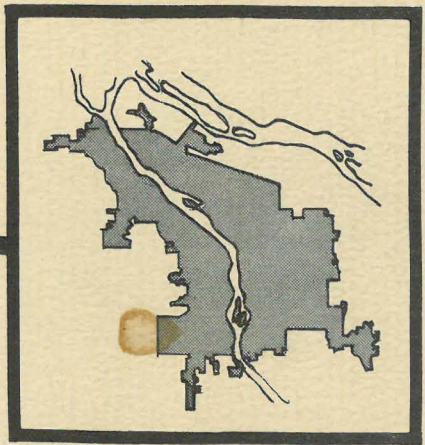


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# TECHNIQUES FOR MEASURING BLIGHT

A DESCRIPTION OF THE APPRAISAL METHODS USED TO MEASURE URBAN BLIGHT IN PORTLAND



1965  
COMMUNITY RENEWAL PROGRAM

PORTLAND CITY PLANNING COMMISSION

FROST

TECHNIQUES FOR MEASURING BLIGHT

A Description  
of the  
Appraisal Methods Used  
to  
Measure Urban Blight  
in  
Portland

The Community Renewal Program  
City Planning Commission  
Portland, Oregon

May, 1965

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## INTRODUCTION

Prior to laying out a long-range renewal program for Portland, an inventory of blighted conditions had to be made for the entire city. Few standard techniques exist for measuring blighted conditions and it was necessary that the Community Renewal Program (CRP) develop appraisal methods applicable to Portland. This report describes how appraisal systems were developed which identify and measure nonresidential blight and residential structural blight. The report also outlines the procedures to be followed when appraising these two kinds of urban blight.

## NONRESIDENTIAL CONDITION APPRAISAL

Locating and measuring nonresidential blight was not an easy task. In 1963, when Portland's CRP started, very little basic research had been done anywhere in the United States which explained the nature of nonresidential blight. Therefore, the CRP had to first define nonresidential blight before it developed an appraisal system.

It was commonly accepted that nonresidential areas are plagued by structural and environmental blight. Industrial and commercial buildings deteriorate at varying rates depending upon the type of original construction, the degree of occupancy abuse, and the extent of building maintenance. Industrial and

commercial environments are blighted if there are inefficient street layouts, archaic land platting, traffic congestion, limited access to transportation routes, lack of off-street parking and loading facilities, inadequate utilities, limited expansion space and the presence of smoke, noise, vibrations and other nuisance elements.

In addition to the deterioration of structures and environments, nonresidential areas also suffer from economic and functional blight. Economic blight results from reduced demands for products or services. Decreased demands may occur from a decreasing population, declining purchasing power, or reduced traffic volumes, all contributing to a lower total market demand. Functional blight stems from locational or structural obsolescence. Older establishments may lack good access to a freeway interchange, or their building design may not incorporate modern manufacturing or marketing techniques. These old buildings are functionally obsolete and they lose their competitive advantages to newer buildings.

A method was derived to appraise the composite effect of all four types of blight for each nonresidential property in Portland. It was thought that the depreciation of commercial and industrial property and improvements might offer a good indication of nonresidential blight. It was concluded, after studying County assessment data, that the factors utilized in an adjustment to the depreciation of nonresidential property are

the same factors that ascribe to nonresidential blight; and that the adjustment process could be interpreted in such a way that the location and degree of blight could be determined.

The Multnomah County Assessor's Office gives each non-residential property in Portland a depreciation value representing the ratio of market value to replacement cost. To maintain a realistic depreciation value, an adjustment is periodically made to update this value. The adjustment is made because replacement costs continually lose authenticity as a measure of real market value once the improvement has been constructed.

The adjustment calculation is an involved and complicated process. The assessors collect detailed information for each property and then use a variety of approaches to adjust the depreciation value. Along with factor tables, experienced judgement is used to figure the net adjustment values. The process of adjustment is constantly underway to keep pace with the dynamics of nonresidential activity.

For every nonresidential parcel, two factors enter into the adjustment calculations:

- (1) Age factor - a value representing the structure's age and its observed physical condition.
- (2) Condition factor - A value representing the economic, functional, and environmental conditions of the property; as well as further appraisal of structural conditions.

Together, the age and condition factors include appraisals of all four types of nonresidential blight: structural, environmental, economic and functional.

Age factors and condition factors for each property were assigned ranks, the higher the value of the rank, the more blighted is the property. Age and condition ranks were then combined, the total rank equating to one of five condition ratings: excellent, good, fair, poor and bad.

Excellent condition ratings are given to establishments that are located in sound modern buildings. The establishments are not adversely affected by their surroundings and they are producing profitable returns on their investments. Bad condition ratings result when nonresidential buildings contain serious structural deficiencies and are functionally obsolete. The establishments are located in undesirable environments and earn marginal profits for their owners or have gone out of business. Good, fair and poor condition ratings indicate varying degrees of blight between the excellent and bad ratings.

Because urban conditions change quite drastically over a period of a few years, it is advised that the useful life of the initial blight appraisal be limited to this decade. After 1970, nonresidential conditions should be obtained from a new citywide appraisal study. It is also urged that the second study, and all subsequent studies, be prefaced with statistical

analyses of the assessment data before rating systems are adopted. This is desirable because the assessors are constantly improving their methods of data collection and adjustment of the depreciation value and current age and condition ranks will not be valid for a period of more than a few years.

#### Adopting the Rating System

A statistical analysis of assessment data was used to develop the condition rating system. The following section reviews some of the more important findings of the study and demonstrates how they shaped the appraisal procedure.

Values for the condition factor were lower than for the age factor, the mean value being +8 for the condition factor and +35 for the age factor. If net adjustment values were used to establish the condition ratings, the age factor values would diminish, and very likely hide, the significance of the condition factors. To avoid this situation the net adjustment value was not used. Instead, separate ranks were assigned to age and condition factors. Then the two ranks were combined into a total condition rating, giving equal importance to each factor.

The maximum depreciation is 100%. The progressive increase for the value of the age factor reaches a high of 85%. Thus, a very old building is not given a high value for the condition



factor because the age factor is already large and the assessor has no need to depreciate a building beyond 100%. To compensate for this situation, the age factor rank has been weighted at the higher end of the value scale.

Newer buildings, four or five years old, are given very low values for the condition factor, often the values are negative, meaning that the values have been enhanced. The values, however, cannot be so low that negative depreciations result, making the building assessments higher than their fair market values. The rank values could not allow for this fact, so a correction was made by automatically giving buildings up to five years old, an excellent condition rating. If the condition factor had an unusually high value, indicating the presence of severe environmental deficiencies, the correction was ignored and the regular ranking was used.

To make certain that the ranks for age and condition factors could be combined without distorting the meaning of the condition rating, frequency distributions were made from a random selection of ranks. It was learned that distribution curves for the age and condition ranks were both normal and skewed slightly to the right. The mode appeared in the second rank for both factors, and the median for each occurred in the third rank. Therefore, it was concluded that the ranks for the two

factors could be combined into a single condition rating without introducing any inaccuracies.

#### Condition Rating Procedure

Assessment data is recorded on cards which are stored in a power file located in the Multnomah County Assessors Office. At the present time, the file contains both old and new assessment cards, the old cards are being replaced gradually as properties are reassessed. Both sides of the new card are shown in Figures 1 & 2. The old card has its front side illustrated in Figure 3. To obtain cards, one must consult the supervisor in charge of the power file.

The following steps describe the condition rating procedure:

A. If a few individual parcels are to be appraised, obtain the correct cards by furnishing the file supervisor with the legal description of each parcel (addition, block, lot) found on the zoning quarter-section maps. If a larger area is being appraised, one needs only to provide the addition and all nonresidential cards in the addition will be obtained in a packet. The legal description is noted at (1) on the cards.

B. Check the business (2) to make certain that the use is nonresidential, the assessors consider apartments as commercial uses and so they appear on these cards.

C. Check the date (3) to make sure that the assessment has been done recently, it should not be older than six years. If an occasional card fails to meet this requirement, the information must be updated using an adjusted age factor value and a condition factor value that is comparable to adjacent nonresidential properties.

D. On the zoning map being used to note the assessment data, enter in the appropriate parcel, the value for the age factor (4).

E. Enter below or to the right of the age factor, the value of the condition factor (5). Usually this value has been totaled for function and economic (F & E), district (Dist.), and condition (Cond.). If separate values appear, they should be totaled and then entered onto the zoning map. This value is to be prefixed with a plus sign.

F. If there is a condition value for enhancement (E. H.) at (6), it should be entered below or to the right of the age factor, and this value is to be prefixed with a minus sign. Should there be two condition factors entered (5 & 6), the difference between the two should be calculated and placed on the zoning map prefixed with the correct sign.





# Figure 3 OLD NONRESIDENTIAL ASSESSMENT CARD

MULTNOMAH COUNTY DIST. \_\_\_\_\_ YEAR 19 **3**

ADDITION **1** LOT \_\_\_\_\_ BLK. \_\_\_\_\_

TAX LOT \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_

ADDRESS **2** \_\_\_\_\_

BUSINESS		CLASS	STORIES	
<b>FOUNDATION</b>	<b>MAIN WALL</b>	<b>INTERIOR</b>	<b>WIRING</b>	<b>MISCELLANEOUS</b>
CON. _____	CON. _____	L&P SHT. RK _____	LIGHT _____	INSUL. _____
BRK. _____	BRK. _____	PLY _____	FIXT _____	FIRE ESC. _____
FRM. _____	TILE <b>8</b> _____	PAPER PAINT _____	<b>PLUMBING</b>	
<b>BASEMENT</b>	STL _____	TRIM - FIR - HDW. _____	BATH TUB _____	SPR. SYS. _____
WHOLE _____	SD SK. SG. STC. _____	<b>HEAT &amp; A.C.</b>	LAVS. _____	VENTS. _____
X _____	PARTY _____	STEAM - HOT WATER _____	TOILET _____	MARQ. _____
VAULTED _____	<b>FRONT</b>	CENT. STAT _____	SINK _____	SKYLIGHTS _____
CON. FLR. _____	CON. _____	SUSP. RAD. _____	W. H. _____	H.W. FLRS _____
<b>FLOORS</b>	BRK. _____	OIL - GAS _____	SHOWER _____	TERRAZO _____
MEZZ _____	TILE _____	PIPE PIPELESS _____	LD. TRAY _____	LINO. _____
<b>ROOF</b>	STL _____	TRUNK SEMI _____	HOSE BIBS _____	TILE - A - V - R _____
TRUSSED _____	FRM. _____	FAN _____	STD. PIPE _____	STAIRWAYS _____
F - G - H _____	SD SK. SG. STC. _____	AIR COND. _____	NO. FIX. - CL. _____	RAMPS _____
B. U. COMP. SHG. _____	CORNICE _____	CHIMNEY _____	<b>OUTSIDE</b>	ELEV. _____
<b>ROOMS</b>	GLASS _____	FIREPLACE _____	CON. _____	SHADES _____
STORES _____	STORE FRONTS _____	<b>GAR.</b>	B. T. _____	<b>BUILT</b>
OFFICES _____	<b>OPENINGS</b>	CONST. _____	PUMP BASE _____	<b>7</b>
ROOMS _____	<b>PARTITIONS</b>	ROOF _____		<b>PERMIT</b>
APTS _____	<b>TILE - BI'S</b>	FDN. _____		<b>R/A - R/M</b>
<b>BATH RMS.</b>		<b>PARTIAL</b>		<b>MAP No.</b>
		YR _____		
		AMT. _____		

AREA \_\_\_\_\_ FACTOR \_\_\_\_\_

GAR. \_\_\_\_\_ X \_\_\_\_\_ AREA \_\_\_\_\_ FACTOR \_\_\_\_\_

\_\_\_\_\_ X \_\_\_\_\_ AREA \_\_\_\_\_ FACTOR \_\_\_\_\_

YEAR	DEP.	ADJUSTMENT	TOTAL REP. COST
MKT. VAL.		AGE <b>4</b> _____	DEPR. _____
YEAR	DEP.	F. & E. _____	DEPR. VALUE _____
MKT. VAL.		DIST. <b>5</b> _____	F. M. VALUE _____
YEAR	DEP.	COND. _____	
MKT. VAL.		E. H. <b>6</b> _____	LAND VALUE _____
		NET _____	

G. To derive a condition rating, first obtain ranks for the age and condition factors using the following tables:

<u>Age Factor</u>		<u>Condition Factor</u>	
Rank	Value	Rank	Value
1	1 to 15%	0	-31% less
2	16 to 30	1	-30 to - 6
3	31 to 45	2	- 5 to + 5
4	46 to 55	3	+ 6 to +15
5	56 to 66	4	+16 to +25
6	67 to 75	5	+26 to +50
7	76 to 85	6	+51% more

H. Next add the age and condition rank figures and refer to the table below to obtain a condition rating for the property.

<u>Combined Ranks</u>	<u>Condition Rating</u>
1 - 2	Excellent
3 - 4	Good
5 - 6	Fair
7 - 8	Poor
9 - 10	Bad

Note: If the parcel is large and contains more than one major building, individual condition ratings can be calculated or an average condition rating can be calculated for the entire parcel.

RESIDENTIAL CONDITION APPRAISAL - SINGLE-UNIT STRUCTURES

The 1960 U. S. Census rated every housing unit in Portland as being either sound, deteriorating or dilapidated. Housing units were further noted as having all, or lacking some or all, plumbing facilities. For the purpose of obtaining a general gauge to the amount and location of Portland's housing stock that is not safe, sanitary, or sound, all housing units that were judged by the 1960 Census as being either deteriorating, dilapidated, or sound but lacking some or all plumbing facilities, were considered to be substandard.

The census appraisal of housing conditions proved useful to the CRP, but it had some shortcomings. The appraisal is now more than five years old. Conditions can rapidly change, and an up-dated check on residential conditions is desirable. Also, the appraisal was the only item of census data that relied to some extent upon the subjective judgements of several hundred enumerators. Therefore, it would be good to check the census housing appraisal for consistency and accuracy. Finally, the census appraisal did not show much relative degree of substandardness, a house was either good or bad. It would help to know if a residential area could be rehabilitated or whether it must be cleared and redeveloped. To do this would require that structures be categorized into several condition ratings, not just two.

The Multnomah County Assessors data was studied to determine if it could be used to appraise detailed housing conditions. There were several reasons why the assessors records were investigated. The assessors obtain information for every residential



structure in the city. The assessment information is usually maintained on an up-to-date basis. Most important, the information has been compiled by trained assessors using uniform appraisal standards.

Like nonresidential property in Portland, residential property is depreciated to show the degree of environmental and structural deterioration, functional obsolescence, and economic decline. The depreciation of residential property is also periodically adjusted to insure that it represents the current fair market value of the property. The adjustment process is greatly influenced by the building's age and condition, so it is the best gauge of structural blight. The net adjustment value was one of the factors used in the rating system.

The other item of assessment data utilized in the rating system was the reproduction cost of each residential structure. The cost represents the amount of money it would take to build the same house today, using current material and construction costs. This item was used to measure the quality of original construction, showing the type of workmanship and materials used in constructing the building. A house that could be reproduced for only \$5,000 might be depreciated 50%, but its condition would be much poorer than a house that could be built for \$25,000 and has been depreciated 50%. The replacement cost does not depend solely upon the quality of the building,

it has some bearing on size. However, it is reasonably assumed that even if the size of the structure is large, and the replacement cost is great, the quality of the original construction is good. A person investing a large amount of money in a home would demand good quality regardless of the size of the structure.

The net adjustment and replacement cost were assigned ranks which were then combined and equated to a condition rating. Five condition ratings were used: excellent, good, fair, poor, and bad. Excellent ratings indicate that the residential structure is in very good condition and quite new, and is located in a pleasant area. A good rating is given to a home not having any serious faults and is about ten to twenty years old. Fair ratings are assigned to homes having a few minor deficiencies or to those in quite good condition but which are getting rather old. Poor ratings usually indicate that the building is both old and requires major repairs. Bad ratings are given to very old structures having several serious deficiencies - these buildings would usually be economically unfeasible to rehabilitate.

The nonresidential study concluded that the results of the initial condition appraisal can not be used indefinitely and that as new appraisals are made, new methods of rating conditions must be considered. This conclusion also applies to the residential appraisal. The current appraisal should remain valid for the rest of the decade.

## Adapting the Rating System

This section briefly describes how ranks were assigned to the adjustment and replacement factors. The method is based upon a statistical study of randomly selected residential properties.

Frequency distributions were made for net adjustment and replacement cost factors of the selected properties. Both factors had normal distributions, the means occurring at 65.1% for the adjustment factor, and at \$11,700 for the replacement factor. The mean value for the replacement cost was given a rank of 4.0, and the adjustment value was assigned a rank of 8.0 at its mean. The adjustment factor was given twice the weight of the replacement value. This was done because the adjustment factor contained the two best gauges of structural blight, age and condition, and required the greatest weight.

Rank values for the adjustment factor change once for every five percentage points of depreciation - from 100% to 30.5%. Ranks were discontinued under 30.5% because below that level all structures, regardless of replacement cost, would be in very bad shape. The statistical testing shows a 90% probability that a house will not have a net adjustment lower than 34.7% and a 95% probability that it will not be lower than 28.1%.

Rank values for the replacement cost factor change twice for every change in an adjustment rank (the previous paragraph explained why this is done). As the rank decreases, the replacement cost covers a progressively greater value range. For instance, a rank of 7.0 is given to a structure that can be replaced for \$3,000 to \$4,000, a difference of \$1,000. At a rank of 1.0 the replacement value can vary between \$22,800 and \$25,000, a difference of \$2,200. This is done because the distribution curve of replacement cost skews towards the higher end of the value scale and to match replacement ranks evenly with adjustment ranks it is necessary to include progressively more value between each class boundary as the rank decreases.

The above ranking procedure was checked in the field using nine different sections of the city as sample areas: Astor, Greater Albina, Central Albina, Eastmoreland, Ladds, Laurelhurst, Sellwood, St. Johns, and Waverleigh. For those persons unfamiliar with Portland or with these neighborhoods, the areas include the widest possible range of residential conditions shown by the census appraisal. Some of the areas have been recently checked by city building inspectors on a house-to-house basis and therefore, the rating system could be cross-referenced with these detailed inspections.

In all areas, results of comparing assessors ranking of housing conditions with the inspection surveys were very favorable. In fact, of all the structures checked, there was only one that rated poorly and appeared to be in good condition. Closer inspection revealed that extensive home improvements had been made after the last adjustment had been made to the depreciation of the building.

#### Condition Rating System

Assessment data is recorded on cards which are stored in a power file located in the Multnomah County Assessors Office. At the present time, the file contains both old and new assessment cards, the old cards are being replaced as the properties are reassessed. Both sides of the new card are shown in figures 4 & 5. The old card is illustrated in figure 6. To obtain cards, one must consult the supervisor in charge of the power file.

The following steps describe the condition rating procedure:

A. If a few individual parcels are to be appraised, obtain the correct cards by furnishing the file supervisor with the legal description of the parcels - they can be found on the zoning quartersection maps, (Addition, Block, Lot). If a larger area is being appraised, one needs only to provide the name of the addition and all residential cards in that addition will be obtained at once. The legal description is found at (1).

B. Check the date (2) to make sure that the assessment has been done recently, it should not be older than six years. If an occasional card fails to meet this requirement, the information must be updated using some other adjustment procedure.

C. On the zoning map being used to note the assessment date, enter in the correct parcel, the value for the replacement cost in hundreds of dollars (3).

D. If an adjusted replacement cost value is entered (4), use it instead of (3).

E. Enter the net adjustment value (5) in the correct parcel.

F. Include in the correct parcel, the year built (6). Although this figure is not used in the rating system, it is a valuable piece of information that is easily obtained, and one that can be mapped and analyzed independently.

G. To derive a condition rating, first obtain ranks for the adjustment and replacement factors using the following tables:

<u>Replacement Cost</u>		<u>Net Adjustment</u>	
Dollars (\$100's)	Rank	Rank	Percent
\$less - 29	7.5	15	less - 30%
30 - 40	7.0	14	31 - 35
41 - 52	6.5	13	36 - 40
53 - 65	6.0	12	41 - 45
66 - 79	5.5	11	46 - 50
80 - 94	5.0	10	51 - 55
95 - 110	4.5	9	56 - 60
111 - 127	4.0	8	61 - 65
128 - 145	3.5	7	66 - 70
146 - 164	3.0	6	71 - 75
165 - 184	2.5	5	76 - 80
185 - 205	2.0	4	81 - 85
206 - 227	1.5	3	86 - 90
228 - 250	1.0	2	91 - 95
251 - more	0.5	1	96 - 100

H. Next add the adjustment and replacement rank figures and refer to the table below to obtain a condition rating for the property.

<u>Combined Ranks</u>	<u>Condition Rating</u>
1.5 - 10.0	Excellent
10.5 - 14.0	Good
14.5 - 16.0	Fair
16.5 - 18.0	Poor
18.5 - 22.5	Bad

## RESIDENTIAL CONDITION APPRAISAL - MULTI-UNIT STRUCTURES

Separate rating systems were derived for residential and non-residential areas. Two systems were required because of the major differences between nonresidential and residential assessment data and depreciation procedures. These differences, in turn, stem from the dissimilar functioning of residential and nonresidential land uses.

Differences among assessment data and depreciation procedures were also observed between single-unit and multi-unit residential structures. Single-family houses are primarily built to provide shelter. Multi-unit structures, of course, provide shelter, but they also earn continuing incomes for their owners. Thus, a multi-unit building is a combination residential and commercial land use. These structures are assessed in the nonresidential department except for duplexes and flats, which are assessed in the residential department. However, single-unit and duplex buildings in commercial or industrial zones are also assessed in the nonresidential department.

This section of the report explains how the previously outlined condition rating procedures can be adapted to rate conditions of multi-unit residential structures.

All multi-unit structures which are assessed using the residential cards (figures 4, 5, & 6), can follow the same steps described for the single-unit rating procedure (see pages 18, 19, & 20), with one important exception. In step G., rather than use the total replacement cost for the structure, divide the replacement cost by the number of units contained in the structure. Then, with the replacement cost per dwelling unit, find the correct rank and proceed with step H.







# Figure 6 OLD RESIDENTIAL ASSESSMENT CARD

ASSESSOR FORM 67

MULTNOMAH COUNTY MAP \_\_\_\_\_ DISTRICT \_\_\_\_\_ CLASS \_\_\_\_\_ STORIES 19 **2**

ADDITION **1** LOT \_\_\_\_\_ BLK \_\_\_\_\_

TAX LOT \_\_\_\_\_ SEC \_\_\_\_\_ TOWNSHIP \_\_\_\_\_ RANGE \_\_\_\_\_ Adj — Base +

ADDRESS \_\_\_\_\_

FDN. Con Br Blk Wp BSMT. Full ¼ ½ ¾

BSMT.—Rooms \_\_\_\_\_ Lav. Bath \_\_\_\_\_

FLOORS D S Lino Tile Hdw Fir Con

ROOF G H F Alum Comp Shg Shk Tile Built-Up

EXTER. D S Fr Blk Comp Stuc Brk

INTER. L&P Dry-Wall Trim-Fir Hdw B.I. Avg

PLUMB.—Cl Sink D.W W.H. Toilet Shwr

BATHTUB W.B. Laun. No. Fixt.

HEAT Hw Pkg Pipe Floor Oil Gas Elec Solid

CHIMNEY Fireplace Dbl Tpl Flue

ATTIC UNF., FIN. 2nd STY. Br Bath Lav H

BAYS \_\_\_\_\_ DORMERS \_\_\_\_\_

MISC. \_\_\_\_\_

OUTSIDE Con B.T. Sprinkler

FIRST FLOOR	GARAGE	MISC.	TOTAL	SUB	DWG	Gar	MISC
Rec Hall	CLASS _____						
Serv Hall	TYPE _____	DIMEN _____ X					
Liv Rm	DIMEN _____ X	FDN _____					
Din Area	FDN _____	CONST _____					
Fam Rm	FLOOR _____	ROOF _____					
Nook	CONST _____		TOTAL RC _____				<b>3</b>
Kitchen	ROOF _____		ADJ VAL _____				<b>4</b>
Utility	MISC _____		DEP VALUE _____				
Bedroom							
Bath, Lav							
Den							

PARTIAL	BUILT <b>6</b>	ADJUSTMENT
Yr _____	PERM _____	Age _____
Amf _____	Prev App _____	F&E _____
Yr _____	DR/A RM MO	Dist _____
Amf _____		Cond _____
Yr _____	Style G A P	
Amf _____	Cond G A P	
Yr _____	Site G A P	Net <b>5</b>
Amf _____		

FAIR MARKET VALUE

LAND \_\_\_\_\_ IMPS \_\_\_\_\_

For those multi-unit structures having their assessment data on nonresidential cards (see figures 1, 2, & 3) the following procedure should be followed:

A. Acquire the correct cards, using the legal descriptions (1).

B. Check the business (2), making sure it is a residential structure.

C. Check the date (3), to make certain that it is not older than six years, if it is then the card information must be updated using another adjustment procedure.

D. Enter in the correct parcel on the zoning map, the year assessed (3), the year built (7), and the age factor (4).

E. Subtract the year built from the year assessed to determine the age of the building at the time of assessment. Consult the age depreciation schedule in figure 7, and under the age column find the building age (3 minus 7), and compare the age factor value (4) with the three values shown on the schedule. The value on the schedule which is closest to (4) will determine whether the building is good, fair, or poor.

F. Because this system lacks excellent and bad condition ratings, these ratings are not comparable to the two other rating systems outlined earlier in the report. However, if the remarks (8) in figure 1, or on the reverse side of the card in figure 3, elaborate about structural conditions, the researcher can also assign an excellent or bad condition rating to the building.

DEPRECIATION SCHEDULE

FOR DWELLINGS AND FRAME BUILDINGS

<u>Age</u>	<u>Good Condition</u> 1.7%	<u>Average Condition</u> 2.0%	<u>Poor Condition</u> 2.3%	<u>Age</u>	<u>Good Condition</u> 1.7%	<u>Average Condition</u> 2.0%	<u>Poor Condition</u> 2.3%
1	3.4	4.0	4.6	41	51.5	57.1	62.3
2	5.0	5.9	6.8	42	52.3	58.0	63.2
3	6.6	7.8	8.9	43	53.1	58.8	64.0
4	8.2	9.6	11.0	44	53.9	59.6	64.8
5	9.8	11.4	13.0	45	54.7	60.4	65.6
6	11.3	13.2	15.0	46	55.5	61.2	66.4
7	12.8	14.9	17.0	47	56.3	62.0	67.2
8	14.3	16.6	18.9	48	57.0	62.8	68.7
9	15.8	18.3	20.8	49	57.7	63.5	68.7
10	17.2	19.9	22.6	50	58.4	64.2	69.4
11	18.6	21.5	24.4	51	59.1	64.9	70.1
12	20.0	23.1	26.1	52	59.8	65.6	70.8
13	21.4	24.6	27.8	53	60.5	66.3	71.5
14	22.8	26.1	29.5	54	61.2	67.0	72.2
15	24.1	27.6	31.1	55	61.9	67.6	72.8
16	25.1	29.0	32.7	56	62.5	68.2	73.4
17	26.1	30.4	34.2	57	63.1	68.8	74.0
18	28.0	31.8	35.7	58	63.7	69.4	74.6
19	29.2	33.2	37.2	59	64.3	70.0	75.2
20	30.4	34.5	38.6	60	64.9	70.6	
21	31.6	35.8	40.0	61	65.5	71.2	
22	32.8	37.1	41.4	62	66.1	71.8	
23	33.9	38.4	42.7	63	66.7	72.4	
24	35.0	39.6	44.0	64	67.3	73.2	
25	36.1	40.8	45.3	65	67.9	73.5	
26	37.2	42.0	46.6	66	68.4	74.2	
27	38.3	43.2	47.8	67	68.9	75.4	
28	39.3	44.3	49.0	68	69.4	76.2	
29	40.3	45.4	50.2	69	69.9		
30	41.3	46.5	51.3	70	70.4		
31	42.3	47.6	52.4	71	70.9		
32	43.3	48.6	53.5	72	71.4		
33	44.3	49.6	54.6	73	71.9		
34	45.3	50.6	55.6	74	72.4		
35	46.2	51.6	56.6	75	72.9		
36	47.1	52.6	57.6	76	73.4		
37	48.0	53.5	58.6	77	73.9		
38	48.9	54.4	59.6	78	74.4		
39	49.8	55.3	60.5	79	74.9		
40	50.7	56.2	61.4	80	75.4		

## Measuring Blight.

depreciation value representing the ratio of  
market value to replacement cost

↓  
adjustment

a) age

b) Condition

} assigned ranks - the  
higher the value the  
higher the blight

age + condition ranks then +  
w/ five ratings excellent to bad

## Residential-

net adjustment + replacement cost  
were assigned ranks which were  
then combined & equated to a condition  
rating

Type

Business

YEAR 19

Address

CLASS										% ADJ.		SQ. FT. ITEMS		LUMP SUMS
STORIES										+	-	+	-	
FDN.	CON.	BRK.	FR.											
BSMT.	WHOLE		X		VAULTED			CON. FLR.						
FIRST FLR. CON.	MILL		HWD.		AT			W. TO W.						
ROOF	TRUSSED		INSUL F G H		BU			COMP. SHG.						
EXT.	CON.	BRK.	STL.	FRM.	SD	SK	SG	STUC.						
INT.	L & P	SR	PLY.	PAP	PNT.		TRIM FIR	HWD.						
ELEC. - AV +														
TUB	LAV.	TOIL	SINK	WH	SHWR.	LT	UR	FNT.						
A/C HEAT	ELEC.	OIL	GAS	STM.	HW	SUS. R	FAN	CH	FP					
UPPER FLOORS	CON.	MILL						MEZZ.						
ADD'S														
STORES														
OFFICES			BLT. INS.											
RMS.			SPR. SYS.		VENT.									
APTS.			MARQ.		SKYLT.									
BDRM.														
BDRM.			STAIRS											
BDRM.														
BATH			FIRE ESC.		ELEV.									
BASE FACTOR \$ _____ X _____ % = \$ _____										TOTALS	+			
											-			
										NET ADJ.				
BUILDING AREA _____ SQ. FT. X \$ _____ FACTOR = _____														
PER SQ. FT. FACTOR \$ _____										REP. COST	TOTAL BASE COST →			
										INDEX	%	-	QUAL.	% = %
AREA _____													ADJ. FACTOR	
GAR. _____ X _____ AREA _____													FACTOR	
YARD _____ X _____ AREA _____													FACTOR	
										BUILT	TOTAL REPL. COST			
										PERMIT	DEPR. COST APPROACH			
											DEP. REPL. COST			
CONST. _____										R/A	INCOME APPROACH			
ROOF _____										R/M	BLDG. RESIDUAL			
										ADJUSTMENT				
FDN. _____										AGE	MARKET APPROACH			
											BLDG. RESIDUAL			
										PHYS.	IMPROVEMENTS			
											VALUE CONCLUSION			
YEAR _____										FUNC.	19 _____	DEPR.	F.M. VALUE	
M. V. _____														
DATE _____										ECON.	19 _____	DEPR.	F.M. VALUE	
INITIALS _____										NET	19 _____	DEPR.	F.M. VALUE	

P A R T I A L







