5	60	80	99
WH3	A	48.77	5	70	80	99
WH3	B	48.77	5	70	80	99
WH3	C	44.26	5	50	80	99
WH3	D	44.26	5	50	80	99
WH3	S	43.18	5	50	80	99

Real Property Assessment Division
2005 Base Changes

Neighborhood	Name	TOTAL BASE			
		2004	2005	Difference	% Change
1	American University Park	$1,599,352,100	$1,738,598,610	$139,246,510	8.71%
2	Anacostia	$256,899,560	$290,077,430	$33,177,870	12.91%
3	Barry Farms	$126,056,350	$138,368,830	$12,312,480	9.77%
4	Berkley	$650,728,060	$709,194,330	$58,466,270	8.98%
5	Brentwood	$276,818,140	$313,295,380	$36,477,240	13.18%
6	Brightwood	$963,054,180	$1,228,189,460	$265,135,280	27.53%
7	Brookland	$1,119,264,890	$1,396,371,160	$277,106,270	24.76%
8	Burleith	$481,369,710	$530,952,170	$49,582,460	10.30%
9	Capitol Hill	$2,004,166,350	$2,235,365,070	$231,198,720	11.54%
10	Central	$23,308,649,583	$24,892,490,390	$1,583,840,807	6.80%
11	Chevy Chase	$3,264,651,880	$3,704,942,710	$440,290,830	13.49%
12	Chillum	$210,457,120	$229,985,930	$19,528,810	9.28%
13	Cleveland Park	$1,583,536,146	$1,808,558,680	$225,022,534	14.21%
14	Colonial Village	$304,392,980	$387,968,250	$83,575,270	27.46%
15	Columbia Heights	$1,500,525,630	$1,874,675,970	$374,150,340	24.93%
16	Congress Heights	$535,847,590	$606,855,380	$71,007,790	13.25%
17	Crestwood	$422,186,830	$485,143,310	$62,956,480	14.91%
18	Deanwood	$646,318,340	$712,326,110	$66,007,770	10.21%
19	Eckington	$457,322,570	$557,609,000	$100,286,430	21.93%
20	Foggy Bottom	$2,129,626,220	$2,363,786,040	$234,159,820	11.00%
21	Forest Hills	$1,666,622,486	$1,840,286,450	$173,663,964	10.42%
22	Fort Dupont Park	$395,281,759	$440,411,890	$45,130,131	11.42%
23	Foxhall	$193,101,360	$213,332,660	$20,231,300	10.48%
24	Garfield	$866,304,760	$978,528,660	$112,223,900	12.95%
25	Georgetown	$4,162,055,340	$4,421,402,962	$259,347,622	6.23%
26	Glover Park	$724,210,685	$843,720,330	$119,509,645	16.50%
27	Hawthorne	$162,858,310	$177,931,090	$15,072,780	9.26%
28	Hillcrest	$608,105,770	$739,448,880	$131,343,110	21.60%
29	Kalorama	$2,200,865,780	$2,444,146,900	$243,281,120	11.05%
30	Kent	$679,339,400	$765,541,870	$86,202,470	12.69%
31	LeDroit Park	$311,176,120	$411,047,550	$99,871,430	32.09%
32	Lily Ponds	$196,815,730	$224,767,090	$27,951,360	14.20%
33	Marshall Heights	$131,561,760	$147,762,550	$16,200,790	12.31%
34	Massachusetts Av Heights	$515,150,940	$548,513,880	$33,362,940	6.48%
35	Michigan Park	$194,833,800	$227,195,530	$32,361,730	16.61%
36	Mount Pleasant	$1,663,450,053	$1,938,753,540	$275,303,487	16.55%
37	North Cleveland Park	$599,122,120	$667,319,890	$68,197,770	11.38%
38	Observatory Circle	$1,075,245,911	$1,211,498,271	$136,252,360	12.67%
39	Old City I	$4,018,805,073	$4,858,485,620	$839,680,547	20.89%
40	Old City II	$5,589,606,287	$6,508,907,890	$919,301,603	16.45%
41	Palisades	$535,311,580	$663,251,320	$127,939,740	23.90%
42	Petworth	$958,306,130	$1,152,895,240	$194,589,110	20.31%
43	Randle Heights	$413,228,950	$485,569,900	$72,340,950	17.51%
44	R.L.A. NE	$789,378,960	$900,631,350	$111,252,390	14.09%
46	R.L.A. SW	$3,186,021,479	$3,461,269,180	$275,247,701	8.64%
47	Riggs Park	$408,125,720	$492,450,890	$84,325,170	20.66%
48	Shepherd Park	$404,850,810	$451,734,250	$46,883,440	11.58%
49	Sixteenth Street Heights	$618,809,610	$791,885,200	$173,075,590	27.97%
50	Spring Valley	$977,887,660	$1,070,897,100	$93,009,440	9.51%
51	Takoma	$172,165,300	$216,346,890	$44,181,590	25.66%
52	Trinidad	$324,088,720	$371,913,260	$47,824,540	14.76%
53	Wakefield	$392,502,400	$474,216,000	$81,713,600	20.82%
54	Wesley Heights	$1,091,286,300	$1,180,702,140	$89,415,840	8.19%
55	Woodley	$180,268,320	$196,106,390	$15,838,070	8.79%
56	Woodridge	$581,079,430	$743,843,980	$162,764,550	28.01%
59	Rail Road Tracks	$1,626,370	$1,626,370	$0	0.00%
63	North Anacostia Park	$1,114,860	$1,122,840	$7,980	0.72%
66	Fort Lincoln	$95,292,170	$100,352,990	$5,060,820	5.31%
68	Bolling AFB & Naval Research	$22,707,390	$25,716,730	$3,009,340	13.25%
69	D.C. Village	$150,400	$156,540	$6,140	4.08%
	Total	$78,949,940,232	$88,596,446,273	$9,646,506,041	12.22%

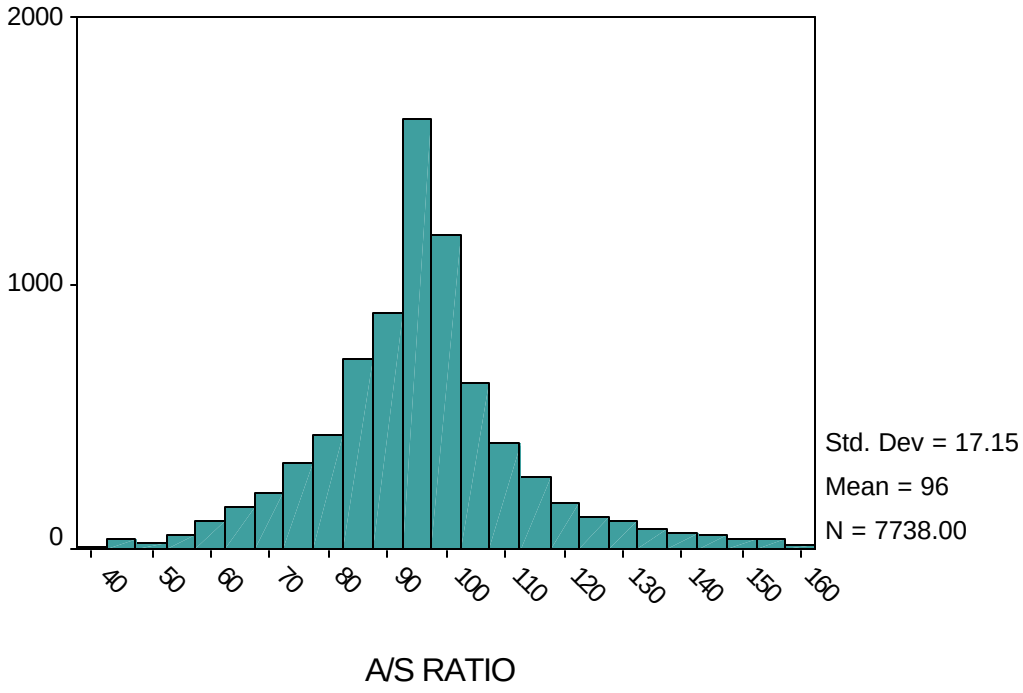
Preliminary 2005 Performance Report

2003 SALES RATIOS BY PROPERTY TYPE: CITY-WIDE

PROPERTY TYPE	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
Residential	7,738	370,899	280,000	95.0	95.7	94.9	13	6,101	1,637	1.01
Commercial	452	5,580,835	370,500	93.2	88.9	97.2	20	377	75	.91

RESIDENTIAL SALES RATIOS

CITY-WIDE



Sales Ratio Report Using Current 2004 Values

2003 SALES RATIOS BY NEIGHBORHOOD: SINGLE-FAMILY

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
1	AMERICAN UNIVERSITY	115	613,473	600,000	84.0	83.5	95.1	9.4	113	2	.88
2	ANACOSTIA	59	140,786	135,000	73.2	80.4	94.1	22.1	50	9	.85
3	BARRY FARMS	21	143,401	147,516	82.8	82.8	92.3	8.2	20	1	.90
4	BERKELEY	33	1,164,436	975,000	83.5	83.2	95.6	14.8	30	3	.87
5	BRENTWOOD	35	153,526	150,000	79.0	82.9	93.9	21.0	28	7	.88
6	BRIGHTWOOD	151	293,999	270,000	74.8	76.1	94.0	17.5	142	9	.81
7	BROOKLAND	213	231,327	210,000	75.3	77.5	90.1	19.3	196	17	.86
8	BURLEITH	58	698,891	565,650	85.5	86.4	97.7	9.3	56	2	.88
9	CAPITOL HILL	179	592,204	551,000	85.6	86.7	97.7	12.3	160	19	.89
10	CENTRAL	15	843,237	810,000	89.9	87.5	96.4	11.4	14	1	.91
11	CHEVY CHASE	225	705,346	655,000	82.1	84.1	98.5	12.3	213	12	.85
12	CHILLUM	27	250,636	225,000	86.4	89.1	96.0	18.1	21	6	.93
13	CLEVELAND PARK	42	819,832	754,250	83.0	82.1	100.7	13.1	41	1	.82
14	COLONIAL VILLAGE	23	653,815	599,000	73.1	74.8	100.0	18.4	22	1	.75
15	COLUMBIA HEIGHTS	305	296,536	270,000	76.2	76.5	89.9	23.8	273	32	.85
16	CONGRESS HEIGHTS	122	134,672	134,900	85.0	86.9	92.8	19.4	102	20	.94
17	CRESTWOOD	30	603,130	561,200	80.8	85.4	97.9	13.2	25	5	.87
18	DEANWOOD	186	122,755	125,000	82.3	85.7	91.3	20.9	153	33	.94
19	ECKINGTON	117	264,210	264,750	73.9	74.2	87.9	22.1	110	7	.84
20	FOGGY BOTTOM	19	541,753	549,000	85.9	88.6	96.8	14.2	16	3	.91
21	FOREST HILLS	37	1,057,202	925,000	88.1	88.6	94.7	17.6	32	5	.94
22	FORT DUPONT PARK	86	145,590	145,000	80.2	83.7	95.7	17.6	75	11	.87
23	FOXHALL	22	647,752	640,000	83.7	82.7	91.6	5.1	22	0	.90
24	GARFIELD	26	818,917	811,550	80.1	80.9	94.0	10.1	26	0	.86
25	GEORGETOWN	159	989,344	843,500	89.2	89.1	98.7	13.2	141	18	.90
26	GLOVER PARK	64	553,085	547,500	79.8	82.3	94.9	11.4	60	4	.87
27	HAWTHORNE	8	645,953	682,000	77.8	83.1	99.1	15.1	6	2	.84
28	HILLCREST	80	229,568	215,500	79.8	79.9	98.1	18.7	74	6	.81
29	KALORAMA	41	1,329,845	1,200,000	90.1	93.0	102.5	15.2	34	7	.91
30	KENT	43	943,872	782,500	82.1	82.4	98.6	18.0	37	6	.84
31	LEDROIT PARK	97	341,378	327,000	68.3	67.1	85.7	24.2	94	3	.78
32	LILY PONDS	35	133,906	127,000	83.6	83.4	91.9	16.7	29	6	.91
33	MARSHALL HEIGHTS	38	116,118	111,000	83.7	83.2	89.4	15.9	34	4	.93
34	MASS. AVE. HEIGHTS	11	2,153,273	2,000,000	93.5	93.2	99.3	11.4	9	2	.94
35	MICHIGAN PARK	21	302,733	310,000	74.3	75.3	95.3	13.2	19	2	.79
36	MOUNT PLEASANT	100	563,103	559,500	79.3	81.0	97.3	13.7	92	8	.83
37	N. CLEVELAND PARK	43	686,206	650,000	78.0	80.9	96.9	12.8	42	1	.83
38	OBSERVATORY CIRCLE	18	942,537	857,500	89.1	86.8	98.4	12.1	16	2	.88
39	OLD CITY #1	758	334,245	305,500	74.5	76.0	92.6	22.0	689	69	.82
40	OLD CITY #2	355	494,135	429,000	75.0	73.9	93.5	24.0	330	25	.79
41	PALISADES	63	792,899	707,000	72.9	73.5	97.1	14.1	63	0	.76
42	PETWORTH	231	234,688	230,000	71.4	73.5	89.5	20.5	220	11	.82
43	RANDLE HEIGHTS	65	151,152	155,000	75.1	77.6	94.6	16.7	61	4	.82
46	R.L.A. (S.W.)	10	529,100	509,500	85.3	85.3	90.3	16.4	10	0	.94
47	RIGGS PARK	52	182,373	176,250	77.7	81.1	95.1	13.3	48	4	.85
48	SHEPHERD PARK	27	463,106	475,000	83.6	84.5	98.1	11.4	27	0	.86
49	16TH STREET HEIGHTS	77	435,782	410,000	71.1	73.4	91.1	20.1	70	7	.81
50	SPRING VALLEY	39	1,088,763	945,000	86.9	87.5	100.6	12.8	36	3	.87
51	TAKOMA PARK	17	252,024	220,000	66.4	72.5	91.4	17.8	17	0	.79
52	TRINIDAD	160	144,996	141,000	74.4	77.1	92.8	21.4	146	14	.83
53	WAKEFIELD	19	730,242	749,000	79.1	76.8	97.0	15.5	19	0	.79
54	WESLEY HEIGHTS	37	996,649	740,000	87.9	90.6	99.4	10.4	33	4	.91
55	WOODLEY	12	960,417	865,500	90.1	87.6	96.9	8.4	12	0	.90
56	WOODRIDGE	116	228,694	219,000	70.3	72.2	94.5	22.5	108	8	.76

Sales Ratio Report Using Current 2004 Values

2003 SALES RATIOS BY NEIGHBORHOOD: CONDOMINIUMS

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	5	61,700	65,000	88.9	89.3	97.6	3.8	5	0	.91
3	BARRY FARMS	62	103,652	101,342	95.9	86.6	97.5	12.5	59	3	.89
4	BERKELEY	6	332,500	352,500	86.9	91.3	97.7	11.2	4	2	.93
6	BRIGHTWOOD	15	186,181	169,900	95.0	88.5	94.0	8.2	15	0	.94
7	BROOKLAND	30	137,413	123,000	67.1	67.3	94.8	15.1	30	0	.71
9	CAPITOL HILL	59	232,581	224,900	81.7	83.8	95.1	17.5	52	7	.88
10	CENTRAL	295	343,331	301,000	83.8	83.8	94.6	13.3	284	11	.88
11	CHEVY CHASE	23	183,749	183,000	68.2	69.4	91.0	9.1	23	0	.76
13	CLEVELAND PARK	189	245,262	239,000	84.1	83.3	92.9	13.7	178	11	.90
15	COLUMBIA HEIGHTS	201	201,508	184,000	95.0	88.4	95.7	9.2	195	6	.92
16	CONGRESS HEIGHTS	29	83,464	89,995	93.7	91.0	94.8	5.2	29	0	.96
18	DEANWOOD	20	109,324	108,000	91.7	90.9	99.6	6.1	20	0	.91
19	ECKINGTON	10	213,200	223,000	95.0	95.9	94.8	1.6	9	1	1.01
20	FOGGY BOTTOM	78	211,894	162,250	72.7	72.4	95.3	13.6	77	1	.76
21	FOREST HILLS	65	240,516	245,200	76.0	76.6	95.4	11.2	64	1	.80
22	FORT DUPONT PARK	1	42,000	42,000	116.8	117	116.8	.0	0	1	1.00
24	GARFIELD	51	306,341	320,000	77.9	80.8	95.2	12.8	49	2	.85
25	GEORGETOWN	71	465,468	425,000	81.0	81.9	89.8	13.4	69	2	.91
26	GLOVER PARK	73	207,170	211,000	82.5	81.3	93.9	10.5	73	0	.87
28	HILLCREST	37	63,852	60,000	76.8	79.4	94.3	20.7	30	7	.84
29	KALORAMA	188	366,035	322,500	80.3	80.5	93.2	15.3	180	8	.86
31	LEDROIT PARK	5	103,000	95,000	95.0	96.3	93.9	6.3	4	1	1.03
32	LILY PONDS	5	129,500	124,000	77.5	78.7	100.9	8.8	5	0	.78
33	MARSHALL HEIGHTS	28	109,982	108,500	87.7	87.7	91.9	4.9	28	0	.95
36	MOUNT PLEASANT	144	309,254	281,000	78.9	76.9	92.6	14.5	140	4	.83
37	N. CLEVELAND PARK	8	289,013	286,000	85.2	82.0	94.1	7.0	8	0	.87
38	OBSERVATORY CIRCLE	56	276,682	262,450	81.4	82.9	96.2	13.0	54	2	.86
39	OLD CITY #1	115	209,285	204,900	95.0	84.3	95.5	13.1	112	3	.88
40	OLD CITY #2	706	305,196	285,000	79.8	81.0	94.2	15.9	674	32	.86
41	PALISADES	12	166,442	159,950	68.0	72.0	88.3	16.9	12	0	.82
42	PETWORTH	1	73,500	73,500	81.4	81.4	86.2	.0	1	0	.94
43	RANDLE HEIGHTS	11	106,258	120,000	108.2	98.4	104.2	14.5	5	6	.94
46	R.L.A. (S.W.)	84	199,529	178,625	71.1	70.4	93.0	18.7	82	2	.76
53	WAKEFIELD	28	250,982	244,750	80.2	78.2	90.6	10.3	28	0	.86
54	WESLEY HEIGHTS	62	313,668	289,500	84.1	84.6	94.8	8.4	60	2	.89
56	WOODRIDGE	5	122,753	129,000	93.7	95.2	99.5	8.6	4	1	.96
66	FORT LINCOLN	18	154,572	156,500	90.2	90.1	99.0	11.0	17	1	.91

Sales Ratio Report Using Current 2004 Values

2003 SALES RATIOS BY NEIGHBORHOOD: MULTI-FAMILY

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	7	256,214	150,000	64.0	74.8	94.8	21.1	6	1	.79
6	BRIGHTWOOD	1	364,000	364,000	72.4	72.4	119.2	.0	1	0	.61
7	BROOKLAND	5	386,520	239,600	75.9	93.0	81.0	51.2	4	1	1.15
9	CAPITOL HILL	2	811,750	811,750	60.2	60.2	80.5	16.1	2	0	.75
10	CENTRAL	4	2,092,500	1,917,500	73.2	77.8	99.2	40.9	3	1	.78
12	CHILLUM	2	475,000	475,000	39.0	39.0	87.9	17.9	2	0	.44
15	COLUMBIA HEIGHTS	13	1,060,674	545,000	60.1	61.8	76.7	29.7	13	0	.81
16	CONGRESS HEIGHTS	9	252,066	250,000	67.2	71.1	89.5	25.6	9	0	.80
18	DEANWOOD	5	286,500	195,000	67.5	71.9	85.8	13.1	5	0	.84
19	ECKINGTON	3	359,333	245,000	62.0	56.7	59.5	11.0	3	0	.95
22	FORT DUPONT PARK	3	207,367	150,000	88.8	82.0	82.4	22.1	2	1	1.00
24	GARFIELD	2	2,618,630	2,618,630	105.0	105	125.1	4.7	1	1	.84
25	GEORGETOWN	1	1,595,000	1,595,000	92.5	92.5	100.0	.0	1	0	.92
28	HILLCREST	6	305,395	283,684	45.7	55.1	89.7	42.8	6	0	.61
29	KALORAMA	1	1,415,900	1,415,900	100.0	100	136.2	.0	1	0	.73
31	LEDROIT PARK	1	255,000	255,000	37.5	37.5	45.3	.0	1	0	.83
33	MARSHALL HEIGHTS	12	493,742	357,450	49.9	50.7	77.3	21.8	12	0	.66
36	MOUNT PLEASANT	3	814,667	599,000	100.2	87.9	99.6	12.5	3	0	.88
39	OLD CITY #1	5	445,400	362,500	67.5	63.8	80.9	30.4	4	1	.79
40	OLD CITY #2	12	915,833	630,000	41.1	58.3	73.8	55.5	10	2	.79
41	PALISADES	1	1,000,000	1,000,000	73.0	73.0	80.3	.0	1	0	.91
42	PETWORTH	11	423,082	364,000	70.4	69.5	91.7	24.2	11	0	.76
43	RANDLE HEIGHTS	10	525,090	247,500	60.3	68.7	86.0	34.3	9	1	.80
49	16TH STREET HEIGHTS	2	550,000	550,000	55.4	55.4	80.6	29.8	2	0	.69
52	TRINIDAD	2	133,025	133,025	97.5	97.5	117.2	5.9	2	0	.83
56	WOODRIDGE	1	360,000	360,000	66.7	66.7	91.8	.0	1	0	.73

Sales Ratio Report Using Current 2004 Values

2003 SALES RATIOS BY NEIGHBORHOOD: COMMERCIAL

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	12	258,750	169,000	79.1	80.9	90.0	21.1	10	2	.90
3	BARRY FARMS	2	80,000	80,000	84.6	84.6	69.1	44.8	1	1	1.22
4	BERKELEY	1	2,215,000	2,215,000	36.7	36.7	40.4	.0	1	0	.91
5	BRENTWOOD	8	509,940	319,920	100.0	90.4	97.2	16.1	7	1	.93
6	BRIGHTWOOD	2	262,500	262,500	55.1	55.1	63.3	22.5	2	0	.87
7	BROOKLAND	10	1,467,300	975,000	56.3	56.0	81.8	26.6	10	0	.68
9	CAPITOL HILL	9	756,116	600,000	70.1	71.0	85.0	20.1	9	0	.83
10	CENTRAL	50	35,041,243	21900000	78.6	77.7	97.8	17.4	48	2	.79
11	CHEVY CHASE	1	600,000	600,000	82.5	82.5	101.2	.0	1	0	.81
12	CHILLUM	1	155,000	155,000	123.9	124	138.5	.0	0	1	.89
13	CLEVELAND PARK	1	810,000	810,000	90.1	90.1	99.1	.0	1	0	.91
15	COLUMBIA HEIGHTS	19	373,711	216,000	72.5	75.9	86.3	33.5	15	4	.88
16	CONGRESS HEIGHTS	5	209,190	125,000	79.3	76.7	103.5	17.4	5	0	.74
18	DEANWOOD	4	438,875	376,250	83.8	84.6	54.6	49.1	2	2	1.55
19	ECKINGTON	10	348,485	235,000	49.5	53.7	77.3	24.1	10	0	.70
20	FOGGY BOTTOM	6	32,523,967	900,000	86.8	84.3	97.2	25.8	5	1	.87
25	GEORGETOWN	13	15,076,846	925,000	46.4	53.2	98.9	26.6	13	0	.54
26	GLOVER PARK	1	755,000	755,000	72.8	72.8	100.0	.0	1	0	.73
28	HILLCREST	1	710,000	710,000	44.5	44.5	53.7	.0	1	0	.83
29	KALORAMA	2	1,218,750	1,218,750	40.8	40.8	82.3	36.7	2	0	.50
31	LEDROIT PARK	7	277,929	240,000	66.0	58.5	75.0	24.1	7	0	.78
33	MARSHALL HEIGHTS	1	105,150	105,150	77.7	77.7	99.9	.0	1	0	.78
36	MOUNT PLEASANT	6	524,933	351,301	75.8	73.6	95.9	37.5	5	1	.77
38	OBSERVATORY CIRCLE	2	9,644,000	9,644,000	95.7	95.7	99.5	13.0	1	1	.96
39	OLD CITY #1	56	731,062	260,000	59.1	64.7	93.1	32.4	52	4	.70
40	OLD CITY #2	57	2,793,331	580,000	61.4	63.5	99.8	30.0	54	3	.64
41	PALISADES	3	695,667	637,000	70.2	70.3	70.4	32.1	3	0	1.00
42	PETWORTH	18	214,378	214,450	67.1	68.6	81.7	24.6	18	0	.84
46	R.L.A. (S.W.)	2	7,525,000	7,525,000	88.0	88.0	99.0	13.7	2	0	.89
48	SHEPHERD PARK	1	370,000	370,000	58.1	58.1	100.0	.0	1	0	.58
49	16TH STREET HEIGHTS	4	174,750	164,500	80.3	80.0	93.1	27.2	4	0	.86
52	TRINIDAD	5	191,560	190,000	71.4	67.6	77.8	10.1	5	0	.87
56	WOODRIDGE	8	308,675	277,450	75.4	79.9	97.7	14.3	7	1	.82

Sales Ratio Report Using Proposed 2005 Values

2003 SALES RATIOS BY NEIGHBORHOOD: SINGLE-FAMILY

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
1	AMERICAN UNIVERSITY	115	613,473	600,000	96.2	95.7	95.1	7.4	103	12	1.01
2	ANACOSTIA	59	140,786	135,000	93.8	97.5	94.1	15.3	41	18	1.04
3	BARRY FARMS	21	143,401	147,516	93.7	92.8	92.3	9.1	18	3	1.01
4	BERKELEY	33	1,164,436	975,000	96.2	96.8	95.6	5.4	28	5	1.01
5	BRENTWOOD	35	153,526	150,000	95.0	97.6	93.9	14.4	25	10	1.04
6	BRIGHTWOOD	151	293,999	270,000	95.0	96.5	94.0	13.5	114	37	1.03
7	BROOKLAND	213	231,327	210,000	92.7	94.1	90.1	17.8	156	57	1.04
8	BURLEITH	58	698,891	565,650	95.7	98.6	97.7	7.9	42	16	1.01
9	CAPITOL HILL	179	592,204	551,000	97.6	98.6	97.7	5.3	163	16	1.01
10	CENTRAL	15	843,237	810,000	95.5	97.2	96.4	6.0	13	2	1.01
11	CHEVY CHASE	225	705,346	655,000	98.2	98.9	98.5	5.5	196	29	1.00
12	CHILLUM	27	250,636	225,000	96.1	99.5	96.0	14.9	17	10	1.04
13	CLEVELAND PARK	42	819,832	754,250	99.9	100	100.7	5.9	35	7	1.00
14	COLONIAL VILLAGE	23	653,815	599,000	99.3	103	100.0	8.3	17	6	1.03
15	COLUMBIA HEIGHTS	305	296,536	270,000	93.1	94.9	89.9	22.0	204	101	1.06
16	CONGRESS HEIGHTS	122	134,672	134,900	94.2	97.4	92.8	17.9	85	37	1.05
17	CRESTWOOD	30	603,130	561,200	94.9	99.9	97.9	13.3	20	10	1.02
18	DEANWOOD	186	122,755	125,000	92.8	94.9	91.3	19.3	129	57	1.04
19	ECKINGTON	117	264,210	264,750	90.0	91.9	87.9	22.3	81	36	1.05
20	FOGGY BOTTOM	19	541,753	549,000	96.5	97.0	96.8	12.0	15	4	1.00
21	FOREST HILLS	37	1,057,202	925,000	95.9	95.3	94.7	3.8	36	1	1.01
22	FORT DUPONT PARK	86	145,590	145,000	98.7	98.1	95.7	8.7	75	11	1.03
23	FOXHALL	22	647,752	640,000	90.4	91.7	91.6	5.2	22	0	1.00
24	GARFIELD	26	818,917	811,550	95.9	94.5	94.0	5.6	24	2	1.01
25	GEORGETOWN	159	989,344	843,500	99.5	99.9	98.7	6.3	127	32	1.01
26	GLOVER PARK	64	553,085	547,500	94.4	97.0	94.9	11.7	48	16	1.02
27	HAWTHORNE	8	645,953	682,000	97.3	100	99.1	7.3	6	2	1.01
28	HILLCREST	80	229,568	215,500	98.3	100	98.1	9.5	59	21	1.02
29	KALORAMA	41	1,329,845	1,200,000	100.4	103	102.5	7.9	29	12	1.00
30	KENT	43	943,872	782,500	98.1	98.7	98.6	5.6	36	7	1.00
31	LEDROIT PARK	97	341,378	327,000	90.8	89.8	85.7	22.8	71	26	1.05
32	LILY PONDS	35	133,906	127,000	96.7	97.4	91.9	15.4	28	7	1.06
33	MARSHALL HEIGHTS	38	116,118	111,000	92.1	93.0	89.4	16.5	31	7	1.04
34	MASS. AVE. HEIGHTS	11	2,153,273	2,000,000	98.9	99.5	99.3	1.7	11	0	1.00
35	MICHIGAN PARK	21	302,733	310,000	95.2	96.5	95.3	9.1	17	4	1.01
36	MOUNT PLEASANT	100	563,103	559,500	96.8	98.8	97.3	10.7	74	26	1.02
37	N. CLEVELAND PARK	43	686,206	650,000	94.9	97.1	96.9	6.4	35	8	1.00
38	OBSERVATORY CIRCLE	18	942,537	857,500	94.8	100	98.4	13.4	12	6	1.02
39	OLD CITY #1	758	334,245	305,500	93.6	95.9	92.6	19.0	539	219	1.04
40	OLD CITY #2	355	494,135	429,000	95.1	94.9	93.5	18.8	270	85	1.01
41	PALISADES	63	792,899	707,000	95.9	97.2	97.1	4.2	58	5	1.00
42	PETWORTH	231	234,688	230,000	91.6	92.7	89.5	15.5	182	49	1.04
43	RANDLE HEIGHTS	65	151,152	155,000	95.2	98.0	94.6	13.1	51	14	1.04
46	R.L.A. (S.W.)	10	529,100	509,500	91.1	92.7	90.3	14.2	7	3	1.03
47	RIGGS PARK	52	182,373	176,250	96.2	97.5	95.1	12.3	39	13	1.03
48	SHEPHERD PARK	27	463,106	475,000	99.0	99.0	98.1	4.9	23	4	1.01
49	16TH STREET HEIGHTS	77	435,782	410,000	91.8	94.4	91.1	18.2	54	23	1.04
50	SPRING VALLEY	39	1,088,763	945,000	99.8	101	100.6	2.9	36	3	1.00
51	TAKOMA PARK	17	252,024	220,000	89.2	92.8	91.4	11.5	14	3	1.02
52	TRINIDAD	160	144,996	141,000	95.0	96.6	92.8	13.7	119	41	1.04
53	WAKEFIELD	19	730,242	749,000	97.0	97.3	97.0	5.8	15	4	1.00
54	WESLEY HEIGHTS	37	996,649	740,000	99.6	99.5	99.4	4.6	32	5	1.00
55	WOODLEY	12	960,417	865,500	97.5	97.5	96.9	3.3	12	0	1.01
56	WOODRIDGE	116	228,694	219,000	95.7	97.9	94.5	13.7	88	28	1.04

Sales Ratio Report Using Proposed 2005 Values

2003 SALES RATIOS BY NEIGHBORHOOD: CONDOMINIUMS

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	5	61,700	65,000	95.9	97.1	97.6	4.8	4	1	.99
3	BARRY FARMS	62	103,652	101,342	97.0	97.5	97.5	4.9	55	7	1.00
4	BERKELEY	6	332,500	352,500	96.4	99.6	97.7	7.5	4	2	1.02
6	BRIGHTWOOD	15	186,181	169,900	95.7	95.7	94.0	7.9	13	2	1.02
7	BROOKLAND	30	137,413	123,000	93.1	93.9	94.8	11.5	23	7	.99
9	CAPITOL HILL	59	232,581	224,900	95.0	96.4	95.1	10.4	47	12	1.01
10	CENTRAL	295	343,331	301,000	95.0	94.5	94.6	8.3	255	40	1.00
11	CHEVY CHASE	23	183,749	183,000	94.0	92.9	91.0	10.2	19	4	1.02
13	CLEVELAND PARK	189	245,262	239,000	93.9	93.9	92.9	14.1	143	46	1.01
15	COLUMBIA HEIGHTS	201	201,508	184,000	95.0	95.6	95.7	5.8	179	22	1.00
16	CONGRESS HEIGHTS	29	83,464	89,995	96.5	94.9	94.8	3.6	29	0	1.00
18	DEANWOOD	20	109,324	108,000	99.0	99.8	99.6	4.8	16	4	1.00
19	ECKINGTON	10	213,200	223,000	95.0	94.8	94.8	.5	10	0	1.00
20	FOGGY BOTTOM	78	211,894	162,250	92.8	92.5	95.3	10.3	65	13	.97
21	FOREST HILLS	65	240,516	245,200	95.3	96.7	95.4	10.1	53	12	1.01
22	FORT DUPONT PARK	1	42,000	42,000	116.8	117	116.8	.0	0	1	1.00
24	GARFIELD	51	306,341	320,000	96.3	95.5	95.2	10.6	43	8	1.00
25	GEORGETOWN	71	465,468	425,000	95.2	94.3	89.8	10.0	58	13	1.05
26	GLOVER PARK	73	207,170	211,000	94.2	94.4	93.9	8.9	61	12	1.01
28	HILLCREST	37	63,852	60,000	94.8	97.8	94.3	17.2	23	14	1.04
29	KALORAMA	188	366,035	322,500	94.2	94.5	93.2	10.9	148	40	1.01
31	LEDROIT PARK	5	103,000	95,000	95.0	94.2	93.9	4.1	5	0	1.00
32	LILY PONDS	5	129,500	124,000	97.0	100	100.9	10.2	4	1	1.00
33	MARSHALL HEIGHTS	28	109,982	108,500	93.3	92.5	91.9	4.4	28	0	1.01
36	MOUNT PLEASANT	144	309,254	281,000	91.8	91.9	92.6	10.8	125	19	.99
37	N. CLEVELAND PARK	8	289,013	286,000	96.3	94.5	94.1	3.5	8	0	1.00
38	OBSERVATORY CIRCLE	56	276,682	262,450	93.3	96.3	96.2	13.0	41	15	1.00
39	OLD CITY #1	115	209,285	204,900	95.0	95.8	95.5	5.7	105	10	1.00
40	OLD CITY #2	706	305,196	285,000	94.7	93.9	94.2	10.8	575	131	1.00
41	PALISADES	12	166,442	159,950	86.9	89.5	88.3	11.2	11	1	1.01
42	PETWORTH	1	73,500	73,500	86.2	86.2	86.2	.0	1	0	1.00
43	RANDLE HEIGHTS	11	106,258	120,000	108.2	103	104.2	10.5	5	6	.99
46	R.L.A. (S.W.)	84	199,529	178,625	91.1	92.9	93.0	16.0	64	20	1.00
53	WAKEFIELD	28	250,982	244,750	91.9	90.0	90.6	8.6	28	0	.99
54	WESLEY HEIGHTS	62	313,668	289,500	95.2	95.8	94.8	6.7	53	9	1.01
56	WOODRIDGE	5	122,753	129,000	97.3	100	99.5	11.7	3	2	1.01
66	FORT LINCOLN	18	154,572	156,500	98.6	98.7	99.0	9.4	15	3	1.00

Sales Ratio Report Using Proposed 2005 Values

2003 SALES RATIOS BY NEIGHBORHOOD: MULTI-FAMILY

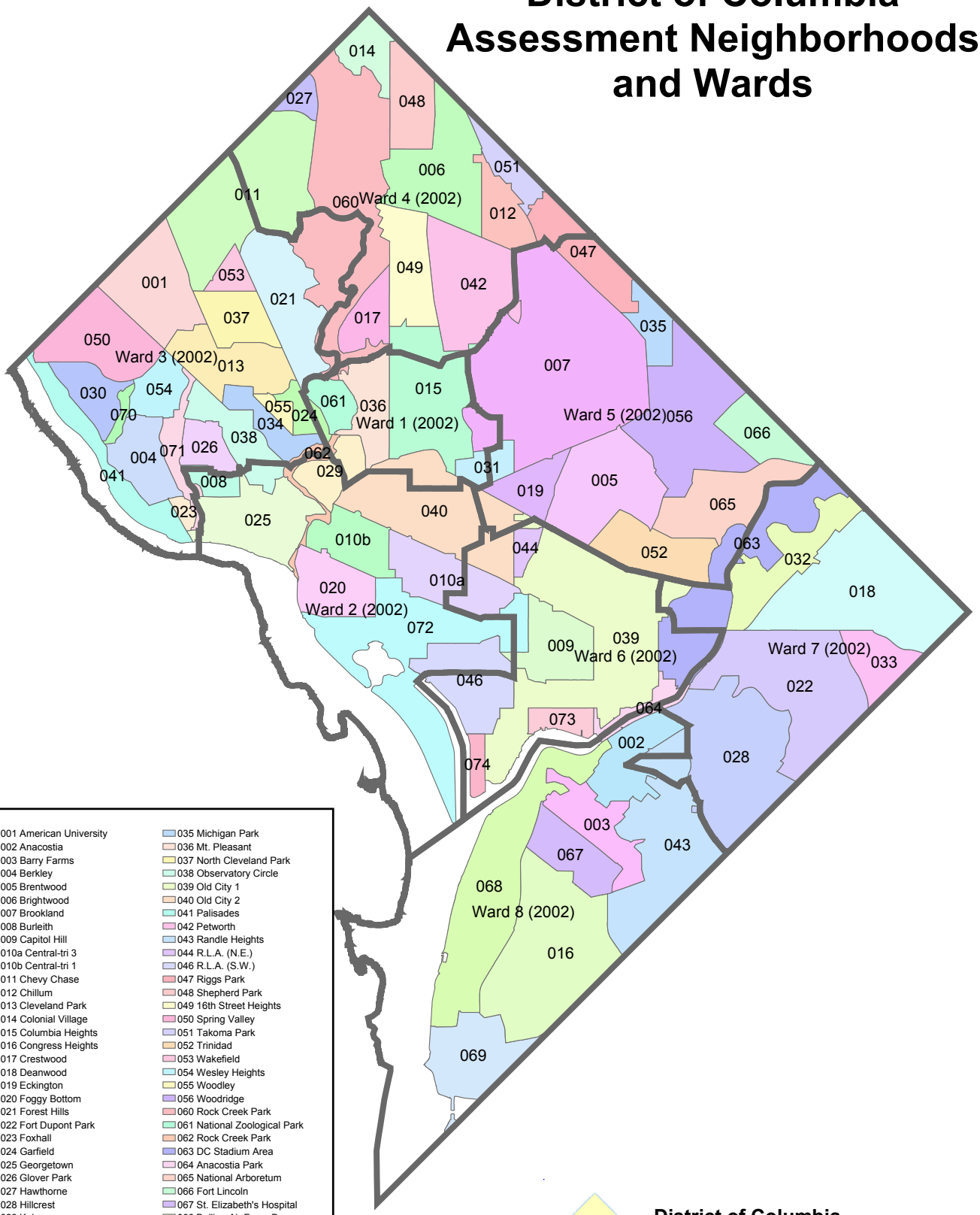
NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	7	256,214	150,000	93.6	93.7	94.8	7.4	6	1	.99
6	BRIGHTWOOD	1	364,000	364,000	119.2	119	119.2	.0	0	1	1.00
7	BROOKLAND	5	386,520	239,600	98.1	99.6	81.0	22.0	4	1	1.23
9	CAPITOL HILL	2	811,750	811,750	81.4	81.4	80.5	5.6	2	0	1.01
10	CENTRAL	4	2,092,500	1,917,500	99.3	99.0	99.2	.6	4	0	1.00
12	CHILLUM	2	475,000	475,000	90.1	90.1	87.9	9.1	2	0	1.02
15	COLUMBIA HEIGHTS	13	1,060,674	545,000	96.9	86.4	76.7	14.1	12	1	1.13
16	CONGRESS HEIGHTS	9	252,066	250,000	100.0	94.7	89.5	14.7	7	2	1.06
18	DEANWOOD	5	286,500	195,000	81.5	85.8	85.8	9.5	5	0	1.00
19	ECKINGTON	3	359,333	245,000	72.6	65.7	59.5	9.7	3	0	1.10
22	FORT DUPONT PARK	3	207,367	150,000	97.7	95.9	82.4	24.7	2	1	1.16
24	GARFIELD	2	2,618,630	2,618,630	125.9	126	125.1	1.3	0	2	1.01
25	GEORGETOWN	1	1,595,000	1,595,000	100.0	100	100.0	.0	1	0	1.00
28	HILLCREST	6	305,395	283,684	80.5	85.0	89.7	15.6	5	1	.95
29	KALORAMA	1	1,415,900	1,415,900	136.2	136	136.2	.0	0	1	1.00
31	LEDROIT PARK	1	255,000	255,000	45.3	45.3	45.3	.0	1	0	1.00
33	MARSHALL HEIGHTS	12	493,742	357,450	76.8	77.1	77.3	19.2	12	0	1.00
36	MOUNT PLEASANT	3	814,667	599,000	118.3	110	99.6	16.5	1	2	1.11
39	OLD CITY #1	5	445,400	362,500	100.0	90.0	80.9	18.0	4	1	1.11
40	OLD CITY #2	12	915,833	630,000	62.1	73.1	73.8	37.4	10	2	.99
41	PALISADES	1	1,000,000	1,000,000	80.3	80.3	80.3	.0	1	0	1.00
42	PETWORTH	11	423,082	364,000	93.8	96.9	91.7	18.9	7	4	1.06
43	RANDLE HEIGHTS	10	525,090	247,500	84.3	87.5	86.0	28.4	9	1	1.02
49	16TH STREET HEIGHTS	2	550,000	550,000	80.6	80.6	80.6	24.0	2	0	1.00
52	TRINIDAD	2	133,025	133,025	116.7	117	117.2	5.2	0	2	1.00
56	WOODRIDGE	1	360,000	360,000	91.8	91.8	91.8	.0	1	0	1.00

Sales Ratio Report Using Proposed 2005 Values

2003 SALES RATIOS BY NEIGHBORHOOD: COMMERCIAL

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	12	258,750	169,000	92.6	93.3	90.0	11.0	11	1	1.04
3	BARRY FARMS	2	80,000	80,000	86.9	86.9	69.1	40.9	1	1	1.26
4	BERKELEY	1	2,215,000	2,215,000	40.4	40.4	40.4	.0	1	0	1.00
5	BRENTWOOD	8	509,940	319,920	110.5	102	97.2	19.0	3	5	1.04
6	BRIGHTWOOD	2	262,500	262,500	62.9	62.9	63.3	21.2	2	0	.99
7	BROOKLAND	10	1,467,300	975,000	91.8	84.8	81.8	11.2	10	0	1.04
9	CAPITOL HILL	9	756,116	600,000	85.5	88.2	85.0	18.8	8	1	1.04
10	CENTRAL	50	35,041,243	21900000	99.1	94.2	97.8	6.7	49	1	.96
11	CHEVY CHASE	1	600,000	600,000	101.2	101	101.2	.0	1	0	1.00
12	CHILLUM	1	155,000	155,000	138.5	138	138.5	.0	0	1	1.00
13	CLEVELAND PARK	1	810,000	810,000	99.1	99.1	99.1	.0	1	0	1.00
15	COLUMBIA HEIGHTS	19	373,711	216,000	95.7	97.0	86.3	23.9	13	6	1.12
16	CONGRESS HEIGHTS	5	209,190	125,000	110.7	98.0	103.5	17.3	2	3	.95
18	DEANWOOD	4	438,875	376,250	94.9	91.1	54.6	42.7	2	2	1.67
19	ECKINGTON	10	348,485	235,000	69.9	72.5	77.3	29.4	10	0	.94
20	FOGGY BOTTOM	6	32,523,967	900,000	99.6	105	97.2	9.1	4	2	1.08
25	GEORGETOWN	13	15,076,846	925,000	95.2	94.9	98.9	3.4	13	0	.96
26	GLOVER PARK	1	755,000	755,000	100.0	100	100.0	.0	1	0	1.00
28	HILLCREST	1	710,000	710,000	53.7	53.7	53.7	.0	1	0	1.00
29	KALORAMA	2	1,218,750	1,218,750	74.2	74.2	82.3	21.4	2	0	.90
31	LEDROIT PARK	7	277,929	240,000	82.5	81.1	75.0	13.2	7	0	1.08
33	MARSHALL HEIGHTS	1	105,150	105,150	99.9	99.9	99.9	.0	1	0	1.00
36	MOUNT PLEASANT	6	524,933	351,301	103.6	97.9	95.9	17.9	3	3	1.02
38	OBSERVATORY CIRCLE	2	9,644,000	9,644,000	103.3	103	99.5	4.7	1	1	1.04
39	OLD CITY #1	56	731,062	260,000	91.7	88.7	93.1	20.1	48	8	.95
40	OLD CITY #2	57	2,793,331	580,000	73.3	79.7	99.8	27.6	49	8	.80
41	PALISADES	3	695,667	637,000	77.3	77.3	70.4	32.1	2	1	1.10
42	PETWORTH	18	214,378	214,450	88.2	83.7	81.7	17.3	15	3	1.03
46	R.L.A. (S.W.)	2	7,525,000	7,525,000	99.5	99.5	99.0	.5	2	0	1.00
48	SHEPHERD PARK	1	370,000	370,000	100.0	100	100.0	.0	1	0	1.00
49	16TH STREET HEIGHTS	4	174,750	164,500	89.6	92.3	93.1	28.9	2	2	.99
52	TRINIDAD	5	191,560	190,000	71.4	83.9	77.8	26.0	4	1	1.08
56	WOODRIDGE	8	308,675	277,450	94.1	99.2	97.7	9.9	6	2	1.01

District of Columbia Assessment Neighborhoods and Wards



001 American University
002 Anacostia
003 Barry Farms
004 Berkley
005 Brentwood
006 Brightwood
007 Brookland
008 Burleith
009 Capitol Hill
010a Central-tri 3
010b Central-tri 1
011 Chevy Chase
012 Chillum
013 Cleveland Park
014 Colonial Village
015 Columbia Heights
016 Congress Heights
017 Crestwood
018 Deanwood
019 Eckington
020 Foggy Bottom
021 Forest Hills
022 Fort Dupont Park
023 Foxhall
024 Garfield
025 Georgetown
026 Glover Park
027 Hawthorne
028 Hillcrest
029 Kalorama
030 Kent
031 Ledroit Park
032 Lily Ponds
033 Marshall Heights
034 Massachusetts Avenue Heights
035 Michigan Park
036 Mt. Pleasant
037 North Cleveland Park
038 Observatory Circle
039 Old City 1
040 Old City 2
041 Palisades
042 Petworth
043 Randle Heights
044 R.L.A. (N.E.)
046 R.L.A. (S.W.)
047 Riggs Park
048 Shepherd Park
049 16th Street Heights
050 Spring Valley
051 Takoma Park
052 Trinidad
053 Wakefield
054 Wesley Heights
055 Woodley
056 Woodridge
060 Rock Creek Park
061 National Zoological Park
062 Rock Creek Park
063 DC Stadium Area
064 Anacostia Park
065 National Arboretum
066 Fort Lincoln
067 St. Elizabeth's Hospital
068 Bolling Air Force Base
069 DC Village
070 Fort Drive
071 Glover - Archbold Parkway
072 Mall/East Potomac Park
073 Washington Navy Yard
074 Ft. McNair

District of Columbia
Office of Tax and Revenue
Real Property Assessment Division