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

2006 GENERAL REASSESSMENT PROGRAM REFERENCE MATERIALS

. . . . . .

February 2005

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 2006 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 Unit
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

NUMBER	TOPIC	Page
1	Chief Assessor's Memo: TY 2006 Reassessment Effort	1
2	Explanation of Residential, Condo and Co-op Valuation Methods	4
3	2006 Valuation Review Process	9
4	Table: Residential Neighborhood Valuation Method	14
5	Table: Residential Trend Factors	15
6	Analysis: Neighborhoods to Trend by Use	16
7	Land Rate Analysis For Non-Modeled Neighborhoods	33
8	Market Approach to Land Valuation in Costed Neighborhood	34
9	Land Rate Development Example	35
10	Table: Residential Base Land Rates by Neighborhood	36
11	Graph: Residential Land Size Curves	37
12	Graph: Condominium Size Curve	38
13	2006 Vision CAMA Residential Valuation Process	39
14	2006 Vision CAMA Commercial Valuation Process	63
15	Income Approach Template	88
16	Table: Cost Occupancy/Use Code	97
17	Table: Base Cost Rates	99
18	Table: RPTA 2006 Base Change Report	104
19	Preliminary 2006 Performance Report	105
20	Sales Ratio Report Using Current 2005 Values	106
21	Sales Ratio Report Using Proposed 2006 Values	110
22	Map: Assessment Neighborhoods and Wards	114

OFFICE OF TAX AND REVEUNE
REAL PROPERTY ASSESSMENT DIVISION
INTEROFFICE MEMORANDUM

TO: REAL PROPERTY ASSESSMENT DIVISION STAFF
FROM: MINNETTA COLES, ACTING CHIEF ASSESSOR
SUBJECT: TY 2005 REASSESSMENT EFFORT
DATE: FEBRUARY 18, 2005

I would like to thank all of you again for the tremendous effort you put forth in completing the Tax Year 2006 assessments. As the result of your dedication, we were able to reassess 173,000 properties and mail 165,000 notices to taxable properties in the District of Columbia.

We are still in the midst of the most rapidly appreciating real estate market that Washington, D.C. has experienced in over two decades. The Office of Tax and Revenue continues to use several approved valuation processes to produce TY 2006 assessed values. This is the fourth year in which our Computer Assisted Mass Appraisal system (CAMA) was used in the valuation process. We prepared 134,037 property specific appraisals this year.

In June 2004, the Office of Tax and Revenue announced the beginning of a project to enhance the quality of the District's real property assessment data. Vans equipped with state-of-the-art photo imaging cameras and computer assisted mass appraisal technology surveyed and gathered data on more than 140,000 parcels of real property in the District of Columbia. Agents were responsible for photographing each building, confirming street addresses, verifying property characteristics and geo-coding (GPS) each building's location.

This program was a great benefit to the citizens of the District of Columbia. Accurate addressing will ensure better property data for more equitable and uniform assessments as well as quicker responses for emergency personnel.

Assessors also began the "Sketch Conversion" project. Sketches from original property record cards were reviewed, verified and revised, based on updated data from assessor field reviews, the data verification project and from

Pictometry. Pictometry is a tool that allowed us to view detailed images of properties from many angles and directions. Once the data was confirmed, the property sketch was converted to the CAMA system. Due to constant changes to properties, this process is on-going. To date, we have completed approximately 132,000 sketch conversions. Property owners are able to obtain a copy of their Property Record Card, which will show a picture and a sketch of the property.

These technical aids and assessment processes will assist us in improving both the quantity and quality of property specific appraisals.

The overall goal for the Office of Tax and Revenue is to uniformly and equitable assess all properties in the District based on market-driven valuation techniques, whether they be the market calibrated cost approach, the income capitalization, multiple regression analysis or time trending.

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.

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. Building a preliminary regression model that reflects the variables of the CAMA cost approach.
3. Reviewing the results of the preliminary regression to identify candidate market areas where the data was such to allow for successful regression analysis.
4. Eliminating outliers in the candidate areas to better ensure accuracy of the regression results.
5. 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 31 months (1/1/2002 through 7/26/2004) as follows:

	1/1/02 - 8/31/02	9/1/02 - 8/31/03	10/1/03 - 12/31/03
"Southeast" Neighborhoods: (2, 3, 16, 22, 28, 33, 43)	+ 0.90% /mo	+ 1.20% /mo	+ 1.6% /mo
"Northeast" Neighborhoods: (5, 7, 12, 14, 17, 32, 35, 36, 42, 47, 48, 51, 52, 56)	+ 1.20% /mo	+ 1.50% /mo	+ 1.9% /mo
"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% /mo	+ 0.85% /mo	+ 1.5% /mo
"Downtown" Neighborhoods: (9, 10, 20, 39, 40, 46)	+ 1.55% /mo	+ 0.95% /mo	+ 1.8% /mo

6. Building a final regression model, using the time-adjusted sale price as the dependant variable.
7. Calibrating that model using non-linear multiple regression. Variables were included to extract land values from the market.
8. Reviewing the regression predicted values and removing extreme outliers.
9. Examining the predicted-values-to-time-adjusted-sale-price ratios for equitability with respect to lot size, building area, age, use, grade, and location.
10. Entering the coefficients indicated by the regression analysis back into the CAMA program's cost model.
11. Applying the cost model in CAMA and reviewing the resulting values to ensure they agreed with the predicted values produced by the regression.
12. Performing sales analysis to determine if acceptable levels of assessment were achieved, and adjusting rates as necessary.
13. Applying model to inventory and producing percent change reports for assessor review.
14. Incorporating oversight of the computer aided procedure by our professional staff cited in the *2006 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 2003 to December 2004.

2. Stratifying the sales by neighborhood, sub-neighborhood, use code and sale year (see the table titled *12/30/04: 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 2004 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 2006.

7. Incorporating oversight by our professional staff cited in the *2006 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:

2005 Assessment * Selected Trend Factor = 2006 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*. Previously established standard lot sizes were used. Land rates were 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. Consideration was given to the indicated trend factors for each neighborhood when selecting the land rate. Finally, the Group 1 land curve, established in the regression modeling analysis, was applied in order to adjust the base land rate for the lot size of each parcel.

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 (1/1/2002 through 12/31/2003) 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.

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 *2006 Valuation Review Process* document.

The Condominium Regression Model:

ESP= (347.70 * 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 (347.70) – 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: $((SIZE^{.740})/SIZE)/.176$, where $.176 = (800^{.740})/800$. See graph titled *Condominium Size Curve*.

Condition – adjustment for the unit's physical condition

(1) Poor	.72
(2) Fair	.86
(3) Average	1.00
(4) Good	1.07
(5) Very Good	1.15
(6) Excellent	1.23

View – adjustment for the unit's view

(1) Poor	.86
(2) Fair	.93
(3) Average	1.00
(4) Good	1.03
(5) Very Good	1.05
(6) Excellent	1.13

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

BATH_ADJ = 1 + (((FULLBATH - 1) + (.5 * HALFBATH)) * .07)

Example: *2 ½ baths: 1 + (((2 – 1) + (.5 * 1)) * .07) = 1.105*
*3 baths: 1 + (((3 – 1) + (.5 * 0)) * .07) + 1 = 1.14*

Parking – adjustment for Limited Common Element parking

Outdoor		Indoor	
26320	or	34545	subject to location adjustment

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.

Explanation of Cooperative Valuation Method

Cooperatives are a type of residential property. In a cooperative, a corporation owns the 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, we further reduce the value an additional 35% according to the statue.

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 didn't have access to sales information to make good evaluations After the 2003 review we were able to collect sales information from MRIS. Using this information we were able to more accurately calculate the actually values.

For 2006, we reviewed all the complexes with sales information and calculated the sales prices per square foot after factoring in the time adjustments. 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 and 2004 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.

2006 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 all accounts and pay particular attention to the properties 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. Keep in mind that the square foot size of many residences has changed for 2006 based on the results of the new sketch conversion program. 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 corrected or revisited during another inspection program at the discretion of the assessor. 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. Please refer to *the "2006 CAMA Residential Construction Valuation Guideline."* 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 10 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. This report now also contains a Sketch Flag" column to indicate sketch outliers. It is located on the far right of the page.

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. As a continuation of the sketch review process, examine the Sketch Flag" for properties that have flag codes 1-3, not previously reviewed. Examine the record in accordance to the established procedures to resolve, if necessary, any discrepancy resulting from the newly sketched buildings. If a flag is indicated, the likelihood is high the parcel is also on the Old to New report. Be sure to cross-reference both reports when reviewing sketches, and document the results of the any changes necessary. If the 2005 record appears correct, indicate with "OK" on the reports.

    B. 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 2002 – 2004. 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. As the age of the sale increases, the likelihood of an apparently high A/S ratio also increases. This is to be expected.

    C. 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.

D. 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 10 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. Cross-reference the Percent Change Detail Analysis report to determine whether the parcel has a "Sketch Flag" value of 1-5. If so, resolve the new sketch issue.

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

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

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

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

   F. 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. Several 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 indicated that the square footage of living area has changed a substantial amount an thus affected the value. Because of the sketching project, the indicated size of the building is either more or less than the CAMA record reflected prior to sketch data being updated. Following the existing sketch review process, the assessor examines the sketch using the Mobile Video tool, and, if necessary, adjusts the sketch in Vision.

   D. 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, “D”, 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, G, H, L	TREND
39	OLD CITY #1	E, F, 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	1.150	1.200	1.150	1.100	1.052	1.052	N/A
	B	Brightwood	1.049	1.077	1.049	N/A	1.050	1.050	N/A
	C	Brightwood	1.254	1.263	1.254	1.250	1.250	1.250	1.200
	D	Brightwood	1.280	1.033	1.280	1.250	1.250	N/A	1.250
	E	Brightwood	1.057	1.153	1.222	N/A	1.200	1.200	1.200
7	C	Brookland	1.119	1.307	1.250	N/A	1.227	1.200	1.200
	D	Brookland	1.112	1.311	1.077	N/A	1.100	1.100	1.100
	E	Brookland	1.236	1.400	1.300	1.100	1.050	1.400	1.100
15	A	Columbia Heights	1.315	1.250	1.315	1.200	1.400	1.455	1.099
	B	Columbia Heights	1.459	1.300	1.400	1.200	1.200	1.157	1.200
	C	Columbia Heights	1.225	1.050	1.091	1.200	1.000	1.000	1.200
	D	Columbia Heights	1.257	1.200	1.200	1.200	1.083	1.250	1.255
	E	Columbia Heights	1.303	1.050	1.159	1.200	1.323	1.206	1.046
18	A	Deanwood	1.252	1.250	1.100	1.150	1.050	1.100	1.100
	B	Deanwood	1.290	1.314	1.217	N/A	1.300	1.300	1.100
	C	Deanwood	1.350	1.162	1.200	1.200	1.300	1.300	1.100
	D	Deanwood	1.238	1.450	1.238	N/A	1.300	N/A	1.100
	E	Deanwood	1.303	1.020	1.246	N/A	1.127	1.100	1.100
19	A	Eckington	1.228	N/A	1.254	N/A	1.250	1.257	1.100
	B	Eckington	1.380	1.187	1.300	1.200	1.450	1.450	1.200
31	A	LeDroit Park	1.085	1.100	1.085	1.200	1.150	1.150	1.100
	B	LeDroit Park	1.064	1.050	1.050	1.100	1.250	1.250	1.100
32	A	Lily Ponds	N/A	1.164	1.200	N/A	1.150	1.150	1.200
39	A	Old City #1	1.111	1.100	1.100	N/A	1.150	1.150	1.115
	B	Old City #1	1.311	1.200	1.125	1.100	1.100	1.100	1.200
	C	Old City #1	1.297	1.200	1.200	N/A	1.100	1.094	1.100
	G	Old City #1	1.131	1.050	1.150	1.100	1.110	1.061	1.100
	H	Old City #1	1.400	N/A	1.400	N/A	1.258	1.250	1.200
	L	Old City #1	1.286	1.375	1.280	N/A	1.250	1.300	1.100
40	A	Old City #2	1.066	1.250	1.250	1.100	1.259	1.418	1.100
	B	Old City #2	1.218	1.200	1.200	1.150	1.000	1.200	1.150
49	A	16th Street Heights	1.235	1.019	1.333	1.100	1.700	1.250	N/A
	B	16th Street Heights	1.050	1.344	1.194	N/A	1.100	1.099	N/A
	C	16th Street Heights	1.050	1.121	1.050	1.100	1.050	1.050	1.100

*The final trend factors presented above may be different from the indicated trend factor analysis shown following this document. The indicated trend factor is considered in the context of all available data, and the selection of a final trend factor is based on the judgement of the assessor.

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
6	A	11	2003	# Sales	7	7	7	7
				Mean	$301,603	$332,708	.926	1.110
				Median	$313,900	$325,000	.920	1.087
			2004	# Sales	8	8	8	8
				Mean	$288,028	$379,875	.770	1.315
				Median	$287,850	$400,000	.766	1.308
		12	2003	# Sales	21	21	21	21
				Mean	$371,432	$396,783	.971	1.065
				Median	$322,140	$348,485	.951	1.052
			2004	# Sales	13	13	13	13
				Mean	$371,000	$517,463	.781	1.354
				Median	$346,100	$438,000	.779	1.283
		13	2003	# Sales	6	6	6	6
				Mean	$335,550	$338,667	1.016	.999
				Median	$328,540	$309,000	1.032	.969
			2004	# Sales	8	8	8	8
				Mean	$368,673	$379,425	1.100	1.010
				Median	$382,395	$423,750	.930	1.082
		23	2003	# Sales	2	2	2	2
				Mean	$211,480	$232,500	.912	1.099
				Median	$211,480	$232,500	.912	1.099
			2004	# Sales	4	4	4	4
				Mean	$255,820	$303,725	.862	1.210
				Median	$243,520	$302,450	.905	1.107
	B	11	2003	# Sales	2	2	2	2
				Mean	$216,185	$235,000	.922	1.086
				Median	$216,185	$235,000	.922	1.086
			2004	# Sales	1	1	1	1
				Mean	$206,330	$227,700	.906	1.104
				Median	$206,330	$227,700	.906	1.104
		12	2003	# Sales	20	20	20	20
				Mean	$315,706	$339,350	.959	1.090
				Median	$308,300	$339,000	.950	1.053
			2004	# Sales	9	9	9	9
				Mean	$300,987	$316,389	.973	1.081
				Median	$268,420	$299,000	.882	1.134
		13	2003	# Sales	7	7	7	7
				Mean	$244,493	$259,200	.951	1.073
				Median	$255,870	$250,000	.906	1.103
			2004	# Sales	5	5	5	5
				Mean	$293,644	$288,220	1.008	1.020
				Median	$221,360	$278,000	1.013	.987
	C	12	2004	# Sales	2	2	2	2
				Mean	$255,155	$334,500	.761	1.329
				Median	$255,155	$334,500	.761	1.329
		13	2003	# Sales	22	22	22	22
				Mean	$197,706	$210,496	1.014	1.068
				Median	$196,915	$212,500	.920	1.088

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
6	C	13	2004	# Sales	26	26	26	26
				Mean	$192,693	$247,941	.814	1.291
				Median	$194,160	$250,000	.758	1.320
		23	2003	# Sales	2	2	2	2
				Mean	$263,110	$292,000	.902	1.109
				Median	$263,110	$292,000	.902	1.109
			2004	# Sales	2	2	2	2
				Mean	$216,520	$378,500	.575	1.744
				Median	$216,520	$378,500	.575	1.744
	D	12	2003	# Sales	12	12	12	12
				Mean	$376,803	$349,896	1.151	.987
				Median	$362,635	$334,500	.912	1.096
			2004	# Sales	12	12	12	12
				Mean	$363,242	$394,158	.975	1.108
				Median	$344,645	$382,000	.920	1.087
		13	2003	# Sales	6	6	6	6
				Mean	$201,075	$212,667	.964	1.061
				Median	$200,620	$220,000	.949	1.054
			2004	# Sales	6	6	6	6
				Mean	$185,192	$242,167	.813	1.315
				Median	$187,220	$246,500	.744	1.347
		15	2003	# Sales	1	1	1	1
				Mean	$436,780	$460,000	.950	1.053
				Median	$436,780	$460,000	.950	1.053
		97	2004	# Sales	1	1	1	1
				Mean	$386,290	$535,000	.722	1.385
				Median	$386,290	$535,000	.722	1.385
	E	11	2003	# Sales	7	7	7	7
				Mean	$217,926	$254,736	.875	1.190
				Median	$208,920	$236,000	.926	1.080
			2004	# Sales	7	7	7	7
				Mean	$230,160	$251,534	1.053	1.119
				Median	$235,650	$249,900	.899	1.113
		12	2003	# Sales	7	7	7	7
				Mean	$245,996	$299,857	.843	1.241
				Median	$261,340	$279,000	.822	1.217
			2004	# Sales	4	4	4	4
				Mean	$258,573	$313,250	.885	1.209
				Median	$261,740	$310,500	.825	1.214
		13	2003	# Sales	15	15	15	15
				Mean	$226,767	$231,900	.996	1.025
				Median	$220,760	$235,000	.952	1.050
			2004	# Sales	14	14	14	14
				Mean	$234,371	$281,521	1.286	1.243
				Median	$232,735	$314,850	.778	1.286
		24	2004	# Sales	1	1	1	1
				Mean	$243,210	$359,000	.677	1.476
				Median	$243,210	$359,000	.677	1.476

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
7	C	11	2003	# Sales	12	12	12	12
				Mean	$250,542	$275,058	.928	1.111
				Median	$269,070	$265,000	.874	1.144
			2004	# Sales	6	6	6	6
				Mean	$237,748	$300,883	.803	1.291
				Median	$236,535	$306,000	.850	1.178
		12	2003	# Sales	18	18	18	18
				Mean	$280,442	$321,806	.895	1.158
				Median	$296,785	$316,500	.928	1.078
			2004	# Sales	24	24	24	24
				Mean	$280,738	$372,346	.823	1.405
				Median	$274,510	$398,288	.727	1.376
		13	2003	# Sales	16	16	16	16
				Mean	$202,024	$230,123	.905	1.136
				Median	$194,640	$228,100	.913	1.096
			2004	# Sales	15	15	15	15
				Mean	$216,484	$310,449	.729	1.438
				Median	$220,660	$299,000	.726	1.377
		23	2003	# Sales	4	4	4	4
				Mean	$252,828	$256,625	1.034	1.027
				Median	$246,945	$276,500	.907	1.109
			2004	# Sales	5	5	5	5
				Mean	$261,774	$336,100	.780	1.283
				Median	$238,990	$311,000	.774	1.292
	D	11	2004	# Sales	2	2	2	2
				Mean	$197,135	$217,500	1.517	1.170
				Median	$197,135	$217,500	1.517	1.170
		12	2003	# Sales	30	30	30	30
				Mean	$264,254	$316,083	.861	1.236
				Median	$246,360	$304,450	.840	1.191
			2004	# Sales	32	32	32	32
				Mean	$236,399	$320,710	.796	1.369
				Median	$234,290	$301,250	.725	1.380
		13	2003	# Sales	2	2	2	2
				Mean	$230,970	$247,450	.974	1.111
				Median	$230,970	$247,450	.974	1.111
			2004	# Sales	1	1	1	1
				Mean	$202,740	$230,000	.881	1.134
				Median	$202,740	$230,000	.881	1.134
		23	2003	# Sales	1	1	1	1
				Mean	$269,370	$300,000	.898	1.114
				Median	$269,370	$300,000	.898	1.114
	E	11	2003	# Sales	31	31	31	31
				Mean	$179,088	$217,476	.842	1.236
				Median	$173,540	$215,000	.835	1.198
			2004	# Sales	45	45	45	45
				Mean	$181,312	$235,904	.815	1.316
				Median	$180,580	$239,000	.768	1.301

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
7	E	12	2003	# Sales	12	12	12	12
				Mean	$177,953	$238,000	.794	1.395
				Median	$170,875	$220,950	.864	1.158
			2004	# Sales	3	3	3	3
				Mean	$178,703	$336,167	.538	1.878
				Median	$176,110	$345,000	.510	1.959
		13	2003	# Sales	1	1	1	1
				Mean	$169,330	$185,900	.911	1.098
				Median	$169,330	$185,900	.911	1.098
			2004	# Sales	3	3	3	3
				Mean	$154,653	$202,467	.867	1.304
				Median	$150,460	$225,000	.644	1.553
		23	2003	# Sales	4	4	4	4
				Mean	$235,710	$214,250	1.179	.970
				Median	$236,005	$209,500	.891	1.122
			2004	# Sales	1	1	1	1
				Mean	$207,250	$216,900	.956	1.047
				Median	$207,250	$216,900	.956	1.047
		24	2004	# Sales	1	1	1	1
				Mean	$208,140	$400,000	.520	1.922
				Median	$208,140	$400,000	.520	1.922
15	A	11	2003	# Sales	17	17	17	17
				Mean	$297,655	$305,225	1.060	1.035
				Median	$288,840	$310,000	.950	1.053
			2004	# Sales	28	28	28	28
				Mean	$339,889	$474,428	.790	1.401
				Median	$307,715	$478,500	.723	1.384
		13	2003	# Sales	1	1	1	1
				Mean	$268,370	$325,000	.826	1.211
				Median	$268,370	$325,000	.826	1.211
		23	2003	# Sales	2	2	2	2
				Mean	$331,070	$452,125	.781	1.395
				Median	$331,070	$452,125	.781	1.395
		97	2003	# Sales	1	1	1	1
				Mean	$356,500	$35,000	10.186	.098
				Median	$356,500	$35,000	10.186	.098
			2004	# Sales	2	2	2	2
				Mean	$301,735	$352,500	.880	1.157
				Median	$301,735	$352,500	.880	1.157
		24	2003	# Sales	5	5	5	5
				Mean	$396,338	$421,200	1.058	1.055
				Median	$345,710	$340,000	.950	1.052
			2004	# Sales	7	7	7	7
				Mean	$415,996	$509,000	.894	1.273
				Median	$430,020	$485,000	.653	1.532
	B	11	2003	# Sales	32	32	32	32
				Mean	$245,384	$285,968	.944	1.181
				Median	$237,630	$290,000	.927	1.078

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
15	B	11	2004	# Sales	39	39	39	39
				Mean	$240,661	$349,969	.715	1.477
				Median	$224,880	$339,900	.651	1.536
		12	2003	# Sales	1	1	1	1
				Mean	$188,080	$250,000	.752	1.329
				Median	$188,080	$250,000	.752	1.329
		23	2003	# Sales	1	1	1	1
				Mean	$256,100	$274,900	.932	1.073
				Median	$256,100	$274,900	.932	1.073
			2004	# Sales	2	2	2	2
				Mean	$192,945	$357,500	.542	1.846
				Median	$192,945	$357,500	.542	1.846
		24	2003	# Sales	2	2	2	2
				Mean	$512,885	$255,000	1.991	.691
				Median	$512,885	$255,000	1.991	.691
			2004	# Sales	1	1	1	1
				Mean	$256,110	$311,910	.821	1.218
				Median	$256,110	$311,910	.821	1.218
	C	11	2003	# Sales	59	59	59	59
				Mean	$193,769	$220,562	.945	1.166
				Median	$183,600	$225,000	.912	1.097
			2004	# Sales	63	63	63	63
				Mean	$196,826	$268,601	.797	1.396
				Median	$182,520	$275,000	.776	1.289
		12	2004	# Sales	1	1	1	1
				Mean	$190,280	$200,000	.951	1.051
				Median	$190,280	$200,000	.951	1.051
		13	2003	# Sales	3	3	3	3
				Mean	$257,267	$297,000	.891	1.146
				Median	$247,580	$285,000	.852	1.173
			2004	# Sales	8	8	8	8
				Mean	$239,656	$289,500	.879	1.197
				Median	$235,465	$270,000	.873	1.148
		23	2003	# Sales	1	1	1	1
				Mean	$209,600	$174,670	1.200	.833
				Median	$209,600	$174,670	1.200	.833
			2004	# Sales	1	1	1	1
				Mean	$105,460	$260,000	.406	2.465
				Median	$105,460	$260,000	.406	2.465
		24	2003	# Sales	7	7	7	7
				Mean	$346,473	$255,302	1.495	.867
				Median	$337,460	$222,500	1.249	.801
			2004	# Sales	9	9	9	9
				Mean	$263,606	$253,946	1.310	1.063
				Median	$266,190	$264,511	1.006	.994
	D	11	2003	# Sales	57	57	57	57
				Mean	$280,934	$289,067	1.093	1.044
				Median	$267,800	$274,000	.939	1.065

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
15	D	11	2004	# Sales	58	58	58	58
				Mean	$260,563	$352,180	1.148	1.379
				Median	$263,460	$350,000	.756	1.323
		12	2003	# Sales	1	1	1	1
				Mean	$205,470	$590,000	.348	2.871
				Median	$205,470	$590,000	.348	2.871
		13	2004	# Sales	1	1	1	1
				Mean	$283,580	$200,000	1.418	.705
				Median	$283,580	$200,000	1.418	.705
		23	2003	# Sales	4	4	4	4
				Mean	$350,155	$420,000	.821	1.305
				Median	$300,735	$402,500	.809	1.291
			2004	# Sales	3	3	3	3
				Mean	$242,710	$341,667	.780	1.453
				Median	$221,660	$300,000	.877	1.140
		97	2004	# Sales	3	3	3	3
				Mean	$141,283	$193,300	.830	1.310
				Median	$136,220	$180,000	.757	1.321
		24	2003	# Sales	15	15	15	15
				Mean	$373,449	$429,677	.970	1.265
				Median	$357,250	$385,000	.928	1.078
			2004	# Sales	15	15	15	15
				Mean	$369,755	$565,262	.699	1.659
				Median	$377,950	$623,000	.632	1.583
	E	11	2003	# Sales	55	55	55	55
				Mean	$238,746	$259,208	1.069	1.093
				Median	$206,310	$235,000	.921	1.086
			2004	# Sales	49	49	49	49
				Mean	$237,652	$331,719	.906	1.385
				Median	$219,570	$280,000	.729	1.372
		12	2004	# Sales	1	1	1	1
				Mean	$262,960	$105,000	2.504	.399
				Median	$262,960	$105,000	2.504	.399
		13	2003	# Sales	12	12	12	12
				Mean	$234,198	$204,900	1.379	.911
				Median	$219,170	$205,750	1.022	.979
			2004	# Sales	3	3	3	3
				Mean	$233,827	$280,000	.844	1.205
				Median	$242,240	$295,000	.819	1.220
		23	2003	# Sales	2	2	2	2
				Mean	$410,265	$568,500	.722	1.385
				Median	$410,265	$568,500	.722	1.385
			2004	# Sales	5	5	5	5
				Mean	$455,454	$538,455	2.401	1.299
				Median	$493,810	$600,000	.718	1.393
		97	2004	# Sales	2	2	2	2
				Mean	$195,750	$227,500	.982	1.101
				Median	$195,750	$227,500	.982	1.101

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
15	E	24	2003	# Sales	20	20	20	20
				Mean	$431,751	$481,141	1.005	1.290
				Median	$450,885	$520,000	.858	1.165
			2004	# Sales	12	12	12	12
				Mean	$358,531	$505,410	.770	1.415
				Median	$348,625	$555,000	.788	1.269
18	A	11	2003	# Sales	16	16	16	16
				Mean	$121,991	$133,069	.938	1.096
				Median	$128,890	$137,500	.884	1.131
			2004	# Sales	14	14	14	14
				Mean	$118,452	$150,256	.811	1.273
				Median	$125,825	$155,500	.759	1.318
		12	2003	# Sales	10	10	10	10
				Mean	$128,292	$128,785	1.044	1.011
				Median	$132,740	$140,950	.951	1.052
			2004	# Sales	9	9	9	9
				Mean	$113,991	$165,000	.730	1.507
				Median	$109,490	$155,000	.608	1.644
		13	2003	# Sales	10	10	10	10
				Mean	$132,212	$141,877	.948	1.117
				Median	$127,810	$148,450	.918	1.090
			2004	# Sales	9	9	9	9
				Mean	$128,757	$145,951	.934	1.127
				Median	$124,930	$155,000	.924	1.082
		23	2003	# Sales	10	10	10	10
				Mean	$141,871	$141,001	1.012	1.008
				Median	$156,450	$142,500	.957	1.045
			2004	# Sales	7	7	7	7
				Mean	$136,737	$142,857	.981	1.034
				Median	$148,360	$150,000	.948	1.055
		24	2003	# Sales	3	3	3	3
				Mean	$101,110	$141,667	.788	1.438
				Median	$92,600	$120,000	.926	1.080
			2004	# Sales	1	1	1	1
				Mean	$93,740	$90,000	1.042	.960
				Median	$93,740	$90,000	1.042	.960
	B	11	2003	# Sales	5	5	5	5
				Mean	$102,600	$99,080	1.079	.947
				Median	$87,880	$85,000	1.034	.967
			2004	# Sales	10	10	10	10
				Mean	$99,414	$111,215	1.003	1.244
				Median	$80,520	$123,000	.701	1.426
		12	2003	# Sales	21	21	21	21
				Mean	$112,129	$131,882	.874	1.211
				Median	$103,510	$125,000	.890	1.123
			2004	# Sales	17	17	17	17
				Mean	$106,847	$154,303	.759	1.463
				Median	$103,500	$165,000	.723	1.383

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
18	B	13	2003	# Sales	19	19	19	19
				Mean	$104,517	$122,442	.851	1.224
				Median	$89,350	$120,000	.772	1.296
			2004	# Sales	33	33	33	33
				Mean	$105,464	$130,827	.811	1.285
				Median	$89,760	$130,000	.780	1.281
		23	2003	# Sales	4	4	4	4
				Mean	$133,820	$119,475	1.152	.895
				Median	$134,730	$121,450	1.110	.903
			2004	# Sales	5	5	5	5
				Mean	$113,934	$149,390	.809	1.328
				Median	$105,490	$160,000	.718	1.393
		97	2003	# Sales	1	1	1	1
				Mean	$100,800	$115,000	.877	1.141
				Median	$100,800	$115,000	.877	1.141
			2004	# Sales	2	2	2	2
				Mean	$116,410	$57,500	2.033	.496
				Median	$116,410	$57,500	2.033	.496
		24	2003	# Sales	2	2	2	2
				Mean	$91,895	$144,250	.856	1.380
				Median	$91,895	$144,250	.856	1.380
	C	11	2003	# Sales	2	2	2	2
				Mean	$84,845	$120,100	.744	1.546
				Median	$84,845	$120,100	.744	1.546
			2004	# Sales	12	12	12	12
				Mean	$115,988	$139,471	.773	1.428
				Median	$72,230	$117,500	.665	1.507
		12	2003	# Sales	16	16	16	16
				Mean	$105,769	$129,053	.876	1.278
				Median	$95,535	$133,000	.863	1.160
			2004	# Sales	20	20	20	20
				Mean	$112,466	$133,849	1.695	1.403
				Median	$97,085	$127,450	.818	1.223
		13	2003	# Sales	17	17	17	17
				Mean	$111,464	$117,890	.991	1.123
				Median	$106,580	$122,000	.849	1.178
			2004	# Sales	23	23	23	23
				Mean	$114,103	$129,174	.983	2.874
				Median	$120,800	$125,000	.842	1.188
		23	2003	# Sales	2	2	2	2
				Mean	$108,200	$190,000	.619	1.889
				Median	$108,200	$190,000	.619	1.889
			2004	# Sales	3	3	3	3
				Mean	$97,770	$171,036	.634	1.810
				Median	$90,190	$135,000	.637	1.569
		97	2003	# Sales	2	2	2	2
				Mean	$73,665	$90,500	.817	1.231
				Median	$73,665	$90,500	.817	1.231

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
18	C	97	2004	# Sales	1	1	1	1
				Mean	$86,010	$65,000	1.323	.756
				Median	$86,010	$65,000	1.323	.756
		24	2003	# Sales	1	1	1	1
				Mean	$87,960	$127,000	.693	1.444
				Median	$87,960	$127,000	.693	1.444
	D	11	2003	# Sales	1	1	1	1
				Mean	$134,930	$168,000	.803	1.245
				Median	$134,930	$168,000	.803	1.245
		12	2003	# Sales	2	2	2	2
				Mean	$123,245	$182,500	.683	1.486
				Median	$123,245	$182,500	.683	1.486
			2004	# Sales	3	3	3	3
				Mean	$118,693	$177,510	.681	1.612
				Median	$107,250	$176,000	.609	1.641
		13	2003	# Sales	9	9	9	9
				Mean	$129,123	$142,716	.917	1.107
				Median	$126,570	$152,500	.878	1.139
			2004	# Sales	7	7	7	7
				Mean	$127,627	$162,627	.789	1.272
				Median	$125,330	$160,000	.768	1.303
	E	11	2003	# Sales	2	2	2	2
				Mean	$83,740	$109,950	.765	1.322
				Median	$83,740	$109,950	.765	1.322
			2004	# Sales	4	4	4	4
				Mean	$98,363	$129,750	.843	1.290
				Median	$99,120	$135,000	.737	1.372
		12	2003	# Sales	5	5	5	5
				Mean	$124,750	$132,600	.920	1.117
				Median	$114,450	$118,000	.952	1.050
			2004	# Sales	10	10	10	10
				Mean	$116,880	$146,090	.904	1.371
				Median	$89,215	$149,950	.981	1.019
		13	2003	# Sales	19	19	19	19
				Mean	$120,267	$132,442	.953	1.141
				Median	$111,610	$128,000	.896	1.117
			2004	# Sales	10	10	10	10
				Mean	$113,058	$138,750	.966	1.249
				Median	$112,440	$136,500	.762	1.312
		23	2004	# Sales	4	4	4	4
				Mean	$97,863	$114,000	1.007	1.117
				Median	$87,090	$100,500	.885	1.186
		97	2004	# Sales	1	1	1	1
				Mean	$79,380	$82,000	.968	1.033
				Median	$79,380	$82,000	.968	1.033
		24	2003	# Sales	1	1	1	1
				Mean	$77,890	$69,500	1.121	.892
				Median	$77,890	$69,500	1.121	.892

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
19	A	11	2003	# Sales	29	29	29	29
				Mean	$278,642	$312,571	.923	1.163
				Median	$279,010	$300,000	.890	1.123
			2004	# Sales	33	33	33	33
				Mean	$294,972	$385,005	.783	1.333
				Median	$292,980	$375,000	.773	1.293
		13	2003	# Sales	3	3	3	3
				Mean	$317,760	$301,333	1.069	.961
				Median	$307,220	$290,000	1.059	.944
			2004	# Sales	2	2	2	2
				Mean	$363,065	$482,000	.759	1.320
				Median	$363,065	$482,000	.759	1.320
		23	2003	# Sales	1	1	1	1
				Mean	$272,740	$275,000	.992	1.008
				Median	$272,740	$275,000	.992	1.008
		24	2003	# Sales	8	8	8	8
				Mean	$329,183	$381,875	.902	1.208
				Median	$308,110	$395,000	.803	1.252
			2004	# Sales	7	7	7	7
				Mean	$245,136	$457,700	.603	2.187
				Median	$248,310	$397,000	.756	1.323
	B	11	2003	# Sales	48	48	48	48
				Mean	$204,149	$237,845	.899	1.188
				Median	$197,470	$234,000	.871	1.148
			2004	# Sales	49	49	49	49
				Mean	$189,798	$281,079	.765	1.562
				Median	$187,600	$276,000	.669	1.494
		12	2003	# Sales	1	1	1	1
				Mean	$186,820	$204,000	.916	1.092
				Median	$186,820	$204,000	.916	1.092
			2004	# Sales	1	1	1	1
				Mean	$268,120	$335,000	.800	1.249
				Median	$268,120	$335,000	.800	1.249
		13	2004	# Sales	2	2	2	2
				Mean	$167,605	$267,500	.999	1.368
				Median	$167,605	$267,500	.999	1.368
		23	2003	# Sales	4	4	4	4
				Mean	$270,735	$238,750	1.139	.885
				Median	$276,600	$230,000	1.096	.912
			2004	# Sales	1	1	1	1
				Mean	$271,510	$455,000	.597	1.676
				Median	$271,510	$455,000	.597	1.676
		15	2004	# Sales	1	1	1	1
				Mean	$111,470	$225,000	.495	2.018
				Median	$111,470	$225,000	.495	2.018
		97	2004	# Sales	2	2	2	2
				Mean	$195,710	$373,182	.511	1.965
				Median	$195,710	$373,182	.511	1.965

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
19	B	24	2003	# Sales	2	2	2	2
				Mean	$221,685	$284,950	.774	1.293
				Median	$221,685	$284,950	.774	1.293
			2004	# Sales	3	3	3	3
				Mean	$192,117	$338,000	.603	1.739
				Median	$164,290	$259,000	.518	1.930
31	A	11	2003	# Sales	15	15	15	15
				Mean	$264,146	$282,493	.994	1.084
				Median	$256,640	$280,000	1.007	.993
			2004	# Sales	14	14	14	14
				Mean	$272,291	$346,336	.919	1.327
				Median	$268,720	$338,500	.876	1.142
		12	2003	# Sales	2	2	2	2
				Mean	$393,315	$317,000	1.385	.914
				Median	$393,315	$317,000	1.385	.914
			2004	# Sales	1	1	1	1
				Mean	$191,490	$427,000	.448	2.230
				Median	$191,490	$427,000	.448	2.230
		13	2003	# Sales	4	4	4	4
				Mean	$238,463	$345,875	.749	1.570
				Median	$216,910	$315,500	.862	1.161
			2004	# Sales	1	1	1	1
				Mean	$175,960	$177,000	.994	1.006
				Median	$175,960	$177,000	.994	1.006
		23	2003	# Sales	1	1	1	1
				Mean	$148,840	$329,000	.452	2.210
				Median	$148,840	$329,000	.452	2.210
			2004	# Sales	1	1	1	1
				Mean	$140,090	$265,000	.529	1.892
				Median	$140,090	$265,000	.529	1.892
		24	2003	# Sales	1	1	1	1
				Mean	$501,460	$529,900	.946	1.057
				Median	$501,460	$529,900	.946	1.057
			2004	# Sales	2	2	2	2
				Mean	$315,840	$358,500	1.926	1.478
				Median	$315,840	$358,500	1.926	1.478
	B	11	2003	# Sales	40	40	40	40
				Mean	$304,419	$341,174	.920	1.148
				Median	$298,950	$315,000	.889	1.125
			2004	# Sales	30	30	30	30
				Mean	$337,786	$393,219	.909	1.198
				Median	$339,210	$377,500	.893	1.120
		23	2003	# Sales	2	2	2	2
				Mean	$326,135	$372,500	.995	1.134
				Median	$326,135	$372,500	.995	1.134
			2004	# Sales	1	1	1	1
				Mean	$222,680	$325,000	.685	1.459
				Median	$222,680	$325,000	.685	1.459
		97	2003	# Sales	1	1	1	1
				Mean	$178,490	$380,000	.470	2.129
				Median	$178,490	$380,000	.470	2.129

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
31	B	24	2003	# Sales	12	12	12	12
				Mean	$399,772	$352,750	1.185	.933
				Median	$384,145	$347,500	1.091	.923
			2004	# Sales	6	6	6	6
				Mean	$348,760	$461,417	.892	1.320
				Median	$310,535	$470,000	.709	1.421
32	A	12	2003	# Sales	6	6	6	6
				Mean	$130,748	$170,967	.786	1.312
				Median	$139,920	$183,500	.750	1.333
			2004	# Sales	5	5	5	5
				Mean	$153,840	$216,800	.720	1.510
				Median	$173,680	$240,000	.816	1.225
		13	2003	# Sales	1	1	1	1
				Mean	$92,450	$99,900	.925	1.081
				Median	$92,450	$99,900	.925	1.081
			2004	# Sales	1	1	1	1
				Mean	$92,250	$173,000	.533	1.875
				Median	$92,250	$173,000	.533	1.875
39	A	11	2003	# Sales	64	64	64	64
				Mean	$264,578	$280,058	.992	1.077
				Median	$255,590	$278,000	.921	1.086
			2004	# Sales	45	45	45	45
				Mean	$258,315	$305,814	.904	1.221
				Median	$271,190	$309,900	.856	1.169
		12	2003	# Sales	1	1	1	1
				Mean	$291,600	$298,500	.977	1.024
				Median	$291,600	$298,500	.977	1.024
		13	2003	# Sales	1	1	1	1
				Mean	$253,690	$303,200	.837	1.195
				Median	$253,690	$303,200	.837	1.195
		23	2003	# Sales	1	1	1	1
				Mean	$245,400	$253,000	.970	1.031
				Median	$245,400	$253,000	.970	1.031
			2004	# Sales	1	1	1	1
				Mean	$315,670	$616,149	.512	1.952
				Median	$315,670	$616,149	.512	1.952
		97	2004	# Sales	4	4	4	4
				Mean	$190,705	$227,813	.846	1.197
				Median	$194,610	$215,875	.853	1.174
		24	2003	# Sales	3	3	3	3
				Mean	$280,080	$329,167	.877	1.177
				Median	$280,150	$349,500	.802	1.248
	B	11	2003	# Sales	42	42	42	42
				Mean	$323,580	$343,105	.987	1.077
				Median	$309,485	$349,500	.888	1.126
			2004	# Sales	38	38	38	38
				Mean	$307,713	$419,645	.770	1.401
				Median	$313,855	$433,750	.724	1.380

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
39	B	13	2004	# Sales	1	1	1	1
				Mean	$295,520	$350,000	.844	1.184
				Median	$295,520	$350,000	.844	1.184
		23	2003	# Sales	3	3	3	3
				Mean	$256,147	$272,520	1.056	1.154
				Median	$234,480	$228,000	.818	1.223
		97	2004	# Sales	1	1	1	1
				Mean	$147,260	$700,000	.210	4.753
				Median	$147,260	$700,000	.210	4.753
		24	2003	# Sales	1	1	1	1
				Mean	$374,150	$466,700	.802	1.247
				Median	$374,150	$466,700	.802	1.247
			2004	# Sales	1	1	1	1
				Mean	$427,500	$470,000	.910	1.099
				Median	$427,500	$470,000	.910	1.099
	C	11	2003	# Sales	32	32	32	32
				Mean	$233,026	$271,686	.911	1.189
				Median	$216,340	$262,500	.933	1.072
			2004	# Sales	29	29	29	29
				Mean	$251,024	$341,484	.926	1.343
				Median	$238,110	$305,000	.733	1.365
		13	2003	# Sales	8	8	8	8
				Mean	$277,234	$338,292	.834	1.222
				Median	$268,870	$310,000	.862	1.161
			2004	# Sales	1	1	1	1
				Mean	$272,060	$317,000	.858	1.165
				Median	$272,060	$317,000	.858	1.165
		23	2004	# Sales	2	2	2	2
				Mean	$195,540	$359,000	.580	1.793
				Median	$195,540	$359,000	.580	1.793
		24	2003	# Sales	11	11	11	11
				Mean	$520,118	$561,291	.907	1.135
				Median	$421,240	$498,000	.951	1.051
			2004	# Sales	13	13	13	13
				Mean	$659,376	$806,338	.881	1.260
				Median	$854,570	$969,500	.868	1.152
	G	11	2003	# Sales	28	28	28	28
				Mean	$175,609	$185,748	1.015	1.048
				Median	$171,265	$167,500	.937	1.067
			2004	# Sales	39	39	39	39
				Mean	$164,040	$207,959	.886	1.351
				Median	$159,660	$205,000	.841	1.190
		12	2004	# Sales	1	1	1	1
				Mean	$124,550	$103,000	1.209	.827
				Median	$124,550	$103,000	1.209	.827
		13	2003	# Sales	3	3	3	3
				Mean	$116,883	$132,733	.919	1.175
				Median	$116,680	$147,900	.951	1.052

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
39	G	13	2004	# Sales	2	2	2	2
				Mean	$128,235	$212,750	.788	1.580
				Median	$128,235	$212,750	.788	1.580
		23	2003	# Sales	7	7	7	7
				Mean	$175,334	$229,714	.878	1.315
				Median	$189,000	$212,000	.987	1.013
			2004	# Sales	7	7	7	7
				Mean	$185,969	$213,876	.896	1.163
				Median	$205,520	$240,000	.856	1.168
		24	2004	# Sales	1	1	1	1
				Mean	$335,860	$375,000	.896	1.117
				Median	$335,860	$375,000	.896	1.117
	H	11	2003	# Sales	34	34	34	34
				Mean	$158,332	$176,886	.981	1.127
				Median	$153,770	$175,500	.939	1.065
			2004	# Sales	35	35	35	35
				Mean	$150,584	$227,614	.756	1.517
				Median	$146,570	$210,000	.666	1.502
		23	2003	# Sales	11	11	11	11
				Mean	$187,934	$206,584	.935	1.118
				Median	$187,020	$200,000	.920	1.087
			2004	# Sales	13	13	13	13
				Mean	$169,975	$237,000	.772	1.442
				Median	$176,340	$220,000	.755	1.324
		97	2003	# Sales	1	1	1	1
				Mean	$95,660	$92,000	1.040	.962
				Median	$95,660	$92,000	1.040	.962
		24	2004	# Sales	1	1	1	1
				Mean	$197,080	$365,000	.540	1.852
				Median	$197,080	$365,000	.540	1.852
	L	11	2003	# Sales	68	68	68	68
				Mean	$211,977	$223,881	1.021	1.102
				Median	$207,545	$227,500	.933	1.072
			2004	# Sales	70	70	70	70
				Mean	$204,694	$282,639	.871	1.419
				Median	$194,275	$277,500	.739	1.354
		12	2004	# Sales	3	3	3	3
				Mean	$227,040	$381,333	.745	1.607
				Median	$239,820	$400,000	.691	1.447
		13	2003	# Sales	2	2	2	2
				Mean	$142,890	$157,500	.911	1.100
				Median	$142,890	$157,500	.911	1.100
			2004	# Sales	3	3	3	3
				Mean	$134,453	$348,747	.385	2.861
				Median	$147,800	$349,000	.423	2.362
		23	2003	# Sales	2	2	2	2
				Mean	$186,980	$212,500	.880	1.137
				Median	$186,980	$212,500	.880	1.137
			2004	# Sales	4	4	4	4
				Mean	$203,425	$269,125	.786	1.404
				Median	$202,500	$270,000	.683	1.491

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
39	L	97	2003	# Sales	1	1	1	1
				Mean	$129,420	$92,000	1.407	.711
				Median	$129,420	$92,000	1.407	.711
			2004	# Sales	4	4	4	4
				Mean	$168,283	$159,601	1.870	1.122
				Median	$179,705	$145,750	1.178	1.139
		24	2003	# Sales	7	7	7	7
				Mean	$258,954	$285,606	.943	1.159
				Median	$258,900	$270,000	.817	1.224
			2004	# Sales	4	4	4	4
				Mean	$208,778	$371,500	.724	2.341
				Median	$222,415	$383,000	.584	1.867
40	A	11	2003	# Sales	67	67	67	67
				Mean	$243,930	$279,904	.973	1.225
				Median	$226,200	$275,000	.798	1.252
			2004	# Sales	58	58	58	58
				Mean	$276,832	$325,505	.947	1.326
				Median	$285,215	$327,500	.892	1.122
		12	2004	# Sales	1	1	1	1
				Mean	$131,810	$265,000	.497	2.010
				Median	$131,810	$265,000	.497	2.010
		13	2003	# Sales	1	1	1	1
				Mean	$202,350	$340,000	.595	1.680
				Median	$202,350	$340,000	.595	1.680
			2004	# Sales	3	3	3	3
				Mean	$129,530	$221,537	.598	1.722
				Median	$129,270	$216,500	.637	1.570
		23	2003	# Sales	10	10	10	10
				Mean	$315,974	$330,450	1.041	1.226
				Median	$285,965	$317,500	.896	1.120
			2004	# Sales	12	12	12	12
				Mean	$251,071	$352,150	1.117	1.537
				Median	$247,790	$308,000	.755	1.325
		97	2004	# Sales	1	1	1	1
				Mean	$147,170	$158,000	.931	1.074
				Median	$147,170	$158,000	.931	1.074
		24	2003	# Sales	17	17	17	17
				Mean	$337,066	$373,353	.982	1.186
				Median	$311,760	$350,000	.958	1.044
			2004	# Sales	11	11	11	11
				Mean	$345,327	$460,409	.832	1.548
				Median	$352,310	$430,000	.670	1.493
	B	11	2003	# Sales	44	44	44	44
				Mean	$281,838	$300,881	1.022	1.116
				Median	$261,580	$280,500	1.000	1.000
			2004	# Sales	31	31	31	31
				Mean	$300,302	$363,897	.967	1.277
				Median	$275,600	$375,000	.780	1.282

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
40	B	12	2003	# Sales	2	2	2	2
				Mean	$424,720	$362,500	1.081	1.052
				Median	$424,720	$362,500	1.081	1.052
			2004	# Sales	1	1	1	1
				Mean	$186,720	$279,000	.669	1.494
				Median	$186,720	$279,000	.669	1.494
		13	2003	# Sales	4	4	4	4
				Mean	$349,060	$376,000	1.094	1.024
				Median	$309,645	$379,500	.950	1.053
		23	2003	# Sales	2	2	2	2
				Mean	$276,495	$265,000	1.064	1.065
				Median	$276,495	$265,000	1.064	1.065
			2004	# Sales	6	6	6	6
				Mean	$501,713	$403,667	1.293	.854
				Median	$422,295	$362,500	1.199	.841
		97	2003	# Sales	1	1	1	1
				Mean	$176,360	$360,000	.490	2.041
				Median	$176,360	$360,000	.490	2.041
		24	2003	# Sales	9	9	9	9
				Mean	$256,814	$346,948	.910	1.317
				Median	$281,300	$340,000	.789	1.267
			2004	# Sales	9	9	9	9
				Mean	$335,378	$518,776	.654	1.855
				Median	$239,300	$500,000	.472	2.117
49	A	11	2003	# Sales	14	14	14	14
				Mean	$362,186	$416,391	.898	1.150
				Median	$344,320	$420,712	.869	1.150
			2004	# Sales	13	13	13	13
				Mean	$352,748	$489,231	.739	1.390
				Median	$347,130	$450,000	.769	1.300
		12	2003	# Sales	18	18	18	18
				Mean	$582,944	$619,028	.982	1.051
				Median	$553,405	$579,500	.934	1.071
			2004	# Sales	18	18	18	18
				Mean	$554,437	$588,083	.975	1.148
				Median	$495,180	$567,500	.981	1.019
		13	2003	# Sales	3	3	3	3
				Mean	$433,833	$423,000	1.209	.949
				Median	$442,740	$466,000	.950	1.053
			2004	# Sales	4	4	4	4
				Mean	$393,975	$557,725	.709	1.422
				Median	$403,885	$537,500	.716	1.403
		23	2003	# Sales	1	1	1	1
				Mean	$207,870	$368,500	.564	1.773
				Median	$207,870	$368,500	.564	1.773
		24	2003	# Sales	1	1	1	1
				Mean	$777,270	$850,000	.914	1.094
				Median	$777,270	$850,000	.914	1.094

12/30/04: Trend Analysis by Use Code (Sales through 9/15/04)

NBHD	SUB	USECODE	Sale Year		Current Value	Sale Price	Current A/S Ratio	Indicated Trend Factor
49	A	24	2004	# Sales	1	1	1	1
				Mean	$330,740	$675,000	.490	2.041
				Median	$330,740	$675,000	.490	2.041
	B	11	2003	# Sales	3	3	3	3
				Mean	$322,127	$358,667	.920	1.137
				Median	$333,340	$380,000	.877	1.140
			2004	# Sales	3	3	3	3
				Mean	$355,937	$385,333	.911	1.115
				Median	$306,820	$350,000	.927	1.079
		12	2003	# Sales	7	7	7	7
				Mean	$292,849	$361,714	.851	1.224
				Median	$289,560	$410,000	.733	1.364
			2004	# Sales	9	9	9	9
				Mean	$351,616	$512,667	.691	1.528
				Median	$293,850	$529,000	.707	1.415
		13	2003	# Sales	1	1	1	1
				Mean	$404,180	$449,000	.900	1.111
				Median	$404,180	$449,000	.900	1.111
			2004	# Sales	2	2	2	2
				Mean	$412,355	$515,000	.827	1.257
				Median	$412,355	$515,000	.827	1.257
		24	2004	# Sales	1	1	1	1
				Mean	$457,970	$530,000	.864	1.157
				Median	$457,970	$530,000	.864	1.157
	C	11	2003	# Sales	3	3	3	3
				Mean	$270,413	$367,000	.783	1.398
				Median	$284,420	$325,000	.897	1.115
			2004	# Sales	5	5	5	5
				Mean	$302,818	$302,790	1.010	.995
				Median	$286,540	$286,000	.991	1.009
		12	2003	# Sales	9	9	9	9
				Mean	$375,944	$402,255	.980	1.078
				Median	$343,780	$400,000	.918	1.089
			2004	# Sales	10	10	10	10
				Mean	$444,848	$523,150	.844	1.210
				Median	$452,355	$544,750	.850	1.180
		13	2004	# Sales	1	1	1	1
				Mean	$285,280	$325,000	.878	1.139
				Median	$285,280	$325,000	.878	1.139
		24	2003	# Sales	1	1	1	1
				Mean	$296,680	$315,500	.940	1.063
				Median	$296,680	$315,500	.940	1.063

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	$393,837	$354,000	40%	$157,535	$141,600	3754	3634	4000	$39.38	$35.40	$29.90	$119,600
	B	$308,811	$295,000	40%	$123,525	$118,000	5068	4531	4000	$30.88	$29.50	$27.00	$108,000
	C	$242,359	$242,500	40%	$96,943	$97,000	2065	1755	2000	$48.47	$48.50	$44.40	$88,800
	D	$332,964	$330,000	40%	$133,186	$132,000	4582	4400	4000	$33.30	$33.00	$28.00	$112,000
	E	$266,812	$250,000	40%	$106,725	$100,000	3352	2913	3000	$35.57	$33.33	$33.00	$99,000
7	C	$308,805	$299,500	40%	$123,522	$119,800	3968	3465	3000	$41.17	$39.93	$36.00	$108,000
	D	$311,840	$299,950	40%	$124,736	$119,980	5638	5400	5000	$24.95	$24.00	$24.00	$120,000
	E	$232,566	$225,000	40%	$93,026	$90,000	2256	1777	2000	$46.51	$45.00	$45.00	$90,000
15	A	$414,461	$375,000	40%	$165,785	$150,000	1924	1695	1800	$92.10	$83.33	$83.00	$149,400
	B	$318,738	$313,455	40%	$127,495	$125,382	2179	2070	1800	$70.83	$69.66	$70.00	$126,000
	C	$249,009	$239,450	40%	$99,603	$95,780	1862	1700	1800	$55.34	$53.21	$50.50	$90,900
	D	$356,065	$341,900	40%	$142,426	$136,760	2029	1966	1800	$79.13	$75.98	$65.00	$117,000
	E	$334,699	$289,900	40%	$133,880	$115,960	1830	1750	1800	$74.38	$64.42	$65.00	$117,000
18	A	$142,279	$149,900	40%	$56,912	$59,960	3150	2633	3000	$18.97	$19.99	$18.00	$54,000
	B	$129,305	$125,000	40%	$51,722	$50,000	3269	2720	3000	$17.24	$16.67	$16.00	$48,000
	C	$130,272	$126,000	40%	$52,109	$50,400	3338	2741	3000	$17.37	$16.80	$16.00	$48,000
	D	$158,562	$158,995	40%	$63,425	$63,598	3454	2875	3000	$21.14	$21.20	$21.00	$63,000
	E	$131,682	$129,450	40%	$52,673	$51,780	3466	2868	3000	$17.56	$17.26	$17.00	$51,000
19	A	$363,513	$359,000	40%	$145,405	$143,600	1519	1500	1800	$80.78	$79.78	$70.00	$126,000
	B	$265,164	$250,000	40%	$106,066	$100,000	1725	1575	1800	$58.93	$55.56	$52.00	$93,600
31	A	$322,583	$300,000	40%	$129,033	$120,000	1973	1700	1800	$71.69	$66.67	$66.00	$118,800
	B	$368,424	$350,000	40%	$147,370	$140,000	1813	1680	1800	$81.87	$77.78	$72.00	$129,600
32	A	$183,285	$190,000	40%	$73,314	$76,000	5350	4800	5000	$14.66	$15.20	$15.00	$75,000
39	A	$292,125	$298,750	40%	$116,850	$119,500	1617	1600	1500	$77.90	$79.67	$73.00	$109,500
	B	$381,163	$384,000	40%	$152,465	$153,600	1533	1440	1500	$101.64	$102.40	$90.00	$135,000
	C	$406,197	$310,000	40%	$162,479	$124,000	1465	1413	1500	$108.32	$82.67	$71.00	$106,500
	G	$201,343	$200,000	40%	$80,537	$80,000	1585	1438	1500	$53.69	$53.33	$43.00	$64,500
	H	$208,327	$200,000	40%	$83,331	$80,000	1809	1582	1500	$55.55	$53.33	$51.00	$76,500
	L	$257,327	$258,000	40%	$102,931	$103,200	1393	1293	1200	$85.78	$86.00	$80.00	$96,000
40	A	$320,454	$310,000	35%	$112,159	$108,500	1361	1372	1400	$80.11	$77.50	$67.00	$93,800
	B	$349,827	$330,000	35%	$122,439	$115,500	1439	1415	1400	$87.46	$82.50	$80.00	$112,000
49	A	$538,505	$525,000	40%	$215,402	$210,000	4165	3585	3000	$71.80	$70.00	$59.00	$177,000
	B	$437,962	$437,500	40%	$175,185	$175,000	4009	4000	3000	$58.39	$58.33	$49.00	$147,000
	C	$417,491	$410,000	40%	$166,997	$164,000	3390	2946	3000	$55.67	$54.67	$43.00	$129,000

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

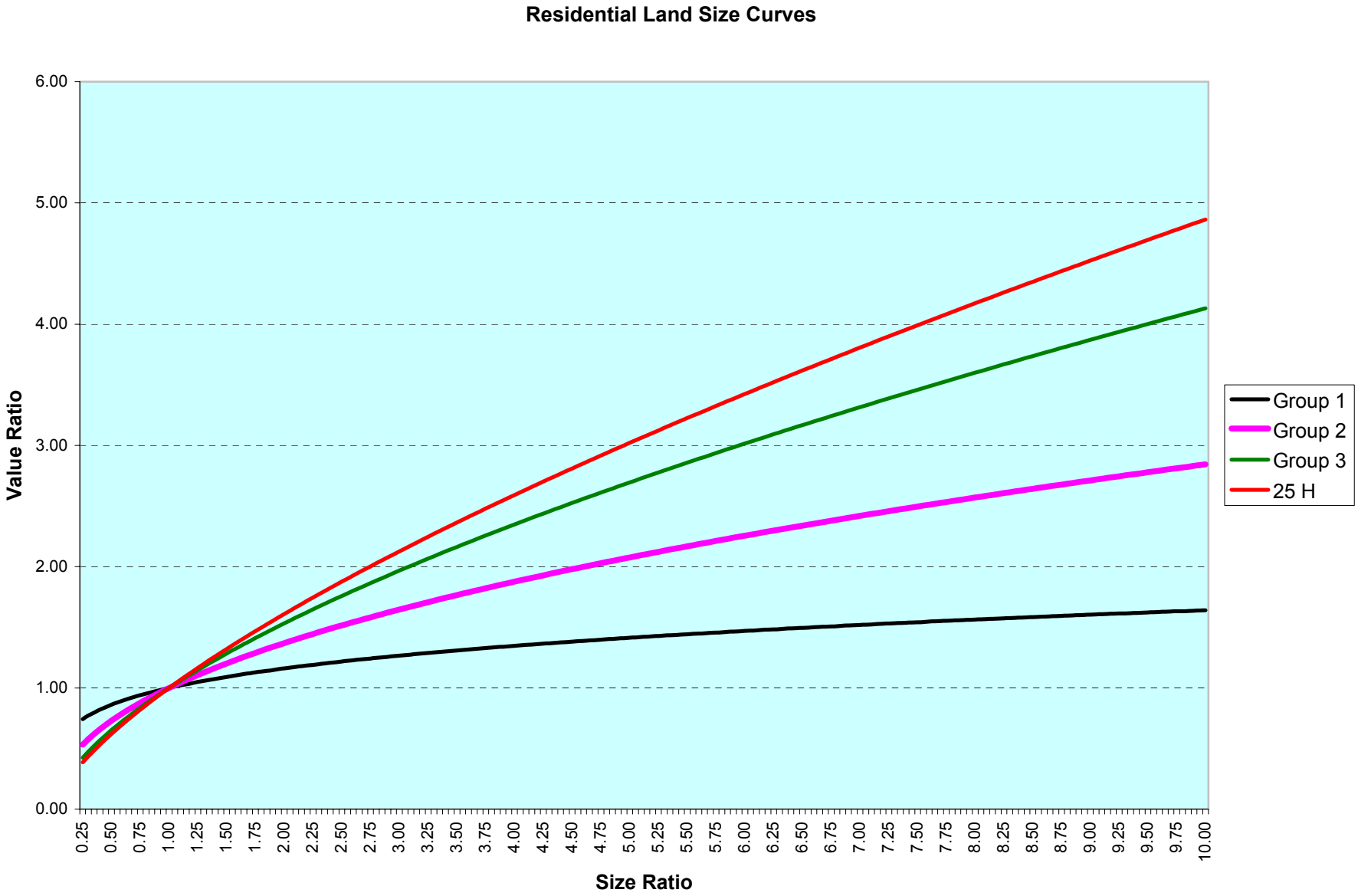
$300,000= 4000sf * ($100 * .75)

Residential Base Land Rates By Neighborhood

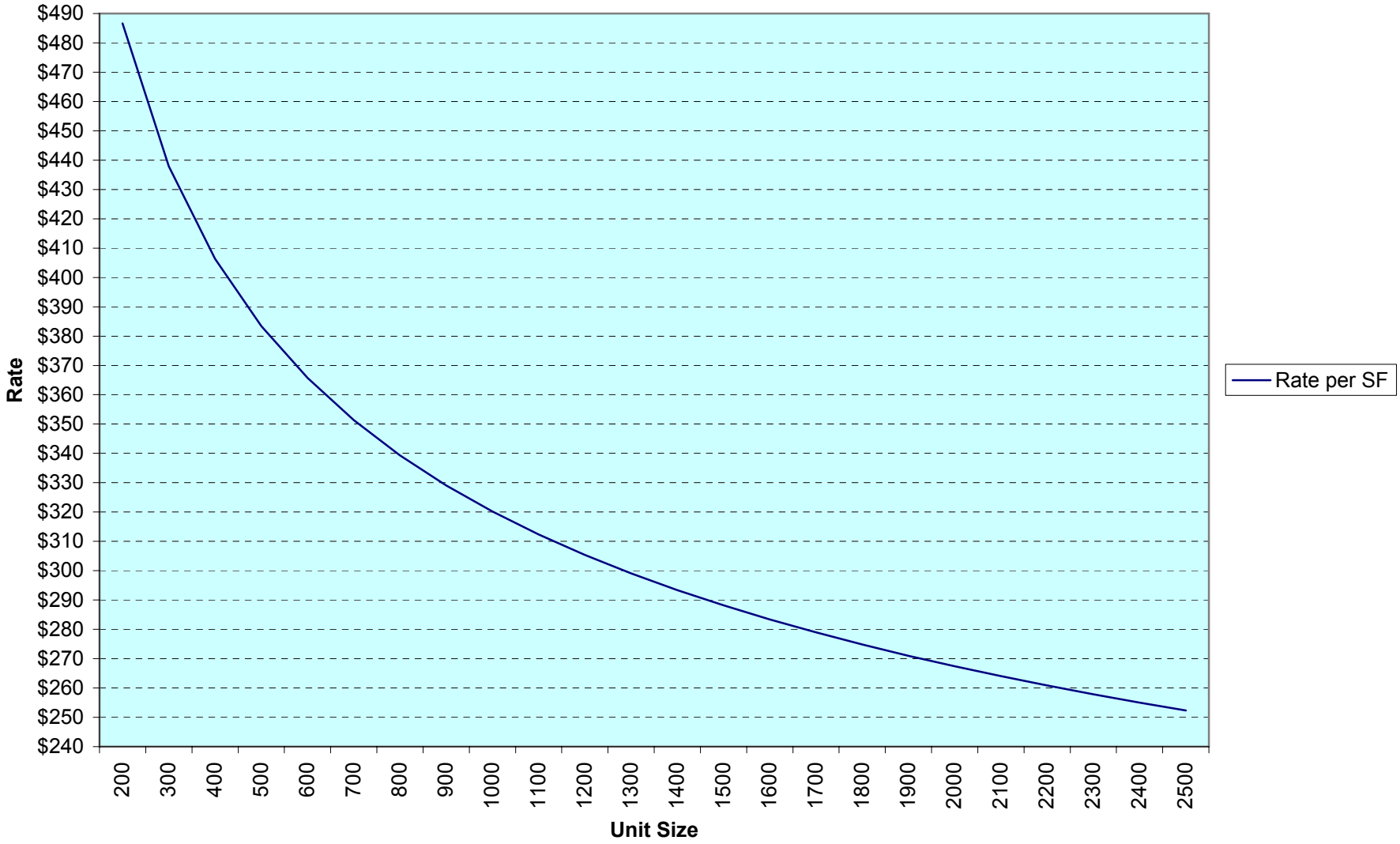
NBHD	Base Lot Size	Base Rate	Base Lot Value	Size Curve
1A	4000 sf	$82.91	$331,640	LG1
1B	5000 sf	$70.27	$351,350	LG1
1C	5000 sf	$70.82	$354,100	LG1
2A	2000 sf	$43.35	$86,700	LG1
2B	2000 sf	$48.36	$96,720	LG1
3	2000 sf	$46.49	$92,980	LG1
4A	6700 sf	$68.37	$458,080	LG2
4B	10000 sf	$52.10	$521,000	LG2
4C	8000 sf	$60.28	$482,240	LG2
5A	1700 sf	$60.84	$103,430	LG1
5B	1700 sf	$52.17	$88,690	LG1
6A	4000 sf	$29.90	$119,600	LG1
6B	4000 sf	$27.00	$108,000	LG1
6C	2000 sf	$44.40	$88,800	LG1
6D	4000 sf	$28.00	$112,000	LG1
6E	3000 sf	$33.00	$99,000	LG1
7A	2000 sf	$58.40	$116,800	LG1
7B	3000 sf	$46.92	$140,760	LG1
7C	3000 sf	$36.00	$108,000	LG1
7D	5000 sf	$24.00	$120,000	LG1
7E	2000 sf	$45.00	$90,000	LG1
8A	2000 sf	$175.35	$350,700	LG1
8B	2000 sf	$186.52	$373,040	LG1
9A	1400 sf	$210.14	$294,200	LG2
9B	1400 sf	$225.47	$315,660	LG2
9C	1400 sf	$225.84	$316,180	LG2
10	1400 sf	$308.66	$432,120	LG1
11A	5000 sf	$65.87	$329,350	LG1
11B	5000 sf	$66.83	$334,150	LG1
11C	5000 sf	$69.17	$345,850	LG1
11D	5000 sf	$68.28	$341,400	LG1
11E	5000 sf	$57.61	$288,050	LG1
12	4000 sf	$41.34	$165,360	LG1
13	5000 sf	$107.21	$536,050	LG3
14	9000 sf	$33.32	$299,880	LG1
15A	1800 sf	$83.00	$149,400	LG1
15B	1800 sf	$70.00	$126,000	LG1
15C	1800 sf	$50.50	$90,900	LG1
15D	1800 sf	$65.00	$117,000	LG1
15E	1800 sf	$65.00	$117,000	LG1
16A	2400 sf	$28.95	$69,480	LG1
16B	2400 sf	$32.67	$78,410	LG1
16C	2400 sf	$34.80	$83,520	LG1
17	6000 sf	$50.81	$304,860	LG1
18A	3000 sf	$18.00	$54,000	LG1
18B	3000 sf	$16.00	$48,000	LG1
18C	3000 sf	$16.00	$48,000	LG1

NBHD	Base Lot Size	Base Rate	Base Lot Value	Size Curve
18D	3000 sf	$21.00	$63,000	LG1
18E	3000 sf	$17.00	$51,000	LG1
19A	1800 sf	$70.00	$126,000	LG1
19B	1800 sf	$52.00	$93,600	LG1
20	1000 sf	$280.24	$280,240	LG1
21	9000 sf	$50.80	$457,200	LG2
22A	3000 sf	$32.72	$98,160	LG1
22B	2400 sf	$40.01	$96,020	LG1
22C	3000 sf	$29.49	$88,470	LG1
22D	2400 sf	$40.11	$96,260	LG1
23	2500 sf	$142.51	$356,280	LG1
24	2400 sf	$149.48	$358,750	LG2
25A	1800 sf	$178.76	$321,770	LG2
25B	1800 sf	$232.62	$418,720	LG2
25C	1800 sf	$222.84	$401,110	LG2
25D	1800 sf	$244.14	$439,450	LG3
25E	1800 sf	$268.99	$484,180	LG3
25F	2000 sf	$237.23	$474,460	LG3
25G	2000 sf	$252.77	$505,540	LG2
25H	2000 sf	$234.76	$469,520	25H
25I	800 sf	$372.97	$298,380	LG3
25J	1200 sf	$303.12	$363,740	LG3
26	1700 sf	$202.57	$344,370	LG1
27	9000 sf	$36.45	$328,050	LG1
28A	2400 sf	$39.76	$95,420	LG1
28B	5000 sf	$36.28	$181,400	LG1
28C	5000 sf	$31.73	$158,650	LG1
29A	2000 sf	$197.90	$395,800	LG3
29B	2000 sf	$202.10	$404,200	LG3
29C	2000 sf	$203.15	$406,300	LG2
30A	8000 sf	$62.95	$503,600	LG3
30B	7000 sf	$73.61	$515,270	LG3
30C	7000 sf	$59.88	$419,160	LG2
31A	1800 sf	$66.00	$118,800	LG1
31B	1800 sf	$72.00	$129,600	LG1
32A	5000 sf	$15.00	$75,000	LG1
32B	2000 sf	$43.51	$87,020	LG1
33	2000 sf	$38.69	$77,380	LG1
34	9000 sf	$86.96	$782,640	LG3
35	5000 sf	$34.40	$172,000	LG1
36A	2000 sf	$135.93	$271,860	LG1
36B	2000 sf	$173.43	$346,860	LG2
36C	1600 sf	$189.00	$302,400	LG2
37	3000 sf	$116.69	$350,070	LG2
38	5000 sf	$105.07	$525,350	LG3
39A	1500 sf	$73.00	$109,500	LG1
39B	1500 sf	$90.00	$135,000	LG1

NBHD	Base Lot Size	Base Rate	Base Lot Value	Size Curve
39C	1500 sf	$71.00	$106,500	LG1
39E	1200 sf	$85.66	$102,790	LG1
39F	1200 sf	$146.59	$175,910	LG1
39G	1500 sf	$43.00	$64,500	LG1
39H	1500 sf	$51.00	$76,500	LG1
39J	1500 sf	$147.49	$221,240	LG1
39K	1500 sf	$177.10	$265,650	LG1
39L	1200 sf	$80.00	$96,000	LG1
39M	1500 sf	$186.49	$279,740	LG1
40A	1400 sf	$67.00	$93,800	LG1
40B	1400 sf	$80.00	$112,000	LG1
40C	1600 sf	$176.46	$282,340	LG2
40D	1600 sf	$210.46	$336,740	LG2
40E	1600 sf	$219.18	$350,690	LG2
40F	1200 sf	$251.60	$301,920	LG2
41	5000 sf	$70.00	$350,000	LG1
42A	1800 sf	$78.82	$141,880	LG1
42B	1800 sf	$85.12	$153,220	LG1
42C	1800 sf	$75.40	$135,720	LG1
43A	2000 sf	$44.86	$89,720	LG1
43B	2000 sf	$39.15	$78,300	LG1
43C	2000 sf	$42.96	$85,920	LG1
46	1200 sf	$205.98	$247,180	LG1
47	3000 sf	$41.17	$123,510	LG1
48	5000 sf	$46.70	$233,500	LG1
49A	3000 sf	$59.00	$177,000	LG1
49B	3000 sf	$49.00	$147,000	LG1
49C	3000 sf	$43.00	$129,000	LG1
50A	10000 sf	$54.88	$548,800	LG2
50B	6000 sf	$66.34	$398,040	LG2
50C	14000 sf	$56.85	$795,900	LG2
50D	15000 sf	$54.42	$816,300	LG2
51	3000 sf	$46.36	$139,080	LG2
52A	1800 sf	$55.29	$99,520	LG1
52B	1600 sf	$62.69	$100,300	LG1
52C	1600 sf	$58.69	$93,900	LG1
53	5000 sf	$69.31	$346,550	LG1
54A	6000 sf	$92.77	$556,620	LG3
54B	1000 sf	$258.32	$258,320	LG1
55	6000 sf	$74.89	$449,340	LG2
56A	5000 sf	$28.04	$140,200	LG1
56B	5000 sf	$22.69	$113,450	LG1
56C	5000 sf	$26.88	$134,400	LG1
56D	5000 sf	$24.04	$120,200	LG1
66	5000 sf	$22.69	$113,450	LG1


Residential Land Size Curves
Value Ratio
6.00
5.00
4.00
3.00
2.00
1.00
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
3.00
3.25
3.50
3.75
4.00
4.25
4.50
4.75
5.00
5.25
5.50
5.75
6.00
6.25
6.50
6.75
7.00
7.25
7.50
7.75
8.00
8.25
8.50
8.75
9.00
9.25
9.50
9.75
10.00
Size Ratio
Group 1
Group 2
Group 3
25 H

Condominium Size Curve



2006 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:

$$\textbf{Building RCN} = [(\text{Base Rate} + \sum \text{ABRV}_n) * \text{Effective Area} * \text{Size Adjustment} + \sum \text{AFRV}_n] * (\text{MV}_0 * \text{MV}_2 * \ldots * \text{MV}_n)$$

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

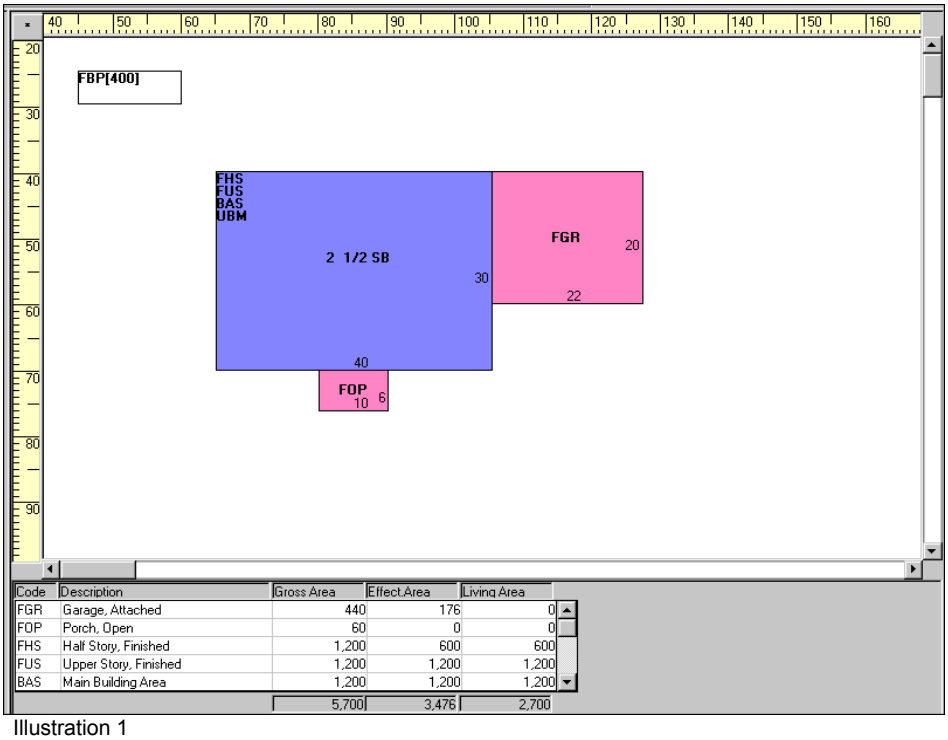
Several items will be helpful while examining the features of the cost model and they are collected as Appendix “A” of this document. You will need to refer to them often during this exercise. They include the following:

- Sample home’s Property Record Card (PRC)
- Cost.dat printout of the sample home
- 2006 CAMA Residential Construction Valuation Guideline

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

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

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



Code	Description	Gross Area	Effect.Area	Living Area
FGR	Garage, Attached	440	176	0
FOP	Porch, Open	60	0	0
FHS	Half Story, Finished	1,200	600	600
FUS	Upper Story, Finished	1,200	1,200	1,200
BAS	Main Building Area	1,200	1,200	1,200
		5,700	3,476	2,700

Illustration 1

It is described as a 2½ story single-family detached residence, with basement. 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.

Sub Area Summary

Code	Description	Gross Area	Effect.Area	Living Area
FGR	Garage, Attached	440	176	0
FOP	Porch, Open	60	0	0
FHS	Half Story, Finished	1,200	600	600
FUS	Upper Story, Finished	1,200	1,200	1,200
BAS	Main Building Area	1,200	1,200	1,200
UBM	Basement, Unfinished	1,200	300	0
FBP	Basement, Finished, Partn	400	0	0
		5,700	3,476	2,700

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 1200 SF), the adjusted area of the garage (Garage, Attached @ 40% of 440 SF), and the adjusted area of the unfinished basement (Basement, Unfinished @ 30% of 1,200 SF).

The adjustments to the finished half story, garage and unfinished basement 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.

Let's take a moment to examine the treatment of the basement in this house. The house has a full-sized basement comprised of 1,200 SF. In addition, the basement contains a finished area (400 SF), and the balance as unfinished. Illustration 3 shows the contribution of the unfinished portion to the effective area calculation. However, notice that the finished portion of the basement is not included in the effective area calculations. The value attributed to this finished area is accounted for as an Additive Flat Rate Variable later in the valuation model. The reason for this methodology is to ensure that the effective area is not erroneously overstated by the amount of any finished area in the basement.

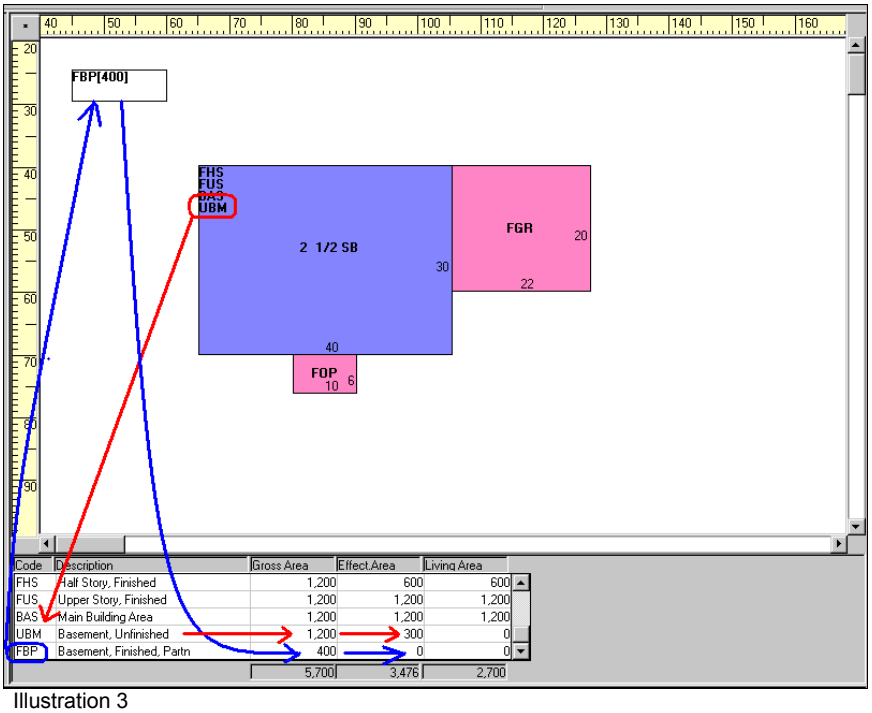


Illustration 3

Finally, 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.

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

Building RCN = [(Base Rate + $\sum$ $ABRV_n$) * *3,476* * Size Adjustment
Effective Area
+ $\sum$ $AFRV_n$] * (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 + $\sum$ $ABRV_n$) * Effective Area * Size Adjustment + $\sum$ $AFRV_n$] * (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 $ 116.67. Now the cost model looks like this:

Building RCN = [(*$116.67* + $\sum$ $ABRV_n$) * *3,476* * Size Adjustment
Base Rate **Effective Area**
+ $\sum$ $AFRV_n$] * (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 + $\sum$ $ABRV_n$) * Effective Area * Size Adjustment + $\sum$ $AFRV_n$] * (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 $\sum$ $ABRV_n$ 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.

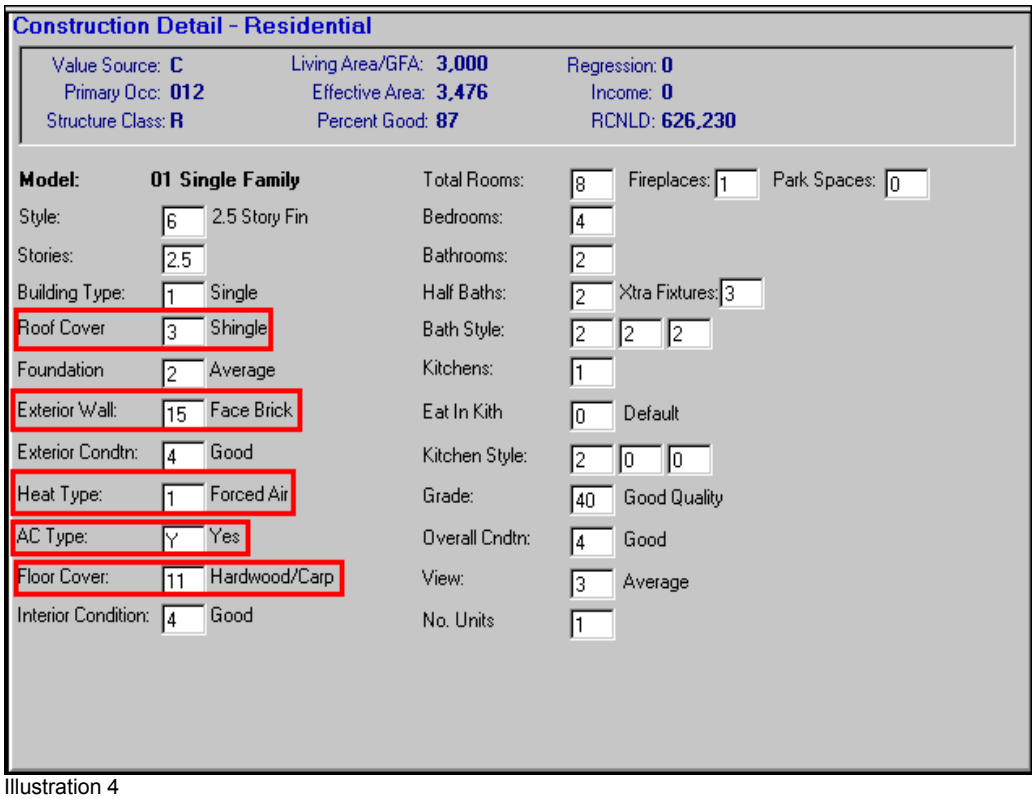


Illustration 4

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, Σ, is $11.10 (1.80+3.95+4.67+0.68). This will be added to the Base Rate of $116.67 to give a modified Base Rate of $127.77.

Our model now looks like this:

Building RCN = [(*$116.67* + $11.10) * *3,476* * Size Adjustment
Base Rate Σ ABRV$_n$ Effective Area
+ Σ 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 + $\sum$ $ABRV_n$) * Effective Area * Size Adjustment + $\sum$ $AFRV_n$] * (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 0.92844 as listed on the Cost.dat sheet. Now our Base Rate is calculated to be $118.63 ((116.67+11.10) * 0.92844).

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 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 = [(*$116.67* + *$11.10*) * *3,476* * *0.92844*
Base Rate $\sum$ $ABRV_n$ Effective Area Size Adjustment
+ $\sum$ $AFRV_n$] * (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 + $\sum$ $ABRV_n$) * Effective Area * Size Adjustment + $\sum$ $AFRV_n$] * (MV_0 * MV_2 * … * MV_n)

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

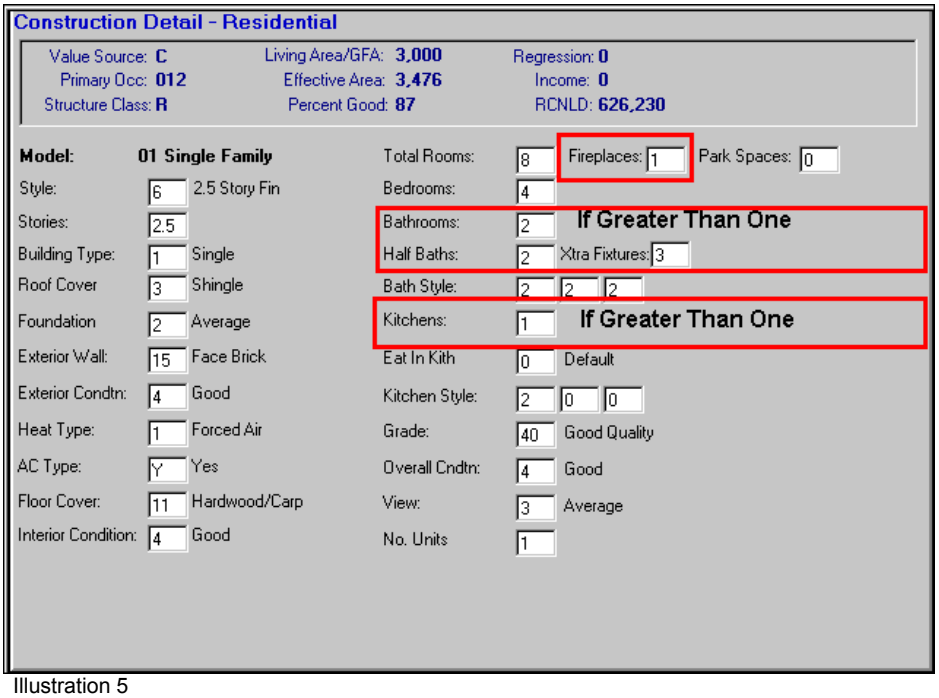


Illustration 5

Unlike the Additive Base Rate Variables (ABRV) described earlier, most of 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 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. The cost for one full bath and one kitchen is always included in the original base rate. Any bathrooms or kitchens over and above the first are accounted for as AFRVs.

The value of an additive flat rate variable is calculated by multiplying the number of "units" by the dollar rate per unit. For example, illustration 5 shows our sample home also has two half baths. The AFRV for the half baths is $20,000 (2 "units" X $10,000 per unit) as shown in a portion of the Cost.dat file below.

Also included in the AFRVs are the partitioned finished basement and the small open porch on the front of the house. Recall that in illustration 3, neither of these areas was included in the calculation of the effective area of the house, therefore, their valuations are included here, as AFRVs.

The partitioned finished basement is calculated to be $12,000. In this case, "units", the gross square footage of 400 SF (shown in the sketch area of the record), are multiplied by the rate of $30 per SF. The open porch is calculated in a similar manner.

**********Flat Value Additions**********
FULL BATHS OVER 1 = 15000 + RCN
HALF BATHS = 20000 + RCN
FIREPLACES = 5300 + RCN
PARTITIONED FINISHED BASEMENT = 12000 + RCN
OPEN PORCH = 647 + RCN

The sum, ∑, is $52,947 (15,000+20,000+5,300+12,000+647) 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 = [(*$116.67* + *$11.10*) * *3,476* * *0.92844*
Base Rate ∑ ABRV$_n$ Effective Area Size Adjustment
+ *$52,947*] * (MV$_0$ * MV$_2$ * … * MV$_n$)
∑ AFRV$_n$

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

Building RCN = [(Base Rate + ∑ ABRV$_n$) * Effective Area * Size Adjustment + ∑ 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 (∑ ABRV$_n$), the Size Adjustment, and the sum of all the Flat Rate Variables (∑ AFRV$_n$). This is where such important characteristics as the building grade, building condition, remodeling, and location factors have their impact.

The sample home is graded “Good Quality - 4”, and consequently has a 1.10 multiplicative factor. This one variable, grade, is going to increase the RCN value of the sample home by 10%. 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 60% over that of an "Average Quality - 3" house.

The condition of the building is also accounted for by the multiplicative variables. The interior, exterior and overall conditions of our sample home are each "Good" and the corresponding multiplicative variable for each is 4.8%. The level of condition may be different for each of the three variables and therefore the coefficients may be different. Please refer to the *2006 CAMA Residential Construction Valuation Guideline --RPAD* for these and all other coefficients used in the valuation model.

Just as construction grade has a profound impact on the final value of a house, so does condition. For example, a house in overall "Poor" condition throughout

will have its value reduced by 50%, whereas a house in excellent condition throughout will have its value increased by 35%. That's a range of over 85%!

Illustration "6" shows a portion of the features that constitute the multiplicative variables in the cost model:

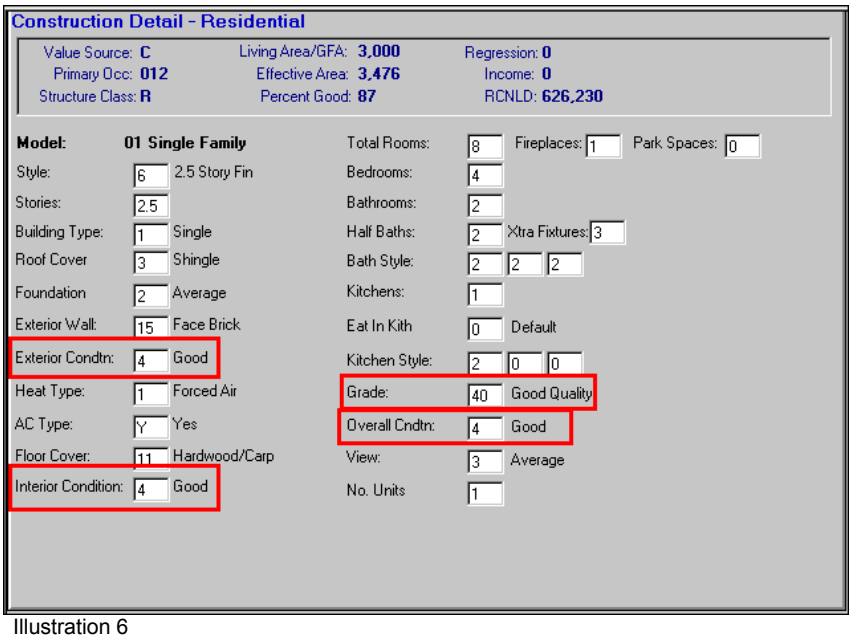


Illustration 6

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 applied 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.

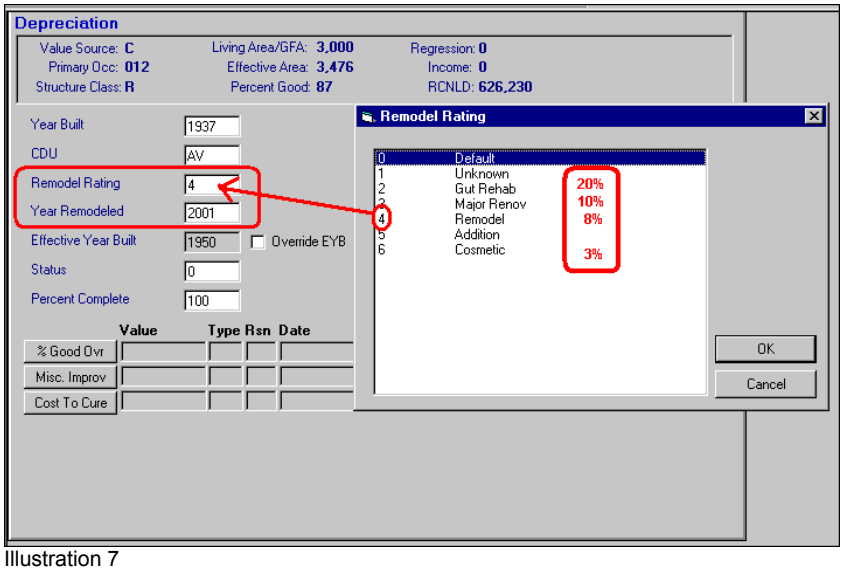


Illustration 7

Obviously, a "Gut Rehab" would increase the value of property more than "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 2004, but it actually occurred in 2001, three years earlier. The CAMA model takes into consideration how long ago a remodel occurred and reduces its 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 three years ago and thus the MV is reduced by fifteen percent to 6.8% (8%*.85).

The last multiplicative variable, “Sub-Neighborhood Adj A", is the local neighborhood multiplier established within the particular neighborhood where the sample home is located. This variable is going to increase the RCN value of the sample home by 14.4%. 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) = 1.048 x RCN
EXTERIOR CONDITION 4 (GOOG) = 1.048 x RCN
GRADE 40 (Good Quality) = 1.1 x RCN
INTERIOR CONDITION 4 (GOOD) = 1.048 x RCN
REMODEL FACTOR 4 = 1.068 x RCN
SUB-NEIGHBORHOOD ADJ A = 1.144 x RCN

Each MV is multiplied together to determine the combined, or overall, MV. The sample home’s MV is 1.54694121419735 (1.048*1.048*1.1*1.048*1.068*1.144).

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

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

$ 719,799 = [($116.67 + $11.10) * 3,476 * .92844 + $52,947] * (1.54694121419735)

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: R06

Section #
Base Rate: 116.67
Size Adjustment: .92844
Effective Area: 3476
Adjusted Base Rate = (116.67 + 11.1) * .92844
Adjusted Base Rate: 118.63
RCN = ((118.63 * 3476) + 52947) * 1.54694121419735
RCN: 719799

The replacement cost new for our sample home is $719,799. There is still one thing left to address before we turn our attention to depreciation. Our sample home has a built-in sauna in the basement. 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 $11,040. 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.

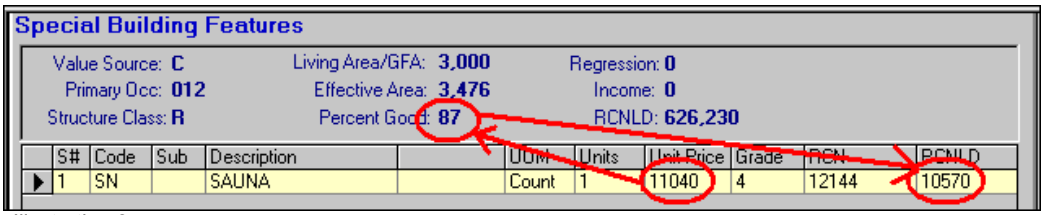


Illustration 8

We now know the total replacement cost new (RCN) of our sample home, including the sauna, is $ 730,839 ($719,799 + $11,040).

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 $730,839. 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 2006; therefore, the valuation date is January 1, 2005. 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 68 years (2005-1937).

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 68 years as indicated on the Depreciation Table below:

Depreciation Table

Base Year
2005

Effective Age of Building	% Depr.	% Good	Effective Year Built
0	0	100	2005
1	1	99	2004
2	2	98	2003
61	14	86	1944
62	14	86	1943
63	14	86	1942
64	14	86	1941
65	14	86	1940
70	15	85	1935
75	16	84	1930

Illustration 1

The Actual Year Built (1937) and the Effective Year Built (1937) would be the same and consequently the Effective Age is 70 years. Moving across the table,

we see that a home with an EYB of 1937 has 15 percent depreciation and therefore is 85 Percent Good (100%-15%). If the RCN of our sample home is $ 730,839, the depreciated value, RCNLD, is only $ 621,213 (730,839* 0.85).

Note: The depreciation table moves in 5-year periods towards its end; this explains the apparent inconsistencies in 70 years v. 68 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.

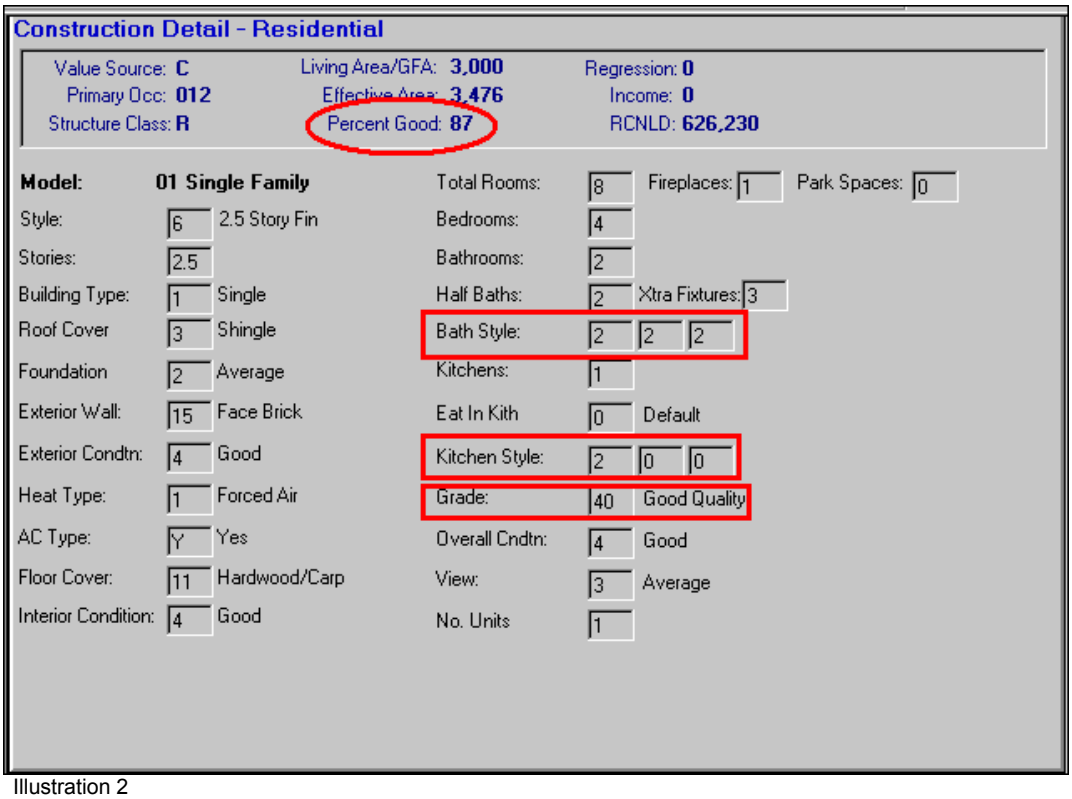


Illustration 2

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 68 years. The Effective Age is calculated to be 55 years (68 * 0.81225). Instead of CAMA using 68 chronological years to calculated depreciation, it will use 55 years. Below is a portion of the Cost.dat file that shows these calculations.

```
*****************************************************
      Actual Year Built:  1937
      Effective Age = 68 * .81225
      Effective Age:  55
      Percent Good = 87
      RCNLD: 626230
```

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 (2005 – 55).

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 2005			
Effective Age of Building	% Depr.	% Good	Effective Year Built
0	0	100	2005
1	1	99	2004
2	2	98	2003
3	2	98	2002
4	3	97	2001
51	12	88	1954
52	12	88	1953
53	12	88	1952
54	13	87	1951
55	13	87	1950
56	13	87	1949
57	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 $ 626,230.

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.

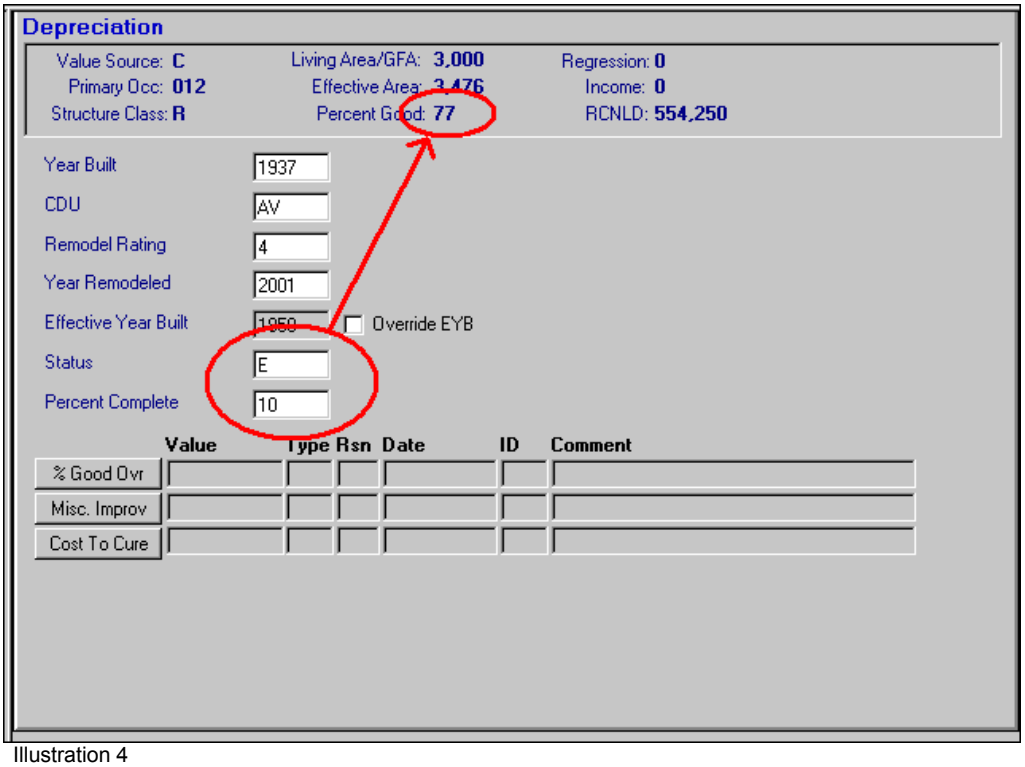


Illustration 4

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.

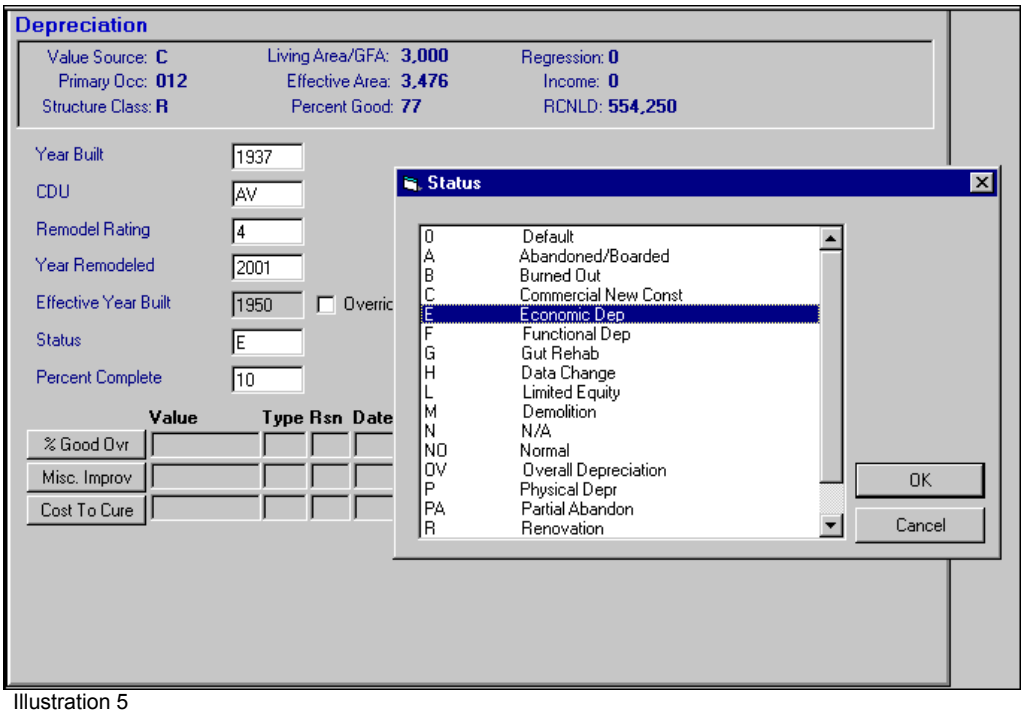


Illustration 5

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.

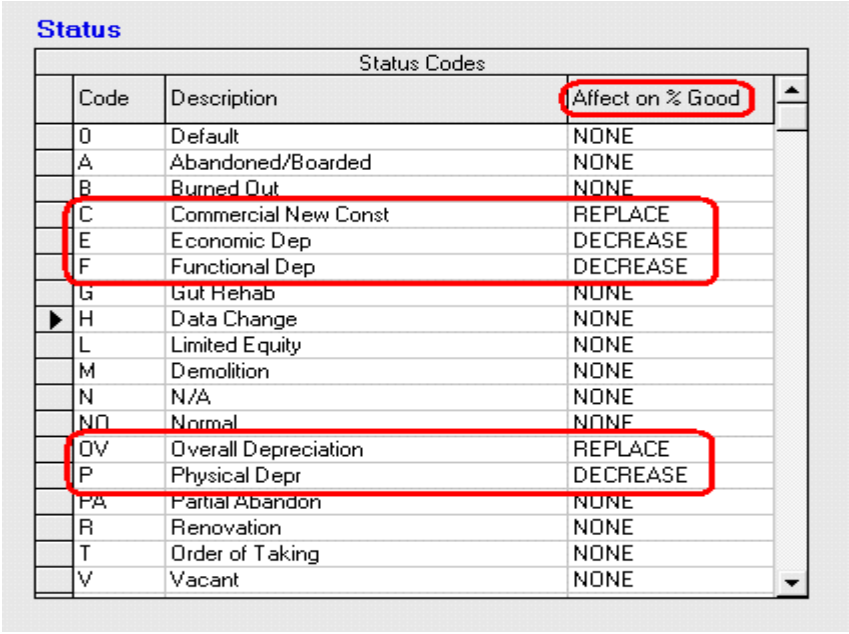


Illustration 6

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. 2006 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: 02/02/2005 15:06

CURRENT OWNER

JOSEPH TAXPAYER
JANE DOE-TAXPAYER
626 BREAKAWAY DR

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	636,800
RES LAND	012	303,620
Value Source: C	Total:	940,420

	Value Date	Value Status
Reg	12/30/1899	
Cost	01/27/2005	C

RES

District of Columbia
Real Property
Assessment Division

OWNERSHIP HISTORY

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

PREVIOUS ASSESSMENTS (HISTORY)

Yr.	Use	Type	Val Source	Land Value	Building Value	Assessed Value
2005	012	R1	C	221,870	555,760	777,630
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
Neighborhood	
Part Part	
Mixed Use	
Vcnt Lnd Use	12
Model Type	
Base Lot Val	
Abbutt Lot	
Sketch Flag	

COMMENTS

PARCEL LOCATION SUMMARY

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

VALUE SUMMARY

	Regress (L&B)	Cost (L&B)
	0	940,420

	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		202.41	0.9632		1.00				303,620
					Total Land Units	1,500	SF										Total Land Value:	303,620

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:** 02/02/2005 15:06

CONSTRUCTION DETAIL

Element	Cd.	Chng	Description
Occupancy	012		Residential Detached
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
FBP	Basement, Finished	400	0	0
FGR	Garage, Attached	440	176	0
FHS	Half Story, Finished	1,200	600	600
FOP	Porch, Open	60	0	0
FUS	Upper Story, Finish	1,200	1,200	1,200
UBM	Basement, Unfinish	1,200	300	0
	Total:	5,700	3,476	3,000

BUILDING COST

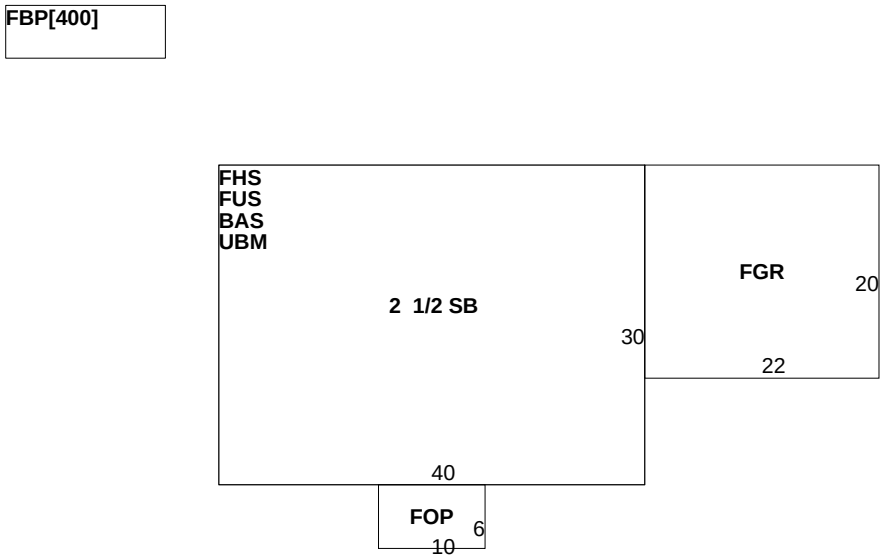
Effective Area	3,476
Building RCN	719,799
Spec.Feature RCN	12,144
Total RCN	731,943
% Good	87
Building Cost	636,800

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
SN	SAUNA	1	Count	11,040.00	4	12,144

DETACHED STRUCTURES

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

OUTPUT FROM STORED PROCEDURE
REPORT GENERATED ON 27-JAN-2005 AT 08:00

**********Building #1 Calc Start**********
Cost Calculation for pid, bid = 182803,173587
Account Number = 9999 9999
Use Code = 012
Cost Rate Group = R12
Model ID: R06

Section #
Base Rate: 116.67
Size Adjustment: .92844
Effective Area: 3476
Adjusted Base Rate = (116.67 + 11.1) * .92844
Adjusted Base Rate: 118.63
RCN = ((118.63 * 3476) + 52947) * 1.54694121419735
RCN: 719799

**********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 = 15000 + RCN
HALF BATHS = 20000 + RCN
FIREPLACES = 5300 + RCN
PARTITIONED FINISHED BASEMENT = 12000 + RCN
OPEN PORCH = 647 + RCN

**********Factor Adjustments**********
OVERALL CONDITION 4 (Good) = 1.048 x RCN
EXTERIOR CONDITION 4 (Good) = 1.048 x RCN
GRADE 40 (Good Quality) = 1.1 x RCN
INTERIOR CONDITION 4 (Good) = 1.048 x RCN
REMODEL FACTOR 4 = 1.068 x RCN
SUB-NEIGHBORHOOD ADJ A = 1.144 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 = 68 * .81225
Effective Age: 55
Percent Good = 87
RCNLD: 626230

USECODE

(Selects Base Rate)

No.	Description	Value
011	Row	$ 92.51
012	Detached	$116.67
013	Semi-Detached	$ 91.03
015	Mixed Use	$ 92.51
019	Miscellaneous	$ 92.51
023	Small Apt. Bldg.	$ 55.29
024	Conversion	$ 94.73
097	Vacant & Aban.	$ 92.51

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	
15	Split Foyer	
94	Outbuildgs	
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	$1.91
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)	$15,000
Half Bath	$10,000
Fireplace	$ 5,300
Kitchen	$ 9,490
Finished Basement (Basic)	$20.00/sf
Finished Basement (Partition)	$30.00/sf
Basement Garage	$20.00/sf
Carport	$21.57/sf
Stoop	$10.79/sf
Open Porch	$10.79/sf
Covered Open Porch	$23.37/sf
Screen Enclosed Porch	$28.76/sf
Glass Enclosed Porch	$32.36/sf
Fully Enclosed Porch	$35.95/sf
Deck	$14.38/sf
Patio	$ 4.67/sf

Grade (Multiplies Base, Add & Flat)

0	Default	
10	Fair Quality	-50%
15	Fair Quality	-50%
20	Fair Quality	-15%
25	Fair Quality	
30	Average Quality	
35	Average Quality	10%
40	Average Quality	10%
45	Average Quality	17%
50	Good Quality	17%
55	Good Quality	25%
60	Good Quality	25%
65	Good Quality	35%
70	Very Good Quality	35%
75	Very Good Quality	45%
80	Very Good Quality	60%
85	Very Good Quality	85%
90	Excellent Quality	85%
95	Excellent Quality	110%
A0	Excellent Quality	110%
A5	Excellent Quality	135%
B0	Superior Quality	135%
B5	Superior Quality	135%
C0	Superior Quality	165%

Interior Condition (Multiplies Base, Add & Flat)

0	Typical	
1	Poor	-20.6%
2	Fair	-11.2%
3	Average	
4	Good	4.8%
5	Very Good	9.1%
6	Excellent	10.5%

Exterior Condition (Multiplies Base, Add & Flat)

0	Default	
1	Poor	-20.6%
2	Fair	-11.2%
3	Average	
4	Good	4.8%
5	Very Good	9.1%
6	Excellent	10.5%

Overall Condition (Multiplies Base, Add & Flat)

0	Default	
1	Poor	-20.6%
2	Fair	-11.2%
3	Average	
4	Good	4.8%
5	Very Good	9.1%
6	Excellent	10.5%

Remodel Type (Multiplies Base, Add & Flat)

0	Default	
1	Unknown	
2	Gut Rehab	20%
3	Major Renov	10%
4	Remodel	8%
5	Addition	
6	Cosmetic	3%

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%
4	Luxury	- 20%
Kitchen Style (Adjust EYB)		
0	Default	
1	No Remodeling	
2	Semi-Modern	- 10%
3	Modern	- 20%
4	Luxury	- 40%

Building RCN = [(Base Rate + $\sum$ $ABRV_n$) * Effective Area * Size Adjustment + $\sum$ $AFRV_n$] * (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 2005

Effective Age of Building	*% Depr.*	*% Good*	*Effective Year Built*
0	0	100	2005
1	1	99	2004
2	2	98	2003
3	2	98	2002
4	3	97	2001
5	3	97	2000
6	4	96	1999
7	4	96	1998
8	4	96	1997
9	4	96	1996
10	5	95	1995
11	5	95	1994
12	5	95	1993
13	5	95	1992
14	6	94	1991
15	6	94	1990
16	6	94	1989
17	6	94	1988
18	6	94	1987
19	7	93	1986
20	7	93	1985
21	7	93	1984
22	7	93	1983
23	7	93	1982
24	8	92	1981
25	8	92	1980
26	8	92	1979
27	8	92	1978
28	8	92	1977
29	9	91	1976
30	9	91	1975
31	9	91	1974
32	9	91	1973
33	9	91	1972
34	9	91	1971
35	10	90	1970
36	10	90	1969
37	10	90	1968
38	10	90	1967
39	10	90	1966
40	10	90	1965
41	11	89	1964
42	11	89	1963
43	11	89	1962
44	11	89	1961
45	11	89	1960
46	11	89	1959
47	11	89	1958
48	12	88	1957
49	12	88	1956
50	12	88	1955
51	12	88	1954
52	12	88	1953
53	12	88	1952
54	13	87	1951
55	13	87	1950
56	13	87	1949
57	13	87	1948
58	13	87	1947
59	13	87	1946
60	14	86	1945
61	14	86	1944
62	14	86	1943
63	14	86	1942
64	14	86	1941
65	14	86	1940
70	15	85	1935
75	16	84	1930

2006 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:

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

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
- 2006 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.

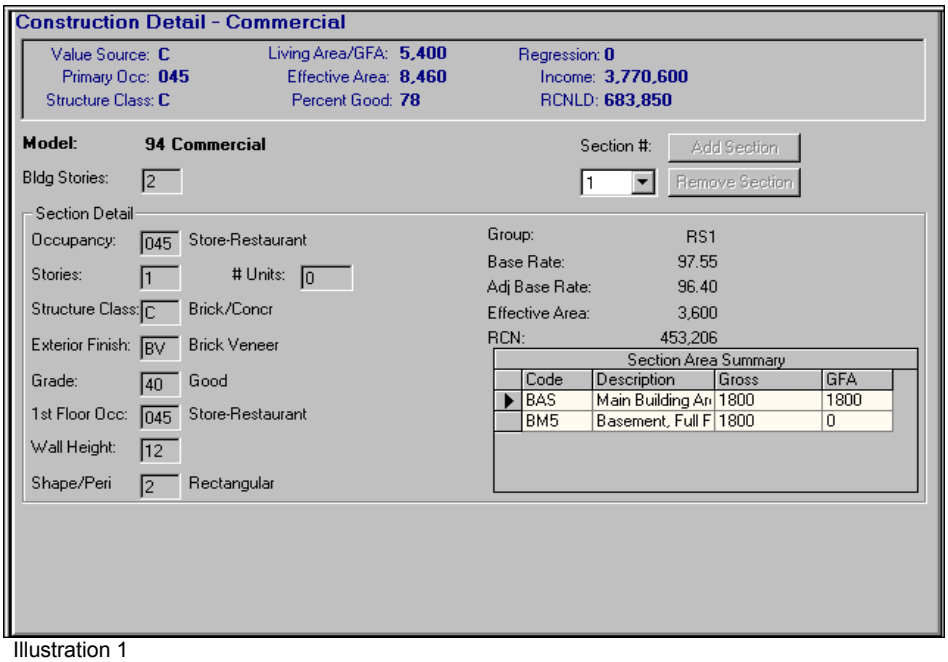


Illustration 1

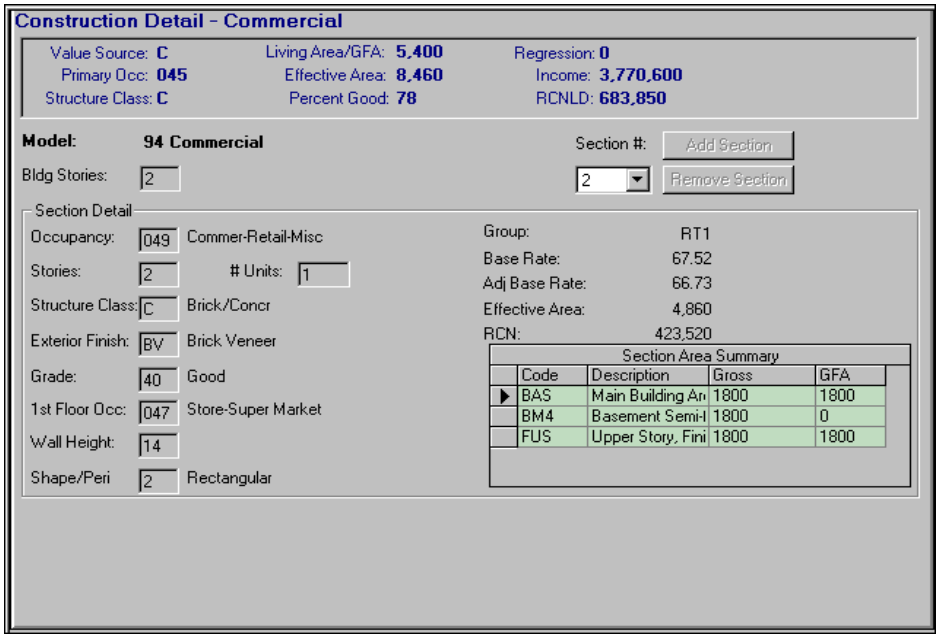
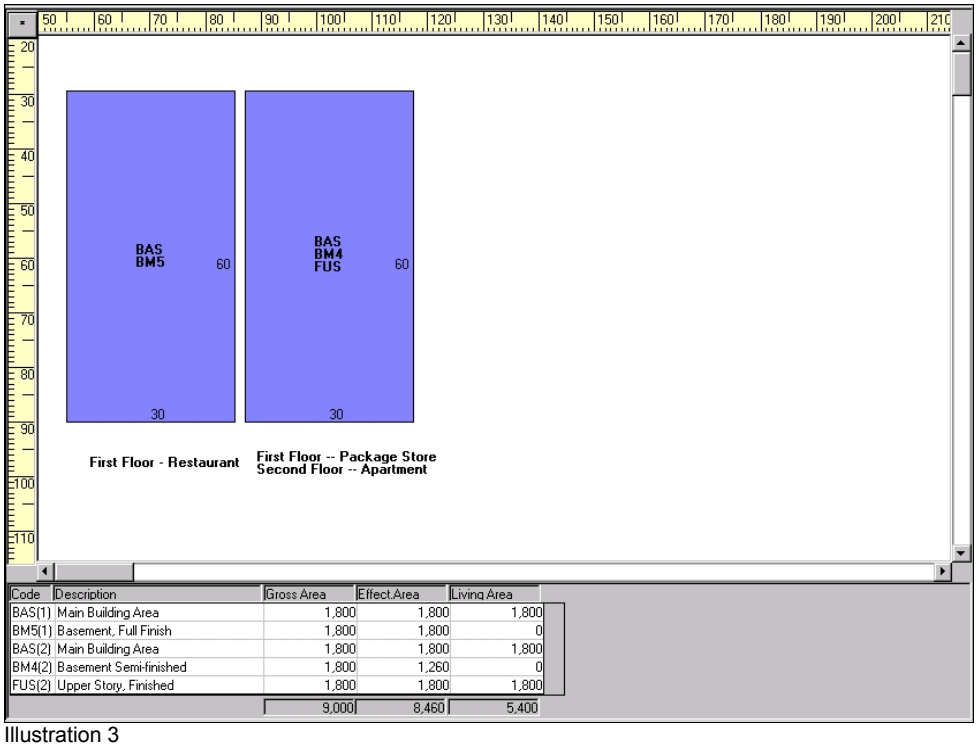


Illustration 2

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



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 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)] + [$\sum$ 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) * (MV$_0$ * MV$_2$ * … * MV$_n$)] + [Section$_n$ (Base Rate * 4860 * Size Adjustment) * (MV$_0$ * MV$_2$ * … * MV$_n$)] + [∑ Special Building Features]

(3600 = Effective Area; 4860 = Effective Area)

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 $ 97.55 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 $67.52

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

Building RCN = [Section$_1$ ($97.55 * 3600 * Size Adjustment) * (MV$_0$ * MV$_2$ * … * MV$_n$)] + [Section$_n$ ($67.52 * 4860 * Size Adjustment) * (MV$_0$ * MV$_2$ * … * MV$_n$)] + [∑ Special Building Features]

($97.55 = Base Rate; 3600 = Effective Area; $67.52 = Base Rate; 4860 = Effective Area)

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 $96.40(97.55 * 0.98825) for Section 1 and $ 66.73 (67.52 * 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$_1$ ($97.55 * 3600 * 0.98825) *
Base Rate Effective Area Size Adjustment
(MV_0 * MV_2 * … * MV_n)] +
[Section$_n$ ($67.52 * 4860 * 0.98825) *
Base Rate Effective Area Size Adjustment
(MV_0 * MV_2 * … * MV_n)] +
[∑ Special Building Features]

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 location 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$_1$ ($97.55 * 3600 * 0.98825) *
Base Rate Effective Area Size Adjustment
(1.30592)] +
Multiplicative Variables
[Section$_n$ ($67.52 * 4860 * 0.98825) *
Base Rate Effective Area Size Adjustment
(1.30592)] +
Multiplicative Variables
[∑ Special Building Features]

The RCN for Section 1, the restaurant is $ 452,206 ($97.55 * 3600 * 0.98825 * 1.30592). The package goods store's RCN is $423,520 ($67.52 * 4860 * 0.98825 * 1.30592).

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

Section #1
Base Rate: 97.55
Size Adjustment: .98825
Effective Area: 3600
Adjusted Base Rate = (97.55 + 0) * .98825
Adjusted Base Rate: 96.4
RCN = ((96.4 * 3600) + 0) * 1.30592
RCN: 453206
Section #2
Base Rate: 67.52
Size Adjustment: .98825
Effective Area: 4860
Adjusted Base Rate = (67.52 + 0) * .98825
Adjusted Base Rate: 66.73
RCN = ((66.73 * 4860) + 0) * 1.30592
RCN: 423520

So far, the RCN of the building is $ 876,726 (453,206+423,520). 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 cooled 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.

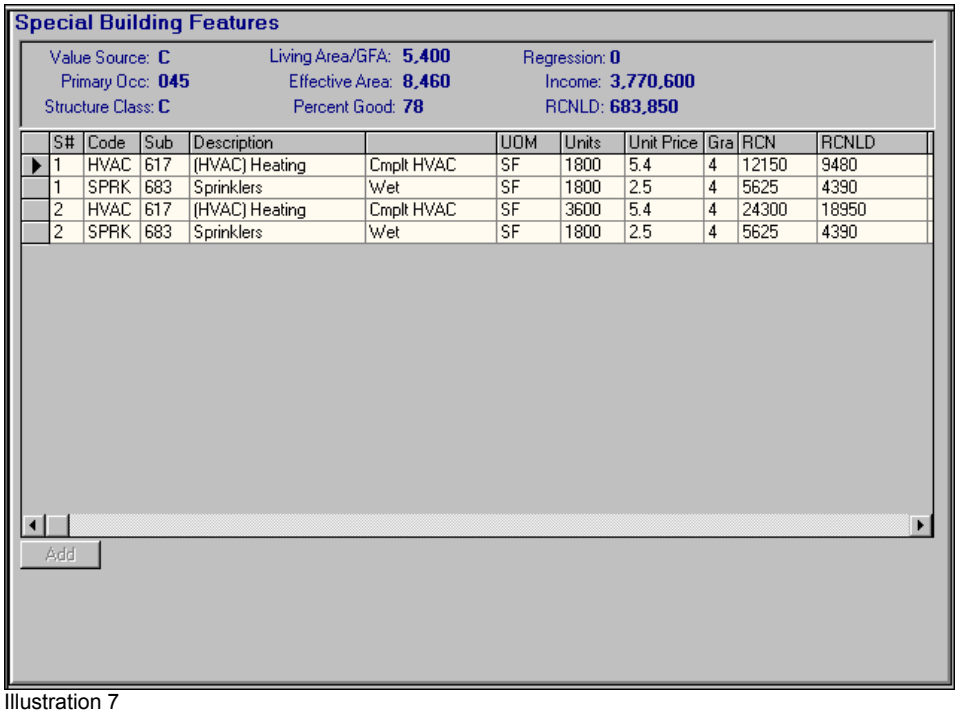


Illustration 7

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

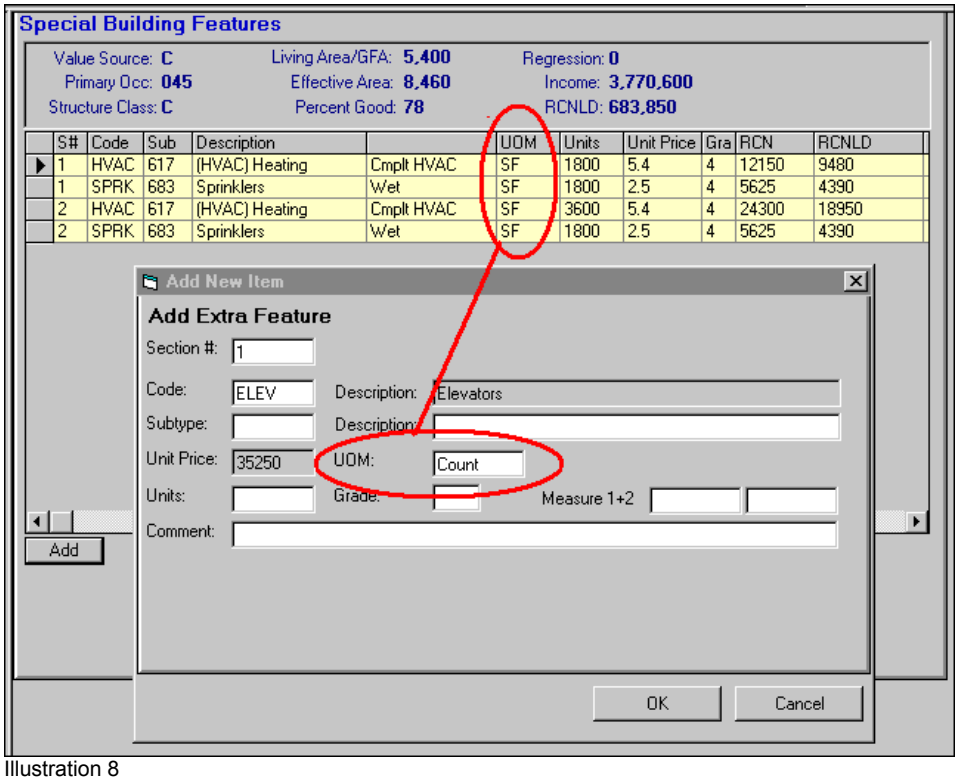


Illustration 8

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 $ 924,426 ($876,726 + $47,700).

$924,426 = Building RCN

[Section$_1$ ($97.55 * 3600 * 0.98825) * (Base Rate, Effective Area, Size Adjustment)

(1.30592)] + (Multiplicative Variables)

[Section$_n$ ($67.52 * 4860 * 0.98825) * (Base Rate, Effective Area, Size Adjustment)

(1.30592)] + (Multiplicative Variables)

[$47,700]

[∑ 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 $924,426. 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 RCN-LD.

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 preceding the tax year. In our example, the tax year is 2006, therefore the valuation date is January 1, 2005. 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 Actual Age of the sample building is 52 years (2005-1953).

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 52 years as indicated on the Depreciation Table below:

Economic Life Depreciation Tables

Base Year 2005

Age of Building	Effective Year Built	60 Year Economic Life: Percent of Depreciation	60 Year Economic Life: Percent Good	50 Year Economic Life: Percent of Depreciation	50 Year Economic Life: Percent Good
0	2005	0	100	0	100
1	2004	0	100	0	100
2	2003	1	99	2	98
3	2002	1	99	2	98
47	1958	56	44	75	25
48	1957	58	43	77	23
49	1956	59	41	78	22
50	1955	61	39	82	18
51	1954	64	36		
52	1953	65	35		
53	1952	66	34		
54	1951	69	31		
55	1950	71	29		
56	1949	73	28		
57	1948	75	25		
58	1947	76	24		

Illustration 9

The Actual Year Built (1953) and the Effective Year Built (1953) would be the same and consequently the Effective Age would be 52 years. Moving across the table, we see that a building with an EYB of 1953 has 65 percent depreciation and therefore is 35 Percent Good (100%-65%). If the RCN of our sample building is $924,426, the depreciated value, RCNLD, is only $ 323,549 (924,426* 0.35).

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.

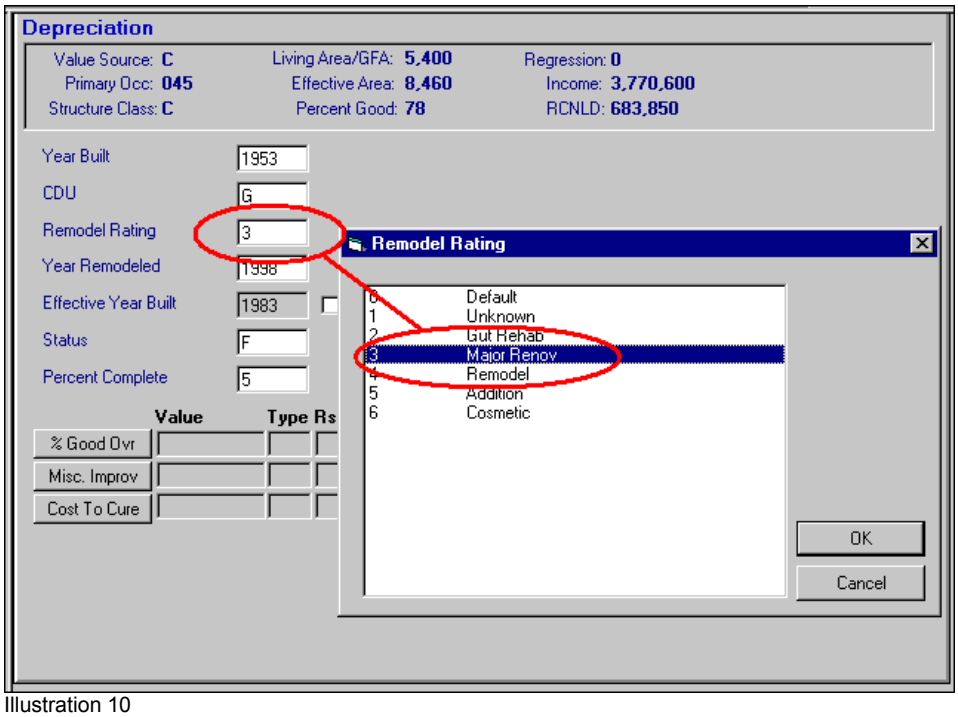


Illustration 10

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 52 years. The Effective Age is calculated to be 22 years (52 * 0.42525). Instead of CAMA using 52 chronological years to calculated depreciation, it will use 22 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 = 52 * .42525
Effective Age: 22
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 52 years of actual age, resulting in an effective age of 25 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. 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 52 years of actual age, as a result, making the effective age now 36 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 36 years verses 25 years is about $100,000 on a building with a RCN of $924,426. 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 (2005 – 22).

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 18% for that year. See Illustration 11.

Economic Life Depreciation Tables

Base Year 2005

Age of Building	Effective Year Built	60 Year Economic Life Percent of Depreciation	60 Year Economic Life Percent Good	50 Year Economic Life Percent of Depreciation	50 Year Economic Life Percent Good
0	2005	0	100	0	100
1	2004	0	100	0	100
2	2003	1	99	2	98
3	2002	1	99	2	98
4	2001	3	98	3	97
17	1988	13	88	17	83
18	1987	14	86	18	82
19	1986	15	85	20	80
20	1985	16	84	22	78
21	1984	16	84	22	78
22	1983	18	83	23	77
23	1982	18	81	25	75

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 78, whereas the depreciation table says it's 83. 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 18%. When multiplied by 0.97 the result is now 17% (18 * 0.97= 17.46, say 17).

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 83%, by subtracting the 5% attributed to functional obsolescence, we are left with 78% as the percent good for our building. This matches the figure shown in the Cost.dat file.

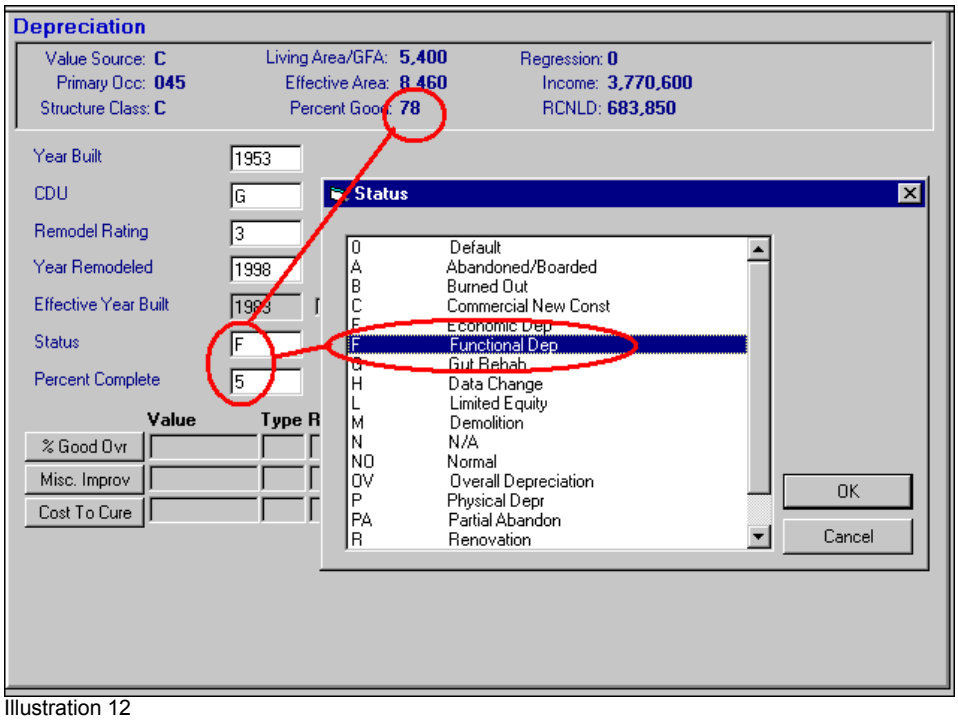
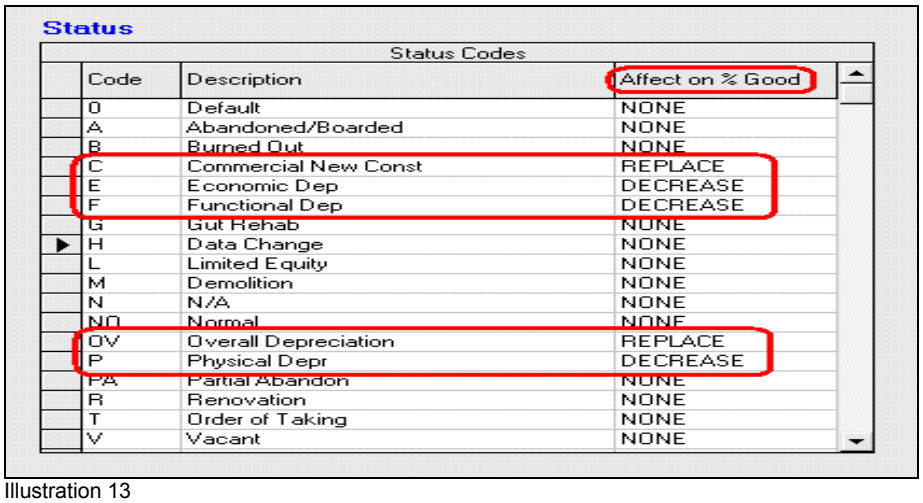


Illustration 12

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.



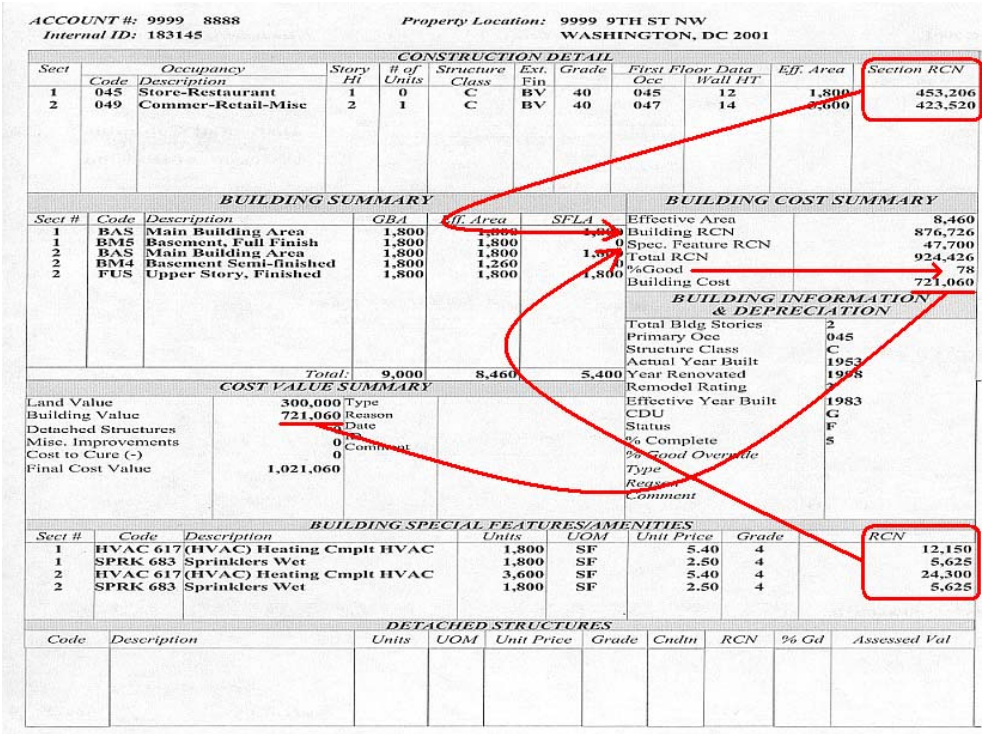
Status

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 $924,426, the RCN LD is $721,052 (924,426 * 0.78). Below is a portion of the Property Record Card that illustrates this information.



ACCOUNT #: 9999 8888
Internal ID: 183145

Property Location: 9999 9TH ST NW
WASHINGTON, DC 2001

CONSTRUCTION DETAIL

Sect	Occupancy Code	Occupancy Description	Story Hi	# 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	453,206
2	049	Commer-Retail-Misc	2	1	C	BV	40	047	14	5,600	423,520

BUILDING SUMMARY

Sect #	Code	Description	GBA	Eff. Area	SFLA
1	BAS	Main Building Area	1,800	1,800	1,800
1	BMS	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	876,726
Spec. Feature RCN	47,700
Total RCN	924,426
%Good	78
Building Cost	721,060

BUILDING INFORMATION & DEPRECIATION

Total Bldg Stories	2
Primary Occ	045
Structure Class	C
Actual Year Built	1953
Year Renovated	1988
Remodel Rating	3
Effective Year Built	1983
CDU	G
Status	F
% Complete	5
% Good Override	
Type	
Reason	
Comment	

COST VALUE SUMMARY

Land Value	300,000	Type	
Building Value	721,060	Reason	
Detached Structures	0	Date	
Misc. Improvements	0	Comment	
Cost to Cure (-)	0		
Final Cost Value	1,021,060		

BUILDING SPECIAL FEATURES/AMENITIES

Sect #	Code	Description	Units	UOM	Unit Price	Grade	RCN
1	HVAC 617	(HVAC) Heating Cmplt HVAC	1,800	SF	5.40	4	12,150
1	SPRK 683	Sprinklers Wet	1,800	SF	2.50	4	5,625
2	HVAC 617	(HVAC) Heating Cmplt HVAC	3,600	SF	5.40	4	24,300
2	SPRK 683	Sprinklers Wet	1,800	SF	2.50	4	5,625

DETACHED STRUCTURES

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

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 2005.

4. 2006 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:** 02/09/2005 10:40

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	721,060
COM LAND	045	300,000

Value Source: C Total: 1,021,060

DATA ENTRY

Entry ID:_____ Entry Date: / /

COMM

District of Columbia
Real Property
Assessment Division

OWNERSHIP HISTORY

INSTRUMENT #	SALE DATE	q/u	v/i	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	
Sketch Flag	

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

Pocket NBHD: 0

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	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

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:** 02/09/2005 10:40

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	453,206
2	049	Commer-Retail-Misc	2	1	C	BV	40	047	14	3,600	423,520

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	876,726
Spec. Feature RCN	47,700
Total RCN	924,426
%Good	78
Building Cost	721,060

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	1983
CDU	G
Status	F
% Complete	5
% Good Override	
Type	
Reason	
Comment	

COST VALUE SUMMARY

Land Value	300,000	Type	
Building Value	721,060	Reason	
Detached Structures	0	Date	
Misc. Improvements	0	ID	
Cost to Cure (-)	0	Comment	
Final Cost Value	1,021,060		

BUILDING SPECIAL FEATURES/AMENITIES

Sect #	Code	Description	Units	UOM	Unit Price	Grade	RCN
1	HVAC 617	(HVAC) Heating Cmplt HVAC	1,800	SF	5.40	4	12,150
1	SPRK 683	Sprinklers Wet	1,800	SF	2.50	4	5,625
2	HVAC 617	(HVAC) Heating Cmplt HVAC	3,600	SF	5.40	4	24,300
2	SPRK 683	Sprinklers Wet	1,800	SF	2.50	4	5,625

DETACHED STRUCTURES

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

SKETCH

No Photo On Record

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*
1	**3**	**Retail**	**GL**	**3**	**6,000**	**A**	**A**	**12.00**	**72,000**	**A**	**.15**	**A**	**0.08**	**56,304**
1	**1**	**1 BR**	**UL**	**1**	**10**	**A**	**A**	**18,000.00**	**180,000**	**A**	**.1**	**A**	**0.10**	**145,800**
1	**2**	**2 BR**	**UL**	**1**	**10**	**A**	**A**	**21,600.00**	**216,000**	**A**	**.1**	**A**	**0.10**	**174,960**

INCOME NOTES

INCOME SUMMARY

Primary Occ	**045**
Total Rentable Units	**468,000**
Total Gross Income	**468,000**
Vacancy $	**50,400**
Expense $	**40,536**
Total NOI	**377,064**
Cap Code	**001**
Cap Adj.	**A**
Cap Rate	**0.1000**
Income Value	**3,770,600**
Excess Land	**0**
Total Income Value:	**3,770,600**

OUTPUT FROM STORED PROCEDURE
REPORT GENERATED ON 09-FEB-2005 AT 09:52

**********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: 97.55
Size Adjustment: .98825
Effective Area: 3600
Adjusted Base Rate = (97.55 + 0) * .98825
Adjusted Base Rate: 96.4
RCN = ((96.4 * 3600) + 0) * 1.30592
RCN: 453206

**********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: 67.52
Size Adjustment: .98825
Effective Area: 4860
Adjusted Base Rate = (67.52 + 0) * .98825
Adjusted Base Rate: 66.73
RCN = ((66.73 * 4860) + 0) * 1.30592
RCN: 423520

**********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 = 52 * .42525
Effective Age: 22
Percent Good = 78
RCNLD: 683850

Economic Life Depreciation Tables

Base Year 2005

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	2005	0	100	0	100	0	100
1	2004	0	100	0	100	0	100
2	2003	1	99	1	99	2	98
3	2002	1	99	1	99	2	98
4	2001	2	98	3	98	3	97
5	2000	2	98	3	98	3	97
6	1999	3	97	4	96	5	95
7	1998	4	96	5	95	7	93
8	1997	4	96	5	95	7	93
9	1996	5	95	6	94	8	92
10	1995	5	95	6	94	8	92
11	1994	6	94	8	93	10	90
12	1993	7	93	9	91	12	88
13	1992	8	92	10	90	13	87
14	1991	8	92	10	90	13	87
15	1990	9	91	11	89	15	85
16	1989	10	90	13	88	17	83
17	1988	10	90	13	88	17	83
18	1987	11	89	14	86	18	82
19	1986	12	88	15	85	20	80
20	1985	13	87	16	84	22	78
21	1984	13	87	16	84	22	78
22	1983	14	86	18	83	23	77
23	1982	15	85	19	81	25	75
24	1981	16	84	20	80	27	73
25	1980	17	83	21	79	28	72
26	1979	18	82	23	78	30	70
27	1978	19	81	24	76	32	68
28	1977	20	80	25	75	33	67
29	1976	21	79	26	74	35	65
30	1975	22	78	28	73	37	63
31	1974	23	77	29	71	38	62
32	1973	24	76	30	70	40	60
33	1972	25	75	31	69	42	58
34	1971	27	73	34	66	45	55
35	1970	28	72	35	65	47	53
36	1969	29	71	36	64	48	52
37	1968	30	70	38	63	50	50
38	1967	32	68	40	60	53	47
39	1966	33	67	41	59	55	45
40	1965	35	65	44	56	58	42
41	1964	36	64	45	55	60	40
42	1963	38	62	48	53	63	37
43	1962	39	61	49	51	65	35
44	1961	41	59	51	49	68	32
45	1960	42	58	53	48	70	30
46	1959	44	56	55	45	73	27
47	1958	45	55	56	44	75	25
48	1957	46	54	58	43	77	23
49	1956	47	53	59	41	78	22
50	1955	49	51	61	39	82	18
51	1954	51	49	64	36		
52	1953	52	48	65	35		
53	1952	54	46	68	33		
54	1951	55	45	69	31		
55	1950	57	43	71	29		
56	1949	58	42	73	28		
57	1948	60	40	75	25		
58	1947	61	39	76	24		
59	1946	63	37	79	21		
60	1945	64	36	80	20		
61	1944	65	35				
62	1943	67	33				
63	1942	68	32				
64	1941	70	30				
65	1940	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)

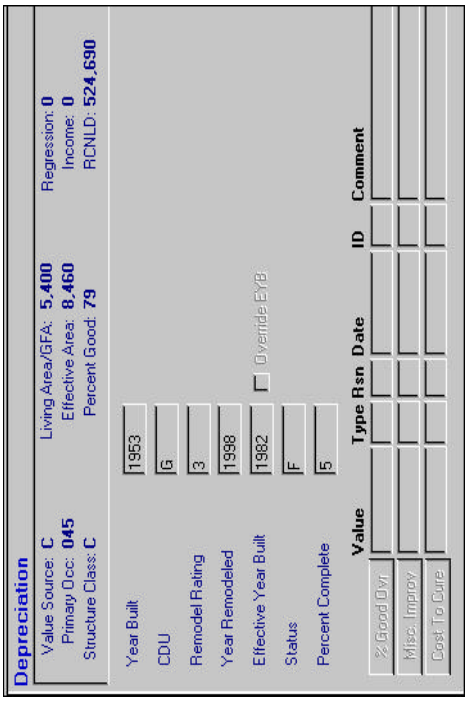
2000-2004	0%
1998-1999	5%
1993-1997	15%
1988-1992	25%
Earlier -1987	50%

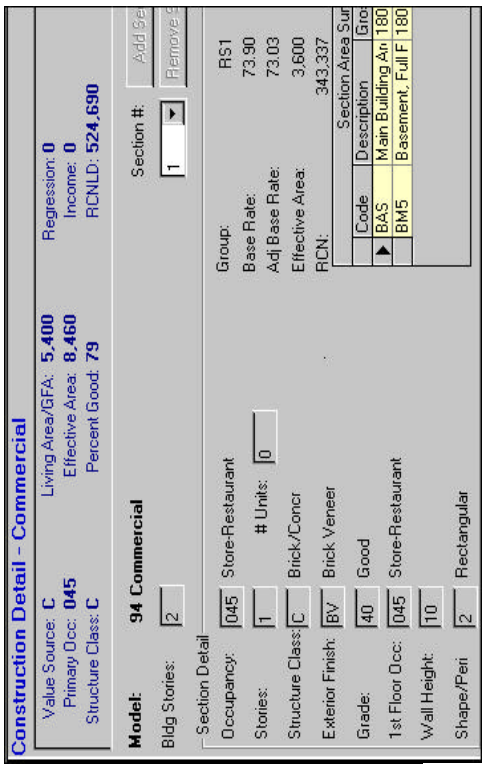
Extra Features (Flat and Sq Ft Add)

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	2006			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

2005	2006	2007	
(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)	
(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)
DISCOUNT FACTORS @ 12%	(10)
$0	PV OF(11)
	EX. VAC
$0	PV TI's(12)
$0	PV COMM (13)
$0	PV OF LEASE-UP (14)

(C)

RETAIL-VACANT/ST SPACE LEASE UP COSTS

(1)	(6)	(11)	PV OF COMMISSIONS
(2)	(7)	(12)	EXCESS VACANCY
(3)	(8)	(13)	

Retail Totals

(15)
(16)
(17)

VACANT AND S-T RETAIL LEASE UP

2005	2006	2007	
(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

(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

(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
B-21	NOI 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
	iscount 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

2006 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

2006 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

2006 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
AP1	0	65.04	5	60	80	99
AP1	A	89.38	5	70	80	99
AP1	B	77.00	5	70	80	99
AP1	C	65.04	5	60	80	99
AP1	D	64.16	5	50	80	99
AP2	0	114.11	5	60	80	99
AP2	A	148.81	5	70	80	99
AP2	B	142.92	5	70	80	99
AP2	C	114.11	5	60	80	99
AP2	D	111.56	5	50	80	99
BN1	0	136.10	5	60	80	99
BN1	A	175.18	5	70	80	99
BN1	B	169.80	5	70	80	99
BN1	C	136.10	5	60	80	99
BN1	D	129.14	5	50	80	99
BN1	S	123.42	5	50	80	99
BS1	0	135.52	5	60	80	99
BS1	A	176.66	5	70	80	99
BS1	B	157.30	5	70	80	99
BS1	C	135.52	5	60	80	99
BS1	D	123.42	5	50	80	99
BS1	S	48.40	5	50	80	99
CD	R	90.75	5	99	80	99
CND	R	126.50	5	50	0	99
CW1	0	111.32	5	60	80	99
CW1	A	131.89	5	70	80	99
CW1	B	125.84	5	70	80	99
CW1	C	111.32	5	60	80	99
CW1	D	99.22	5	50	80	99
CW1	S	99.22	5	50	80	99
ED1	0	106.11	5	60	80	99
ED1	A	136.21	5	70	80	99
ED1	B	130.87	5	70	80	99
ED1	C	106.11	5	60	80	99
ED1	D	102.03	5	50	80	99
ED1	S	99.19	5	50	80	99
GEN	0	116.16	5	60	80	99
GEN	A	161.04	5	70	80	99
GEN	B	147.84	5	70	80	99
GEN	C	116.16	5	60	80	99
GEN	D	99.00	5	50	80	99
GEN	S	99.00	5	50	80	99
GS1	0	116.16	5	60	80	99
GS1	A	147.84	5	70	80	99
GS1	B	137.28	5	70	80	99
GS1	C	116.16	5	60	80	99
GS1	D	109.56	5	50	80	99
GS1	S	52.80	5	50	80	99
GS2	0	85.21	5	60	80	99
GS2	A	137.75	5	70	80	99
GS2	B	134.40	5	70	80	99
GS2	C	85.21	5	60	80	99
GS2	D	80.67	5	50	80	99
GS2	S	78.80	5	50	80	99

2006 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
GS3	0	109.98	5	60	80	99
GS3	A	152.81	5	70	80	99
GS3	B	148.23	5	70	80	99
GS3	C	109.98	5	60	80	99
GS3	D	105.55	5	50	80	99
GS3	S	98.69	5	50	80	99
HT1	0	86.71	5	60	80	99
HT1	A	107.80	5	70	80	99
HT1	B	105.02	5	70	80	99
HT1	C	86.71	5	60	80	99
HT1	D	82.48	5	50	80	99
HT1	S	81.62	5	50	80	99
HT2	0	119.26	5	60	80	99
HT2	A	138.48	5	70	80	99
HT2	B	135.12	5	70	80	99
HT2	C	119.26	5	60	80	99
HT2	D	112.96	5	50	80	99
HT2	S	112.96	5	50	80	99
MC1	0	122.06	5	60	80	99
MC1	A	155.76	5	70	80	99
MC1	B	149.81	5	70	80	99
MC1	C	122.06	5	60	80	99
MC1	D	117.72	5	50	80	99
MC1	S	108.08	5	50	80	99
MC2	0	85.60	5	60	80	99
MC2	A	110.26	5	70	80	99
MC2	B	110.26	5	70	80	99
MC2	C	85.60	5	60	80	99
MC2	D	81.55	5	50	80	99
MC2	S	76.68	5	50	80	99
MLT	R	55.44	5	70	80	70
MN1	0	41.34	5	60	80	99
MN1	A	66.04	5	70	80	99
MN1	B	63.69	5	70	80	99
MN1	C	41.34	5	60	80	99
MN1	D	37.43	5	50	80	99
MN1	S	36.03	5	50	80	99
MN2	0	91.17	5	60	80	99
MN2	A	119.15	5	70	80	99
MN2	B	115.52	5	70	80	99
MN2	C	91.17	5	60	80	99
MN2	D	81.64	5	50	80	99
MN2	S	81.20	5	50	80	99
MN4	0	128.26	5	60	80	99
MN4	A	163.35	5	70	80	99
MN4	B	140.36	5	70	80	99
MN4	C	128.26	5	60	80	99
MN4	D	118.58	5	50	80	99
MN4	S	118.58	5	50	80	99
OF1	0	89.67	5	60	80	99
OF1	A	128.36	5	70	80	99
OF1	B	124.70	5	70	80	99
OF1	C	89.67	5	60	80	99
OF1	D	85.73	5	50	80	99

2006 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
OF1	S	79.04	5	50	80	99
OF2	0	107.78	5	60	80	99
OF2	A	152.81	5	70	80	99
OF2	B	147.05	5	70	80	99
OF2	C	107.78	5	60	80	99
OF2	D	102.98	5	50	80	99
OF2	S	115.43	5	50	80	99
OF3	0	127.77	5	60	80	99
OF3	A	150.54	5	70	80	99
OF3	B	141.68	5	70	80	99
OF3	C	127.77	5	60	80	99
OF3	D	113.85	5	50	80	99
OF3	S	113.85	5	50	80	99
OFF	0	88.55	5	60	80	99
OFF	A	116.38	5	70	80	99
OFF	B	108.79	5	70	80	99
OFF	C	88.55	5	60	80	99
OFF	D	80.96	5	50	80	99
OFF	S	80.96	5	50	80	99
PK1	0	44.67	5	60	80	99
PK1	A	64.43	5	70	80	99
PK1	B	64.43	5	70	80	99
PK1	C	44.67	5	60	80	99
PK1	D	40.11	5	50	80	99
PK1	S	37.50	5	50	80	99
PK2	0	37.22	5	60	80	99
PK2	A	38.46	5	70	80	99
PK2	B	37.22	5	70	80	99
PK2	C	37.22	5	60	80	99
PK2	D	27.67	5	50	80	99
PK2	S	27.67	5	50	80	90
PS1	0	98.16	5	60	80	99
PS1	A	132.69	5	70	80	99
PS1	B	128.46	5	70	80	99
PS1	C	98.16	5	60	80	99
PS1	D	93.84	5	50	80	99
PS1	S	87.92	5	50	80	99
PS2	0	129.47	5	60	80	99
PS2	A	146.41	5	70	80	99
PS2	B	141.57	5	70	80	99
PS2	C	129.47	5	60	80	99
PS2	D	117.37	5	50	80	99
PS2	S	117.37	5	50	80	99
R11	R	92.51	6	75	80	75
R12	R	116.67	6	75	80	75
R13	R	91.03	6	75	80	75
R15	R	92.51	6	75	80	75
R19	R	92.51	6	75	80	75
R23	R	55.29	6	75	80	75
R24	R	94.73	6	75	80	75
R97	R	92.51	6	75	80	75
RB1	0	86.31	5	60	80	99
RB1	A	121.86	5	70	80	99
RB1	B	118.09	5	70	80	99

2006 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
RB1	C	86.31	5	60	80	99
RB1	D	81.71	5	50	80	99
RB1	S	79.15	5	50	80	99
RES	R	66.00	5	70	80	70
RH1	0	115.31	5	70	80	99
RH1	A	115.31	5	70	80	99
RH1	B	115.31	5	70	80	99
RH1	C	115.31	5	70	80	99
RH1	D	115.31	5	70	80	99
RH1	S	115.31	5	70	80	99
RH2	0	98.99	5	60	80	99
RH2	A	137.96	5	70	80	99
RH2	B	133.61	5	70	80	99
RH2	C	98.99	5	60	80	99
RH2	D	93.96	5	50	80	99
RH2	S	91.86	5	50	80	99
RS1	0	97.55	5	60	80	99
RS1	A	120.36	5	70	80	99
RS1	B	120.36	5	70	80	99
RS1	C	97.55	5	60	80	99
RS1	D	92.22	5	50	80	99
RS1	S	88.36	5	50	80	99
RS2	0	109.23	5	60	80	99
RS2	A	139.51	5	70	80	99
RS2	B	139.51	5	70	80	99
RS2	C	109.23	5	60	80	99
RS2	D	103.16	5	50	80	99
RS2	S	99.75	5	50	80	99
RT1	0	67.52	5	60	80	99
RT1	A	86.53	5	70	80	99
RT1	B	85.05	5	70	80	99
RT1	C	67.52	5	60	80	99
RT1	D	64.96	5	50	80	99
RT1	S	62.57	5	50	80	99
RT2	0	70.40	5	60	80	99
RT2	A	70.40	5	70	80	99
RT2	B	70.40	5	70	80	99
RT2	C	70.40	5	60	80	99
RT2	D	70.40	5	50	80	99
RT2	S	66.80	5	50	80	99
RT3	0	97.76	5	60	80	99
RT3	A	101.99	5	70	80	99
RT3	B	99.33	5	70	80	99
RT3	C	97.76	5	60	80	99
RT3	D	84.94	5	50	80	99
RT3	S	84.94	5	50	80	99
RT4	0	64.74	5	60	80	99
RT4	A	86.57	5	70	80	99
RT4	B	86.57	5	70	80	99
RT4	C	64.74	5	60	80	99
RT4	D	60.98	5	50	80	99
RT4	S	58.34	5	50	80	99
SIN	R	75.65	5	70	80	70
SS1	0	148.87	5	70	80	99

2006 Base Cost Rates

Cost Group	Class	Base Rate	Depr. Table	Econ. Life	Max. Depr.	Max. Age
SS1	A	148.87	5	70	80	99
SS1	B	148.87	5	70	80	99
SS1	C	148.87	5	70	80	99
SS1	D	148.87	5	70	80	99
SS1	S	148.87	5	70	80	99
SS2	0	72.19	5	60	80	99
SS2	A	87.21	5	70	80	99
SS2	B	87.21	5	70	80	99
SS2	C	72.19	5	60	80	99
SS2	D	69.31	5	50	80	99
SS2	S	66.92	5	50	80	99
SV1	0	97.76	5	60	80	99
SV1	A	97.76	5	70	80	99
SV1	B	97.76	5	70	80	99
SV1	C	97.76	5	60	80	99
SV1	D	80.98	5	50	80	99
SV1	S	97.76	5	50	80	99
TM1	0	62.92	5	60	80	99
TM1	A	77.44	5	70	80	99
TM1	B	70.18	5	70	80	99
TM1	C	62.92	5	60	80	99
TM1	D	58.08	5	50	80	99
TM1	S	58.08	5	50	80	99
UT1	0	110.11	5	60	80	99
UT1	A	124.63	5	70	80	99
UT1	B	116.16	5	70	80	99
UT1	C	110.11	5	60	80	99
UT1	D	94.38	5	50	80	99
UT1	S	94.38	5	50	80	99
WH1	0	35.68	5	60	80	99
WH1	A	54.00	5	70	80	99
WH1	B	51.02	5	70	80	99
WH1	C	35.68	5	60	80	99
WH1	D	32.38	5	50	80	99
WH1	S	31.63	5	50	80	99
WH2	0	45.01	5	60	80	99
WH2	A	49.92	5	70	80	99
WH2	B	49.92	5	70	80	99
WH2	C	45.01	5	60	80	99
WH2	D	37.21	5	50	80	99
WH2	S	45.01	5	50	80	99
WH3	0	48.69	5	60	80	99
WH3	A	53.65	5	70	80	99
WH3	B	53.65	5	70	80	99
WH3	C	48.69	5	50	80	99
WH3	D	48.69	5	50	80	99
WH3	S	47.50	5	50	80	99

Real Property Assessment Division
2006 Base Change

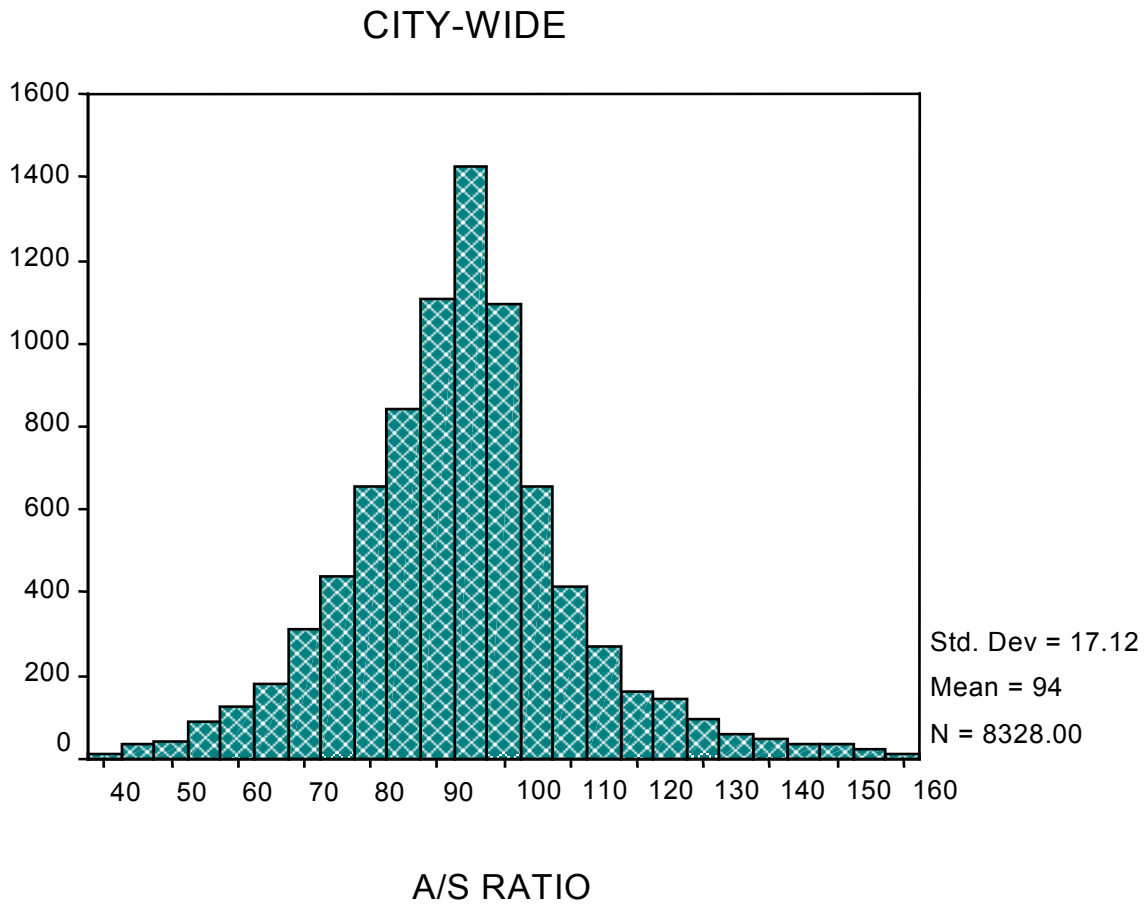
Neighborhood	Name	TOTAL BASE			
		2005	2006	Difference	% Change
001	American University Park	$1,749,553,540	$2,073,567,840	$324,014,300	18.52%
002	Anacostia	$292,137,310	$345,634,400	$53,497,090	18.31%
003	Barry Farms	$129,026,650	$148,811,020	$19,784,370	15.33%
004	Berkley	$708,002,280	$794,738,450	$86,736,170	12.25%
005	Brentwood	$322,863,760	$352,739,520	$29,875,760	9.25%
006	Brightwood	$1,232,129,920	$1,444,298,220	$212,168,300	17.22%
007	Brookland	$1,741,248,900	$2,111,254,670	$370,005,770	21.25%
008	Burleith	$529,968,840	$618,029,160	$88,060,320	16.62%
009	Capitol Hill	$2,247,016,607	$2,567,672,130	$320,655,523	14.27%
010	Central	$25,771,297,665	$28,447,468,390	$2,676,170,725	10.38%
011	Chevy Chase	$3,707,540,070	$4,137,905,470	$430,365,400	11.61%
012	Chillum	$236,693,520	$284,417,600	$47,724,080	20.16%
013	Cleveland Park	$1,782,422,120	$2,099,402,230	$316,980,110	17.78%
014	Colonial Village	$386,017,600	$447,254,780	$61,237,180	15.86%
015	Columbia Heights	$2,028,652,920	$2,539,257,610	$510,604,690	25.17%
016	Congress Heights	$615,387,540	$695,298,810	$79,911,270	12.99%
017	Crestwood	$485,859,430	$584,134,030	$98,274,600	20.23%
018	Deanwood	$713,047,720	$853,120,140	$140,072,420	19.64%
019	Eckington	$591,377,810	$734,481,220	$143,103,410	24.20%
020	Foggy Bottom	$2,300,883,030	$2,508,646,220	$207,763,190	9.03%
021	Forest Hills	$1,886,750,840	$2,129,830,830	$243,079,990	12.88%
022	Fort Dupont Park	$448,565,830	$528,357,770	$79,791,940	17.79%
023	Foxhall	$213,170,250	$248,946,530	$35,776,280	16.78%
024	Garfield	$975,239,940	$1,164,198,160	$188,958,220	19.38%
025	Georgetown	$4,844,491,115	$5,420,731,390	$576,240,275	11.89%
026	Glover Park	$853,826,820	$1,021,817,100	$167,990,280	19.67%
027	Hawthorne	$178,869,340	$208,708,290	$29,838,950	16.68%
028	Hillcrest	$751,771,240	$895,450,730	$143,679,490	19.11%
029	Kalorama	$2,444,987,856	$2,758,221,590	$313,233,734	12.81%
030	Kent	$762,825,000	$861,449,620	$98,624,620	12.93%
031	LeDroit Park	$425,690,400	$476,102,170	$50,411,770	11.84%
032	Lily Ponds	$225,787,650	$260,946,930	$35,159,280	15.57%
033	Marshall Heights	$150,353,200	$176,523,440	$26,170,240	17.41%
034	Massachusetts Av Heights	$533,387,540	$637,225,100	$103,837,560	19.47%
035	Michigan Park	$227,199,680	$260,361,140	$33,161,460	14.60%
036	Mount Pleasant	$1,961,737,525	$2,265,972,670	$304,235,145	15.51%
037	North Cleveland Park	$922,632,590	$1,056,550,300	$133,917,710	14.51%
038	Observatory Circle	$1,187,944,131	$1,431,914,930	$243,970,799	20.54%
039	Old City I	$5,111,742,763	$6,092,344,030	$980,601,267	19.18%
040	Old City II	$6,951,601,501	$8,225,886,300	$1,274,284,799	18.33%
041	Palisades	$670,428,450	$763,542,230	$93,113,780	13.89%
042	Petworth	$1,187,515,140	$1,505,923,170	$318,408,030	26.81%
043	Randle Heights	$478,359,460	$530,437,740	$52,078,280	10.89%
044	R.L.A. NE	$983,153,430	$1,088,227,040	$105,073,610	10.69%
046	R.L.A. SW	$3,442,105,183	$3,841,845,240	$399,740,057	11.61%
047	Riggs Park	$496,753,900	$590,882,850	$94,128,950	18.95%
048	Shepherd Park	$450,985,950	$545,944,200	$94,958,250	21.06%
049	Sixteenth Street Heights	$801,457,160	$919,294,980	$117,837,820	14.70%
050	Spring Valley	$1,065,339,210	$1,298,286,820	$232,947,610	21.87%
051	Takoma	$227,235,530	$259,949,970	$32,714,440	14.40%
052	Trinidad	$373,057,380	$490,752,420	$117,695,040	31.55%
053	Wakefield	$467,407,820	$523,768,730	$56,360,910	12.06%
054	Wesley Heights	$1,179,415,196	$1,336,830,500	$157,415,304	13.35%
055	Woodley	$197,417,022	$212,991,760	$15,574,738	7.89%
056	Woodridge	$749,030,380	$934,528,580	$185,498,200	24.77%
059	Rail Road Tracks	$1,626,370	$1,789,010	$162,640	10.00%
063	North Anacostia Park	$960,140	$962,710	$2,570	0.27%
066	Fort Lincoln	$127,316,440	$138,617,610	$11,301,170	8.88%
068	Bolling AFB & Naval Research	$7,993,050	$8,214,030	$220,980	2.76%
069	D.C. Village	$156,540	$172,190	$15,650	10.00%
	Total	$91,537,416,194	$104,902,632,710	$13,365,216,516	14.60%

Preliminary 2006 Performance Report

2004 SALES RATIOS BY PROPERTY TYPE: CITY-WIDE

PROPERTY TYPE	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
Residential	8,328	433,411	330,000	93.7	93.5	91.9	13	6,763	1,565	1.02
Commercial	498	5,766,721	482,430	79.1	80.4	93.3	26	439	59	.86

Residential Sales Ratios



Sales Ratio Report Using Current 2005 Values

2004 SALES RATIOS BY NEIGHBORHOOD: SINGLE-FAMILY

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
1	AMERICAN UNIVERSITY	109	730,041	700,000	82.6	82.9	96.0	9.9	108	1	.86
2	ANACOSTIA	99	168,963	153,500	73.1	76.6	92.2	21.5	88	11	.83
3	BARRY FARMS	23	148,537	136,000	77.5	80.0	90.8	19.3	19	4	.88
4	BERKELEY	25	1,143,520	985,000	81.7	81.5	92.4	14.3	24	1	.88
5	BRENTWOOD	44	203,939	185,863	67.9	73.2	78.7	25.4	38	6	.93
6	BRIGHTWOOD	161	354,735	336,000	76.5	79.2	87.7	20.0	142	19	.90
7	BROOKLAND	226	293,881	280,000	70.9	73.2	89.3	18.6	218	8	.82
8	BURLEITH	46	858,109	675,000	82.4	83.1	95.2	11.1	45	1	.87
9	CAPITOL HILL	164	650,861	639,000	79.1	81.1	95.3	12.3	153	11	.85
10	CENTRAL	16	1,032,569	951,000	82.2	81.4	96.6	10.2	16	0	.84
11	CHEVY CHASE	173	780,055	730,000	84.2	85.0	95.9	11.4	162	11	.89
12	CHILLUM	29	333,418	312,550	70.1	70.8	86.7	16.5	28	1	.82
13	CLEVELAND PARK	37	1,049,071	906,000	76.3	80.5	95.6	14.9	34	3	.84
14	COLONIAL VILLAGE	19	794,732	775,000	80.2	83.1	95.5	17.8	16	3	.87
15	COLUMBIA HEIGHTS	407	381,607	350,000	67.5	70.9	86.8	24.2	377	30	.82
16	CONGRESS HEIGHTS	165	165,394	157,000	74.9	78.7	87.3	21.9	148	17	.90
17	CRESTWOOD	20	854,605	790,000	76.4	73.7	87.3	11.6	20	0	.84
18	DEANWOOD	285	151,841	145,000	73.9	76.7	94.2	23.0	258	27	.81
19	ECKINGTON	120	354,179	350,000	67.0	68.4	87.3	21.5	114	6	.78
20	FOGGY BOTTOM	20	599,519	530,250	73.8	79.4	94.8	15.8	18	2	.84
21	FOREST HILLS	33	1,167,342	1,100,000	80.6	79.8	94.8	11.2	32	1	.84
22	FORT DUPONT PARK	99	174,428	169,000	72.6	75.0	89.5	18.3	96	3	.84
23	FOXHALL	22	712,816	694,950	76.7	76.2	91.6	9.0	22	0	.83
24	GARFIELD	21	968,672	929,000	78.2	78.2	93.5	11.0	21	0	.84
25	GEORGETOWN	156	1,205,256	970,000	80.5	81.1	90.8	13.4	149	7	.89
26	GLOVER PARK	66	683,706	650,000	74.7	76.5	94.3	11.6	66	0	.81
27	HAWTHORNE	12	775,067	697,500	80.5	83.0	98.1	13.0	11	1	.85
28	HILLCREST	80	280,120	279,500	73.7	77.2	89.1	21.9	73	7	.87
29	KALORAMA	49	1,550,306	1,450,000	79.9	84.4	93.5	17.3	42	7	.90
30	KENT	36	1,193,449	964,500	79.2	77.2	83.7	13.4	36	0	.92
31	LEDROIT PARK	87	421,992	405,000	77.1	77.8	87.3	25.1	79	8	.89
32	LILY PONDS	42	160,524	156,900	74.6	76.2	89.1	15.4	40	2	.86
33	MARSHALL HEIGHTS	58	141,024	135,000	76.7	76.3	89.0	15.2	55	3	.86
34	MASS. AVE. HEIGHTS	14	2,123,000	1,855,000	84.3	89.4	93.2	21.2	11	3	.96
35	MICHIGAN PARK	23	316,076	317,000	77.3	79.6	90.7	12.3	22	1	.88
36	MOUNT PLEASANT	97	663,519	656,000	82.6	84.5	95.1	15.2	87	10	.89
37	N. CLEVELAND PARK	39	821,941	736,090	78.0	78.5	88.7	11.2	38	1	.88
38	OBSERVATORY CIRCLE	20	1,198,670	1,074,500	83.5	83.0	94.7	16.3	19	1	.88
39	OLD CITY #1	792	419,352	379,500	72.9	74.4	91.2	20.8	737	55	.82
40	OLD CITY #2	353	601,658	529,000	74.3	77.0	90.9	21.4	317	36	.85
41	PALISADES	53	794,299	730,000	82.5	84.4	93.9	10.8	51	2	.90
42	PETWORTH	343	295,805	290,000	67.8	69.8	90.1	15.8	333	10	.78
43	RANDLE HEIGHTS	63	164,153	161,500	84.6	85.3	92.0	15.5	56	7	.93
46	R.L.A. (S.W.)	10	566,700	555,500	79.4	81.8	97.0	8.6	9	1	.84
47	RIGGS PARK	81	223,796	230,000	76.5	79.8	95.6	15.1	73	8	.83
48	SHEPHERD PARK	37	583,008	600,000	75.3	76.7	91.8	13.1	35	2	.84
49	16TH STREET HEIGHTS	97	511,895	515,000	77.4	79.6	92.2	20.3	89	8	.86
50	SPRING VALLEY	47	1,457,896	1,215,000	77.3	77.8	93.8	14.9	46	1	.83
51	TAKOMA PARK	26	276,925	280,750	79.5	82.4	92.1	13.5	23	3	.89
52	TRINIDAD	155	210,234	199,900	60.9	63.6	82.2	26.1	151	4	.77
53	WAKEFIELD	21	788,831	750,000	82.1	85.2	94.4	10.2	19	2	.90
54	WESLEY HEIGHTS	25	1,488,440	1,188,000	84.1	84.2	92.7	14.4	24	1	.91
55	WOODLEY	12	1,201,856	1,155,550	83.0	84.6	91.0	14.9	10	2	.93
56	WOODRIDGE	105	273,177	259,000	71.0	73.7	94.1	19.8	97	8	.78
66	FORT LINCOLN	2	205,000	205,000	96.6	96.6	111.1	29.2	1	1	.87

Sales Ratio Report Using Current 2005 Values

2004 SALES RATIOS BY NEIGHBORHOOD: CONDOMINIUMS

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	11	82,086	82,350	48.7	64.5	101.0	44.6	11	0	.64
3	BARRY FARMS	34	112,021	111,050	91.5	90.0	100.5	9.2	33	1	.90
4	BERKELEY	7	451,357	470,000	89.3	87.2	97.1	7.9	7	0	.90
5	BRENTWOOD	2	170,950	170,950	62.6	62.6	91.6	9.1	2	0	.68
6	BRIGHTWOOD	12	243,750	283,750	54.7	53.2	91.1	15.7	12	0	.58
7	BROOKLAND	42	177,125	163,500	72.1	74.7	87.9	17.4	40	2	.85
9	CAPITOL HILL	54	288,071	280,000	81.1	80.3	95.2	11.6	52	2	.84
10	CENTRAL	282	445,085	359,000	80.4	80.6	91.6	13.3	275	7	.88
11	CHEVY CHASE	18	259,494	254,000	75.3	77.6	95.8	12.5	17	1	.81
13	CLEVELAND PARK	174	326,858	320,930	67.0	63.2	94.4	22.1	173	1	.67
15	COLUMBIA HEIGHTS	135	283,843	250,000	66.1	56.7	94.0	42.7	133	2	.60
16	CONGRESS HEIGHTS	14	72,007	64,050	82.1	84.4	98.0	10.2	14	0	.86
18	DEANWOOD	4	131,143	128,500	90.1	89.9	103.7	1.2	4	0	.87
19	ECKINGTON	33	276,944	270,546	96.1	96.1	100.8	5.3	30	3	.95
20	FOGGY BOTTOM	83	273,208	216,000	71.4	73.5	86.8	13.8	82	1	.85
21	FOREST HILLS	74	317,677	347,000	79.3	80.4	90.4	10.6	71	3	.89
22	FORT DUPONT PARK	3	140,950	167,500	86.1	82.6	94.5	10.6	3	0	.87
24	GARFIELD	52	427,761	395,450	75.2	77.5	88.0	12.3	51	1	.88
25	GEORGETOWN	79	759,665	459,000	75.2	76.1	93.2	12.6	78	1	.82
26	GLOVER PARK	54	276,605	269,750	72.9	71.0	91.1	16.9	52	2	.78
28	HILLCREST	63	90,221	92,000	73.9	76.1	86.8	21.9	58	5	.88
29	KALORAMA	182	431,354	365,950	76.8	77.3	91.2	11.6	181	1	.85
31	LEDROIT PARK	10	246,600	252,500	90.0	69.3	93.3	29.6	10	0	.74
32	LILY PONDS	4	163,750	160,000	90.2	90.2	96.2	9.8	4	0	.94
33	MARSHALL HEIGHTS	31	117,767	119,892	80.5	81.8	96.7	6.4	31	0	.85
36	MOUNT PLEASANT	138	389,906	329,700	74.7	74.5	92.1	11.7	138	0	.81
37	N. CLEVELAND PARK	6	342,392	358,500	82.3	84.1	102.7	11.6	6	0	.82
38	OBSERVATORY CIRCLE	57	363,746	292,000	75.4	76.9	93.2	11.9	56	1	.83
39	OLD CITY #1	261	308,637	295,000	41.8	56.9	100.0	62.5	256	5	.57
40	OLD CITY #2	762	347,074	327,400	78.5	76.6	92.3	16.4	749	13	.83
41	PALISADES	17	211,974	200,000	65.3	68.8	95.0	11.1	17	0	.72
42	PETWORTH	9	148,004	154,500	43.7	49.1	94.9	101.1	8	1	.52
43	RANDLE HEIGHTS	27	105,559	109,900	95.0	90.4	93.8	6.6	26	1	.96
46	R.L.A. (S.W.)	93	285,091	256,000	72.3	72.9	91.9	16.1	91	2	.79
49	16TH STREET HEIGHTS	6	155,750	155,750	95.0	95.0	99.1	.0	6	0	.96
53	WAKEFIELD	41	304,323	292,000	77.9	76.8	87.4	10.6	41	0	.88
54	WESLEY HEIGHTS	74	393,781	399,450	78.3	78.4	91.4	7.7	73	1	.86
56	WOODRIDGE	2	163,500	163,500	68.8	68.8	73.2	24.5	2	0	.94
66	FORT LINCOLN	14	179,414	171,000	81.7	85.7	96.3	16.4	12	2	.89

Sales Ratio Report Using Current 2005 Values

2004 SALES RATIOS BY NEIGHBORHOOD: MULTI-FAMILY

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	3	520,833	525,000	68.8	70.1	79.9	8.6	3	0	.88
5	BRENTWOOD	3	370,000	300,000	69.3	74.3	79.2	7.7	3	0	.94
6	BRIGHTWOOD	1	1,200,000	1,200,000	41.8	41.8	87.6	.0	1	0	.48
7	BROOKLAND	5	328,200	295,000	74.7	68.6	73.9	14.0	5	0	.93
9	CAPITOL HILL	1	1,200,000	1,200,000	61.6	61.6	100.0	.0	1	0	.62
10	CENTRAL	1	6,000,000	6,000,000	90.1	90.1	120.0	.0	1	0	.75
15	COLUMBIA HEIGHTS	12	827,000	707,500	44.2	51.5	62.3	30.1	12	0	.83
16	CONGRESS HEIGHTS	20	526,778	380,000	57.1	62.2	67.2	26.6	19	1	.93
18	DEANWOOD	11	323,459	350,000	47.5	60.4	84.2	40.8	10	1	.72
19	ECKINGTON	1	575,000	575,000	71.8	71.8	77.3	.0	1	0	.93
22	FORT DUPONT PARK	1	266,000	266,000	55.1	55.1	60.6	.0	1	0	.91
24	GARFIELD	1	9,750,000	9,750,000	33.7	33.7	100.0	.0	1	0	.34
25	GEORGETOWN	1	1,575,000	1,575,000	39.2	39.2	43.1	.0	1	0	.91
26	GLOVER PARK	1	928,000	928,000	40.8	40.8	44.9	.0	1	0	.91
28	HILLCREST	6	468,867	335,000	56.3	55.9	64.3	22.5	6	0	.87
29	KALORAMA	4	1,412,775	1,137,500	53.2	76.3	106.9	55.4	3	1	.71
32	LILY PONDS	1	350,000	350,000	55.8	55.8	98.5	.0	1	0	.57
33	MARSHALL HEIGHTS	5	436,980	359,900	69.3	65.0	65.5	14.9	5	0	.99
36	MOUNT PLEASANT	2	400,000	400,000	107.7	108	112.8	3.3	1	1	.96
39	OLD CITY #1	2	558,000	558,000	62.0	62.0	71.2	11.9	2	0	.87
40	OLD CITY #2	7	2,148,889	1,390,000	44.0	57.7	88.4	54.0	7	0	.65
42	PETWORTH	6	553,333	562,500	50.6	55.7	59.8	25.8	6	0	.93
43	RANDLE HEIGHTS	6	395,000	287,500	57.8	58.9	67.2	17.9	6	0	.88
49	16TH STREET HEIGHTS	1	325,000	325,000	92.7	92.7	100.0	.0	1	0	.93
52	TRINIDAD	1	750,000	750,000	73.8	73.8	77.5	.0	1	0	.95
56	WOODRIDGE	1	300,000	300,000	50.2	50.2	55.2	.0	1	0	.91

Sales Ratio Report Using Current 2005 Values

2004 SALES RATIOS BY NEIGHBORHOOD: COMMERCIAL

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
1	AMERICAN UNIVERSITY	4	20,062,500	1,425,000	51.8	55.8	97.6	29.2	4	0	.57
2	ANACOSTIA	4	160,250	157,500	77.6	90.8	103.3	27.3	3	1	.88
3	BARRY FARMS	2	3,626,500	3,626,500	78.9	78.9	69.0	23.2	2	0	1.14
5	BRENTWOOD	12	739,545	527,520	93.8	87.0	104.9	25.5	8	4	.83
6	BRIGHTWOOD	7	1,451,429	515,000	57.2	66.4	93.0	25.4	7	0	.71
7	BROOKLAND	19	1,039,472	320,000	71.4	71.3	71.2	19.6	18	1	1.00
9	CAPITOL HILL	9	660,667	549,000	43.4	42.4	84.3	25.6	9	0	.50
10	CENTRAL	48	36,779,035	19650000	75.9	86.9	94.3	35.3	47	1	.92
11	CHEVY CHASE	4	671,590	690,680	52.0	65.0	79.5	44.0	3	1	.82
12	CHILLUM	2	1,233,000	1,233,000	91.8	91.8	89.8	8.2	2	0	1.02
15	COLUMBIA HEIGHTS	41	390,062	275,000	53.1	65.3	72.9	42.7	35	6	.90
16	CONGRESS HEIGHTS	4	135,513	136,025	91.1	92.5	106.4	27.3	2	2	.87
18	DEANWOOD	13	346,800	225,000	63.2	69.1	73.4	27.9	12	1	.94
19	ECKINGTON	9	350,044	342,000	54.2	55.4	74.1	27.5	9	0	.75
20	FOGGY BOTTOM	8	23,297,217	1,097,500	85.2	80.3	93.0	13.1	8	0	.86
21	FOREST HILLS	2	10,658,240	10658240	95.2	95.2	100.3	13.5	1	1	.95
22	FORT DUPONT PARK	2	322,600	322,600	93.8	93.8	54.1	51.8	1	1	1.74
23	FOXHALL	1	2,700,000	2,700,000	55.1	55.1	60.6	.0	1	0	.91
24	GARFIELD	2	9,225,000	9,225,000	62.3	62.3	86.3	11.3	2	0	.72
25	GEORGETOWN	15	15,799,000	950,000	59.5	71.8	97.4	44.2	13	2	.74
29	KALORAMA	2	1,465,258	1,465,258	64.0	64.0	85.4	32.4	2	0	.75
30	KENT	1	650,000	650,000	58.8	58.8	67.6	.0	1	0	.87
31	LEDROIT PARK	4	755,000	317,500	79.6	83.5	95.6	15.8	3	1	.87
33	MARSHALL HEIGHTS	1	89,000	89,000	40.6	40.6	44.7	.0	1	0	.91
35	MICHIGAN PARK	1	145,000	145,000	67.5	67.5	70.3	.0	1	0	.96
36	MOUNT PLEASANT	9	1,296,889	800,000	52.8	58.9	83.4	25.7	9	0	.71
39	OLD CITY #1	60	3,921,510	332,500	62.0	64.9	94.5	23.3	56	4	.69
40	OLD CITY #2	71	1,130,471	630,000	51.6	53.3	78.9	29.8	71	0	.68
41	PALISADES	1	2,300,000	2,300,000	68.5	68.5	75.4	.0	1	0	.91
42	PETWORTH	9	300,233	293,000	66.1	65.8	68.1	24.0	8	1	.97
43	RANDLE HEIGHTS	1	175,000	175,000	100.9	101	105.4	.0	1	0	.96
46	R.L.A. (S.W.)	1	40,000,000	40000000	79.2	79.2	99.3	.0	1	0	.80
47	RIGGS PARK	1	400,000	400,000	109.2	109	120.1	.0	0	1	.91
48	SHEPHERD PARK	2	574,500	574,500	84.5	84.5	105.8	42.5	1	1	.80
49	16TH STREET HEIGHTS	4	716,250	300,000	51.2	49.4	95.2	22.5	4	0	.52
51	TAKOMA PARK	2	1,125,000	1,125,000	86.3	86.3	106.0	14.7	2	0	.81
52	TRINIDAD	6	145,000	77,500	76.9	77.4	63.7	42.4	4	2	1.21
53	WAKEFIELD	2	832,500	832,500	83.6	83.6	107.5	20.9	2	0	.78
56	WOODRIDGE	8	556,819	421,500	72.9	73.6	74.8	28.9	6	2	.98

Sales Ratio Report Using Proposed 2006 Values

2004 SALES RATIOS BY NEIGHBORHOOD: SINGLE-FAMILY

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
1	AMERICAN UNIVERSITY	109	730,041	700,000	97.0	96.6	96.0	6.2	99	10	1.01
2	ANACOSTIA	99	168,963	153,500	95.3	97.0	92.2	18.1	71	28	1.05
3	BARRY FARMS	23	148,537	136,000	93.2	95.5	90.8	19.0	17	6	1.05
4	BERKELEY	25	1,143,520	985,000	95.4	93.7	92.4	9.8	21	4	1.01
5	BRENTWOOD	44	203,939	185,863	81.3	86.1	78.7	22.6	35	9	1.09
6	BRIGHTWOOD	161	354,735	336,000	89.5	91.5	87.7	18.7	126	35	1.04
7	BROOKLAND	226	293,881	280,000	91.3	91.9	89.3	17.8	173	53	1.03
8	BURLEITH	46	858,109	675,000	95.6	96.5	95.2	8.1	38	8	1.01
9	CAPITOL HILL	164	650,861	639,000	95.7	96.1	95.3	8.1	141	23	1.01
10	CENTRAL	16	1,032,569	951,000	97.7	97.0	96.6	4.2	16	0	1.00
11	CHEVY CHASE	173	780,055	730,000	96.5	96.9	95.9	7.9	145	28	1.01
12	CHILLUM	29	333,418	312,550	88.1	89.0	86.7	13.8	25	4	1.03
13	CLEVELAND PARK	37	1,049,071	906,000	93.7	95.5	95.6	7.7	33	4	1.00
14	COLONIAL VILLAGE	19	794,732	775,000	97.4	95.7	95.5	16.2	13	6	1.00
15	COLUMBIA HEIGHTS	407	381,607	350,000	89.6	91.0	86.8	21.6	303	104	1.05
16	CONGRESS HEIGHTS	165	165,394	157,000	90.3	91.4	87.3	18.9	129	36	1.05
17	CRESTWOOD	20	854,605	790,000	94.7	91.0	87.3	12.0	17	3	1.04
18	DEANWOOD	285	151,841	145,000	96.2	97.6	94.2	14.6	214	71	1.04
19	ECKINGTON	120	354,179	350,000	88.1	89.8	87.3	19.8	96	24	1.03
20	FOGGY BOTTOM	20	599,519	530,250	90.0	96.4	94.8	14.2	14	6	1.02
21	FOREST HILLS	33	1,167,342	1,100,000	98.4	95.2	94.8	6.0	31	2	1.00
22	FORT DUPONT PARK	99	174,428	169,000	89.9	92.2	89.5	14.6	80	19	1.03
23	FOXHALL	22	712,816	694,950	93.3	91.8	91.6	5.5	22	0	1.00
24	GARFIELD	21	968,672	929,000	96.1	94.7	93.5	8.8	18	3	1.01
25	GEORGETOWN	156	1,205,256	970,000	92.7	92.8	90.8	9.9	128	28	1.02
26	GLOVER PARK	66	683,706	650,000	95.9	95.3	94.3	8.5	56	10	1.01
27	HAWTHORNE	12	775,067	697,500	93.6	98.0	98.1	9.2	10	2	1.00
28	HILLCREST	80	280,120	279,500	91.4	94.0	89.1	20.7	53	27	1.06
29	KALORAMA	49	1,550,306	1,450,000	93.6	94.2	93.5	12.1	40	9	1.01
30	KENT	36	1,193,449	964,500	94.1	88.9	83.7	12.0	34	2	1.06
31	LEDROIT PARK	87	421,992	405,000	92.0	90.3	87.3	17.8	72	15	1.03
32	LILY PONDS	42	160,524	156,900	90.5	91.0	89.1	12.7	36	6	1.02
33	MARSHALL HEIGHTS	58	141,024	135,000	93.2	92.1	89.0	14.1	49	9	1.03
34	MASS. AVE. HEIGHTS	14	2,123,000	1,855,000	96.0	97.4	93.2	12.0	11	3	1.04
35	MICHIGAN PARK	23	316,076	317,000	92.3	93.2	90.7	12.2	17	6	1.03
36	MOUNT PLEASANT	97	663,519	656,000	96.8	96.7	95.1	12.5	75	22	1.02
37	N. CLEVELAND PARK	39	821,941	736,090	93.4	92.6	88.7	7.3	36	3	1.04
38	OBSERVATORY CIRCLE	20	1,198,670	1,074,500	96.3	96.9	94.7	13.3	15	5	1.02
39	OLD CITY #1	792	419,352	379,500	95.0	93.0	91.2	15.8	625	167	1.02
40	OLD CITY #2	353	601,658	529,000	94.0	92.4	90.9	17.6	278	75	1.02
41	PALISADES	53	794,299	730,000	96.5	95.5	93.9	9.6	45	8	1.02
42	PETWORTH	343	295,805	290,000	90.0	92.8	90.1	14.4	277	66	1.03
43	RANDLE HEIGHTS	63	164,153	161,500	94.2	95.2	92.0	15.0	47	16	1.03
46	R.L.A. (S.W.)	10	566,700	555,500	93.9	98.0	97.0	7.8	9	1	1.01
47	RIGGS PARK	81	223,796	230,000	93.3	98.0	95.6	11.7	63	18	1.02
48	SHEPHERD PARK	37	583,008	600,000	91.2	92.6	91.8	12.5	30	7	1.01
49	16TH STREET HEIGHTS	97	511,895	515,000	92.2	92.8	92.2	12.6	78	19	1.01
50	SPRING VALLEY	47	1,457,896	1,215,000	96.4	96.1	93.8	7.9	41	6	1.02
51	TAKOMA PARK	26	276,925	280,750	91.8	94.2	92.1	13.2	22	4	1.02
52	TRINIDAD	155	210,234	199,900	88.9	88.1	82.2	20.3	123	32	1.07
53	WAKEFIELD	21	788,831	750,000	95.5	95.4	94.4	8.2	17	4	1.01
54	WESLEY HEIGHTS	25	1,488,440	1,188,000	93.9	93.4	92.7	11.3	21	4	1.01
55	WOODLEY	12	1,201,856	1,155,550	96.4	91.4	91.0	9.3	11	1	1.00
56	WOODRIDGE	105	273,177	259,000	94.8	98.0	94.1	13.5	74	31	1.04
66	FORT LINCOLN	2	205,000	205,000	114.8	115	111.1	14.9	1	1	1.03

Sales Ratio Report Using Proposed 2006 Values

2004 SALES RATIOS BY NEIGHBORHOOD: CONDOMINIUMS

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	11	82,086	82,350	99.4	101	101.0	9.8	7	4	1.00
3	BARRY FARMS	34	112,021	111,050	99.6	101	100.5	7.0	25	9	1.00
4	BERKELEY	7	451,357	470,000	97.8	96.5	97.1	6.8	5	2	.99
5	BRENTWOOD	2	170,950	170,950	91.6	91.6	91.6	8.4	2	0	1.00
6	BRIGHTWOOD	12	243,750	283,750	92.2	90.2	91.1	4.9	12	0	.99
7	BROOKLAND	42	177,125	163,500	88.6	89.0	87.9	15.9	35	7	1.01
9	CAPITOL HILL	54	288,071	280,000	95.9	96.5	95.2	10.6	45	9	1.01
10	CENTRAL	282	445,085	359,000	92.3	92.9	91.6	9.4	247	35	1.01
11	CHEVY CHASE	18	259,494	254,000	95.2	98.9	95.8	12.3	14	4	1.03
13	CLEVELAND PARK	174	326,858	320,930	92.7	95.4	94.4	8.0	143	31	1.01
15	COLUMBIA HEIGHTS	135	283,843	250,000	95.0	95.0	94.0	10.2	115	20	1.01
16	CONGRESS HEIGHTS	14	72,007	64,050	94.1	97.7	98.0	9.2	10	4	1.00
18	DEANWOOD	4	131,143	128,500	96.1	103	103.7	9.1	3	1	.99
19	ECKINGTON	33	276,944	270,546	100.9	101	100.8	4.2	28	5	1.00
20	FOGGY BOTTOM	83	273,208	216,000	84.9	86.4	86.8	10.8	78	5	1.00
21	FOREST HILLS	74	317,677	347,000	90.4	91.2	90.4	9.0	68	6	1.01
22	FORT DUPONT PARK	3	140,950	167,500	99.7	96.4	94.5	7.9	2	1	1.02
24	GARFIELD	52	427,761	395,450	89.6	91.3	88.0	10.5	44	8	1.04
25	GEORGETOWN	79	759,665	459,000	92.3	94.5	93.2	8.6	66	13	1.01
26	GLOVER PARK	54	276,605	269,750	89.3	91.4	91.1	10.5	47	7	1.00
28	HILLCREST	63	90,221	92,000	87.6	90.4	86.8	20.5	48	15	1.04
29	KALORAMA	182	431,354	365,950	92.5	91.7	91.2	9.3	164	18	1.01
31	LEDROIT PARK	10	246,600	252,500	95.1	96.6	93.3	10.9	9	1	1.04
32	LILY PONDS	4	163,750	160,000	97.6	96.6	96.2	8.4	4	0	1.00
33	MARSHALL HEIGHTS	31	117,767	119,892	97.3	97.0	96.7	6.0	28	3	1.00
36	MOUNT PLEASANT	138	389,906	329,700	92.5	92.8	92.1	8.5	121	17	1.01
37	N. CLEVELAND PARK	6	342,392	358,500	99.9	105	102.7	13.4	4	2	1.02
38	OBSERVATORY CIRCLE	57	363,746	292,000	95.2	94.8	93.2	8.1	51	6	1.02
39	OLD CITY #1	261	308,637	295,000	99.5	101	100.0	10.6	178	83	1.01
40	OLD CITY #2	762	347,074	327,400	92.2	92.3	92.3	10.6	648	114	1.00
41	PALISADES	17	211,974	200,000	92.0	95.8	95.0	8.5	14	3	1.01
42	PETWORTH	9	148,004	154,500	103.9	98.3	94.9	14.4	7	2	1.04
43	RANDLE HEIGHTS	27	105,559	109,900	95.0	94.1	93.8	5.0	25	2	1.00
46	R.L.A. (S.W.)	93	285,091	256,000	93.3	92.8	91.9	13.3	75	18	1.01
49	16TH STREET HEIGHTS	6	155,750	155,750	97.2	99.5	99.1	4.3	5	1	1.00
53	WAKEFIELD	41	304,323	292,000	87.1	88.1	87.4	11.7	38	3	1.01
54	WESLEY HEIGHTS	74	393,781	399,450	93.3	93.9	91.4	8.0	66	8	1.03
56	WOODRIDGE	2	163,500	163,500	87.8	87.8	73.2	28.1	1	1	1.20
66	FORT LINCOLN	14	179,414	171,000	91.2	96.0	96.3	14.0	10	4	1.00

Sales Ratio Report Using Proposed 2006 Values

2004 SALES RATIOS BY NEIGHBORHOOD: MULTI-FAMILY

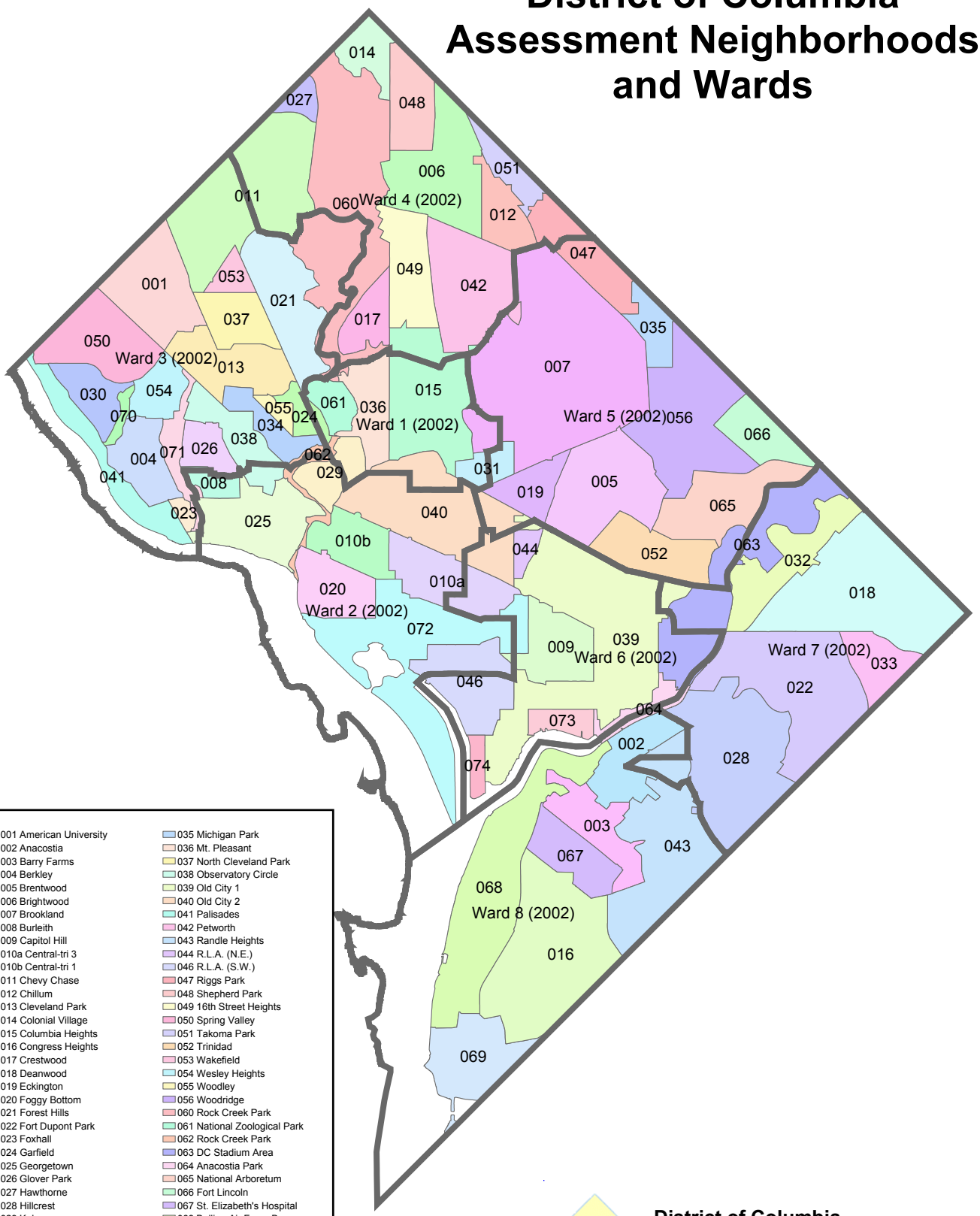
NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
2	ANACOSTIA	3	520,833	525,000	75.7	77.1	79.9	8.6	3	0	.97
5	BRENTWOOD	3	370,000	300,000	76.0	83.6	79.2	10.2	3	0	1.06
6	BRIGHTWOOD	1	1,200,000	1,200,000	87.6	87.6	87.6	.0	1	0	1.00
7	BROOKLAND	5	328,200	295,000	79.8	74.9	73.9	9.8	5	0	1.01
9	CAPITOL HILL	1	1,200,000	1,200,000	100.0	100	100.0	.0	1	0	1.00
10	CENTRAL	1	6,000,000	6,000,000	120.0	120	120.0	.0	0	1	1.00
15	COLUMBIA HEIGHTS	12	827,000	707,500	62.9	66.6	62.3	19.4	12	0	1.07
16	CONGRESS HEIGHTS	20	526,778	380,000	67.6	71.3	67.2	23.7	19	1	1.06
18	DEANWOOD	11	323,459	350,000	86.5	84.9	84.2	16.8	10	1	1.01
19	ECKINGTON	1	575,000	575,000	77.3	77.3	77.3	.0	1	0	1.00
22	FORT DUPONT PARK	1	266,000	266,000	60.6	60.6	60.6	.0	1	0	1.00
24	GARFIELD	1	9,750,000	9,750,000	100.0	100	100.0	.0	1	0	1.00
25	GEORGETOWN	1	1,575,000	1,575,000	43.1	43.1	43.1	.0	1	0	1.00
26	GLOVER PARK	1	928,000	928,000	44.9	44.9	44.9	.0	1	0	1.00
28	HILLCREST	6	468,867	335,000	61.6	61.5	64.3	22.8	6	0	.96
29	KALORAMA	4	1,412,775	1,137,500	100.0	107	106.9	23.2	3	1	1.00
32	LILY PONDS	1	350,000	350,000	98.5	98.5	98.5	.0	1	0	1.00
33	MARSHALL HEIGHTS	5	436,980	359,900	76.2	72.2	65.5	16.0	5	0	1.10
36	MOUNT PLEASANT	2	400,000	400,000	112.8	113	112.8	6.7	0	2	1.00
39	OLD CITY #1	2	558,000	558,000	77.0	77.0	71.2	22.0	2	0	1.08
40	OLD CITY #2	7	2,148,889	1,390,000	100.0	85.8	88.4	17.0	6	1	.97
42	PETWORTH	6	553,333	562,500	54.2	60.7	59.8	24.9	6	0	1.01
43	RANDLE HEIGHTS	6	395,000	287,500	63.5	64.6	67.2	18.2	6	0	.96
49	16TH STREET HEIGHTS	1	325,000	325,000	100.0	100	100.0	.0	1	0	1.00
52	TRINIDAD	1	750,000	750,000	77.5	77.5	77.5	.0	1	0	1.00
56	WOODRIDGE	1	300,000	300,000	55.2	55.2	55.2	.0	1	0	1.00

Sales Ratio Report Using Proposed 2006 Values

2004 SALES RATIOS BY NEIGHBORHOOD: COMMERCIAL

NB	NAME	SALES	AVE PRICE	MED PRICE	MEDIAN	MEAN	WEIGHTED	COD	< 105	> 105	PRD
1	AMERICAN UNIVERSITY	4	20,062,500	1,425,000	58.5	64.4	97.6	31.8	4	0	.66
2	ANACOSTIA	4	160,250	157,500	85.4	99.8	103.3	27.3	3	1	.97
3	BARRY FARMS	2	3,626,500	3,626,500	84.3	84.3	69.0	19.5	2	0	1.22
5	BRENTWOOD	12	739,545	527,520	98.0	94.6	104.9	27.1	7	5	.90
6	BRIGHTWOOD	7	1,451,429	515,000	92.9	88.0	93.0	8.2	7	0	.95
7	BROOKLAND	19	1,039,472	320,000	81.0	83.5	71.2	20.8	16	3	1.17
9	CAPITOL HILL	9	660,667	549,000	99.3	90.0	84.3	10.0	9	0	1.07
10	CENTRAL	48	36,779,035	19650000	98.2	92.9	94.3	9.0	45	3	.98
11	CHEVY CHASE	4	671,590	690,680	75.5	79.0	79.5	44.4	3	1	.99
12	CHILLUM	2	1,233,000	1,233,000	94.9	94.9	89.8	6.5	2	0	1.06
15	COLUMBIA HEIGHTS	41	390,062	275,000	59.6	74.2	72.9	43.0	32	9	1.02
16	CONGRESS HEIGHTS	4	135,513	136,025	100.2	102	106.4	27.3	2	2	.96
18	DEANWOOD	13	346,800	225,000	69.5	77.3	73.4	26.8	11	2	1.05
19	ECKINGTON	9	350,044	342,000	78.6	72.5	74.1	18.0	9	0	.98
20	FOGGY BOTTOM	8	23,297,217	1,097,500	97.9	93.8	93.0	5.4	8	0	1.01
21	FOREST HILLS	2	10,658,240	10658240	110.3	110	100.3	9.4	1	1	1.10
22	FORT DUPONT PARK	2	322,600	322,600	100.0	100	54.1	53.4	1	1	1.85
23	FOXHALL	1	2,700,000	2,700,000	60.6	60.6	60.6	.0	1	0	1.00
24	GARFIELD	2	9,225,000	9,225,000	92.6	92.6	86.3	8.0	2	0	1.07
25	GEORGETOWN	15	15,799,000	950,000	65.4	78.0	97.4	42.7	13	2	.80
29	KALORAMA	2	1,465,258	1,465,258	73.1	73.1	85.4	36.8	2	0	.86
30	KENT	1	650,000	650,000	67.6	67.6	67.6	.0	1	0	1.00
31	LEDROIT PARK	4	755,000	317,500	90.2	93.2	95.6	16.8	3	1	.98
33	MARSHALL HEIGHTS	1	89,000	89,000	44.7	44.7	44.7	.0	1	0	1.00
35	MICHIGAN PARK	1	145,000	145,000	70.3	70.3	70.3	.0	1	0	1.00
36	MOUNT PLEASANT	9	1,296,889	800,000	64.4	76.2	83.4	30.8	9	0	.91
39	OLD CITY #1	60	3,921,510	332,500	69.8	73.1	94.5	24.1	56	4	.77
40	OLD CITY #2	71	1,130,471	630,000	76.3	78.6	78.9	26.9	65	6	1.00
41	PALISADES	1	2,300,000	2,300,000	75.4	75.4	75.4	.0	1	0	1.00
42	PETWORTH	9	300,233	293,000	72.7	72.2	68.1	24.5	8	1	1.06
43	RANDLE HEIGHTS	1	175,000	175,000	105.4	105	105.4	.0	0	1	1.00
46	R.L.A. (S.W.)	1	40,000,000	40000000	99.3	99.3	99.3	.0	1	0	1.00
47	RIGGS PARK	1	400,000	400,000	120.1	120	120.1	.0	0	1	1.00
48	SHEPHERD PARK	2	574,500	574,500	93.9	93.9	105.8	41.3	1	1	.89
49	16TH STREET HEIGHTS	4	716,250	300,000	87.8	87.7	95.2	14.0	4	0	.92
51	TAKOMA PARK	2	1,125,000	1,125,000	96.1	96.1	106.0	13.4	1	1	.91
52	TRINIDAD	6	145,000	77,500	84.0	83.7	63.7	41.7	3	3	1.31
53	WAKEFIELD	2	832,500	832,500	109.4	109	107.5	8.6	1	1	1.02
56	WOODRIDGE	8	556,819	421,500	81.4	87.2	74.8	22.3	6	2	1.17

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