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SCHEDULE OF VALUES

GUILFORD COUNTY
NORTH CAROLINA

2022

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Process for Adoption of Schedule of Values

The Board will consider adopting a proposed Schedule of Values, Standards, and Rules for Guilford County's 2022 reappraisal, as prescribed by North Carolina General Statute 105-317. Guilford County's next countywide reappraisal will become effective on January 1, 2022. Guilford County has approximately 215,000 separate parcels of land which, under North Carolina law, must be appraised at 100% of market value, as of the effective reappraisal date.

To that end, Guilford County staff has worked for many months analyzing data derived from real estate sales, building cost data, and income and expense statements from income producing properties in the county. This has resulted in the creation of the proposed Schedule of Values, Standards and Rules that will be utilized, after it is approved by the Board of Commissioners, to generate market value appraisals for all real property in Guilford County. Individuals who buy and sell real estate in the open market establish the market value. Market value is not set by the Guilford County Tax Department.

Also included in the proposed Schedule of Values is a special schedule for appraising eligible agricultural, horticultural and forest land at its "present use" value. This statewide schedule is formulated by the N.C. Department of Revenue. Properties whose owners qualify for "present use" assessment will receive two values: a market value mandated by law and a "present use" value.

Adoption of the proposed Schedule of Values is an important step in the revaluation process. Because of its importance, the Machinery Act of North Carolina requires the Board of Commissioners to only adopt it after holding a public hearing and then publicizing that it has done so. After the Schedule is adopted, property owners will have 30 days to challenge the Schedule of Values by appeal to the North Carolina Property Tax Commission. In accordance with North Carolina General Statute 105-317(c), the proposed Schedule of Values will be formally presented to the Board at its October 14, 2021, meeting and the Board of Commissioners will hold a public hearing at its October 20, 2021, meeting, during which the Board will receive comments from the public on the proposed Schedule of Values. The Schedule is available for review at the Tax Department web page; (or in the Tax Director's office on the second floor of the Independence Center at 400 West Market Street in Greensboro.

Once the Board adopts the Schedule of Values, a notice must be posted stating that the Schedule of Values has been adopted and that property owners have 30 days from the date of the first publication to challenge the Schedule of Values by appeal to the North Carolina Property Tax Commission on grounds that the Schedule of Values does not adhere to the appropriate statutory valuation standard (that it will produce values that are too high, too low, or inconsistent). The North Carolina Property Tax Commission has the power to order the Board of Commissioners to revise the Schedule of Values if they do not adhere to the statutory valuation standard. The North Carolina Property Tax Commission's decision may be appealed to the North Carolina Court of Appeals. Assuming a November 17, 2021 adoption, property owners will have until Monday, December 20, 2021 to challenge the Schedule of Values.

CALENDAR OF EVENTS
FOR THE 2022 SCHEDULE OF VALUES
GUILFORD COUNTY, NORTH CAROLINA

DATE	DESCRIPTION
October 14, 2021	Present Schedule of Values to the Board of Commissioners.
October 14, 2021	Advertise on county website that the Schedule of Values is open for public review on the tax department website and in the offices of the Guilford County Tax Assessor until December 10, 2021.
November 4, 2021	Public Hearing during the regularly Scheduled Board meeting.
November 18, 2021	Date the Board of Commissioners will Consider adoption of the Schedule of Values.
November 19, 2021	Advertise on the county webpage that the Schedule of Values has been adopted by The Board of Commissioners and if anyone wishes to take exception with them and appeal to the NC Property Tax Commission (in Raleigh, NC) they must do so in writing by December 20, 2021.
.	
December 20, 2021	Last date Schedule of Values can be challenged.

NOTICE OF PUBLIC HEARING

PROPOSED SCHEDULE OF VALUES

GUILFORD COUNTY 2022 PROPERTY TAX REVALUATION

The Guilford County Board of Commissioners will hold a **PUBLIC HEARING** on Thursday, October 20, 2021, at 5:30 p.m., in the Commissioners Meeting Room, Old Guilford County Courthouse, 301 West Market Street, Greensboro, North Carolina.

The purpose of the **PUBLIC HEARING** is to solicit public comment on the proposed Schedules, Standards and Rules to be used for the Guilford County 2022 Property Tax Reappraisal

A copy of the proposed schedules, standards and rules will be available for public inspection in the County Tax Director's Office located in the Independence Center at 400 West Market Street, 2nd floor, Greensboro. The proposed schedule of values will also be posted on the Tax Department Webpage; http://www.myguilford.com/tax/

Advertisement #2 – To be posted on County Website November 19, 2021 until December 10. 2021.

PUBLIC NOTICE

On November 18, 2021 the Guilford County Board of Commissioners adopted a Schedule of Values, Standards and Rules to be used for the Guilford County 2022 Property Tax Reappraisal

Anyone choosing to challenge the validity of these schedules, standards and rules by appealing to the North Carolina Property Tax Commission, must do so in writing by December 20, 2022. The mailing address is NC Property Tax Commission, P.O. Box 871, Raleigh, NC 27602. For more information, please contact the Guilford County Tax Department at 336-641-4749.

CHAPTER 1 - INTRODUCTION
Guilford County Reappraisal 2022

Guilford County's last Reappraisal was in 2017. As required by state law all counties must conduct a countywide Reappraisal at least once every eight years. In February of 2014 the County Commissioners approved a five-year Reappraisal cycle for Guilford County. In 2022 Guilford County will reappraise all real property. To accomplish a Reappraisal of many thousands of properties (Guilford has 215,000 parcels) county appraisers use mass appraisal. Mass appraisal is based on the same underlying principals as individual real estate appraisal but is conducted on a much broader scale.
Appraised values are established by using the sales approach, cost approach, and the income approach.

Sales Comparison Approach	This approach to value estimates a property's value by comparing it to other very similar properties that have recently sold.
Cost Approach	This approach is based on the principle of substitution which states that a rational, informed purchaser would pay no more for a property than the cost of building an acceptable substitute with similar utility. The cost approach seeks to determine the replacement cost new of an improvement less depreciation plus land value.
Income Approach	This approach to value is based on the concept that current value is the present worth of future benefits to be derived through income production by an asset over the remainder of the property's economic life.

Counties are required to reappraise all real property at 100% of market value in a revaluation year. Market value is defined as "*the price estimated in terms of money at which the property between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used*" (NCGS 105.283). Counties are required to maintain fairness and equity in the values of properties with similar locations, qualities, and conditions. Equitable mass appraisals require following two principles.

- The establishment of a standardized schedule of values which sets guidelines and schedules for valuing properties in a similar manner.
- The establishment of well-defined appraisal neighborhoods that are based on homogeneous properties that share very similar characteristics.

CHAPTER 2 - UNIFORM SCHEDULE OF VALUES BY STATUTE

Guidelines and requirements for the establishment of schedules of values are established by state law. The purpose of the schedule of values is to ensure that tax payers are treated fairly and that their property is assessed by the same measurement as other similar properties in comparable locations. Appraisers use the schedule of value as an appraisal manual which assists them to place values on properties in a consistent manner. The Schedule of Values is only one component of the valuation process. Other valuation factors include location, comparable sales and rents.

Administration of Real and Personal Property Appraisal

105-317. Appraisal of real property; adoption of schedules, standards, and rules.

(a)) Whenever any real property is appraised it shall be the duty of the persons making Appraisals:

(1) In determining the true value of land, to consider as to each tract, parcel or lot separately listed at least its advantages and disadvantages as to location; zoning; quality of soil; waterpower; water privileges; dedication as a nature preserve; conservation or preservation agreements; mineral, quarry, or other valuable deposits; fertility; adaptability for agricultural, timber-producing, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value.

(2) In determining the true value of a building or other improvement, to consider at least its location; type of construction; age; replacement cost; adaptability for residence, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value.

(b) In preparation for each revaluation of real property required by GS 105-286, it shall be the duty of the assessor to see that:

Uniform schedules of values, standards, and rules to be used in appraising real property at its true value and at its present-use value are prepared and are sufficiently detailed to enable those making appraisals to adhere to them in appraising real property.

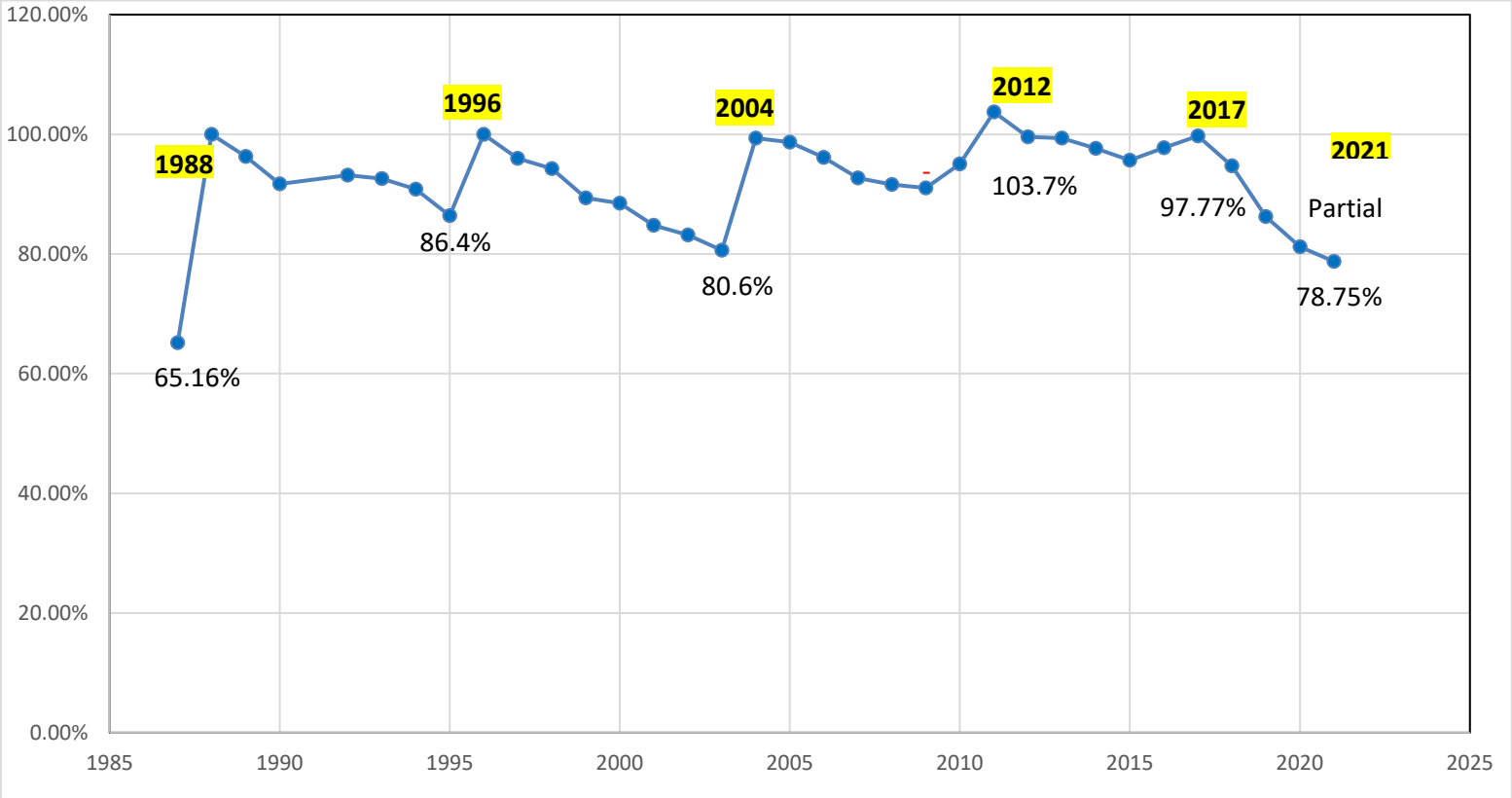
CHAPTER 3 - 2017-2022 REAPPRAISAL CYCLE

Guilford County's two previous reappraisals occurred in 2012 and 2017. Both of these reappraisals were impacted by the great recession of 2009. The normal pattern of appreciation that Guilford County has experienced in the real estate market was stunted during both of these reappraisals. Since 2017 Guilford County's real estate market has accelerated and has shown consistent annual growth. Population and job growth in the county has partially fueled the appreciation in the real estate market. Other factors that have affected appreciating real property values include rising costs of building materials, labor shortages, supply and demand, and competition from investment companies.

The graph on the next page illustrates the relationship between market value and tax value as it tracks the assessment percentage of the Guilford County sales ratio. Guilford County conducted reappraisals in 1988,1996, 2004, 2012, and 2017. The sales ratio shows how the difference between market value and tax value is adjusted for each reappraisal year. Historically, most reappraisals have shown an appreciation of real property values during most reappraisal cycles. State law mandates that assessed real property values be brought up to 100% for each reappraisal. In the years following a reappraisal year, counties are not allowed to change values for economic conditions that may trend up or down.

CHAPTER 4 – SALES RATIO

Guilford County Sales Ratios During Reappraisals 1988-2017



SALES RATIO STUDY

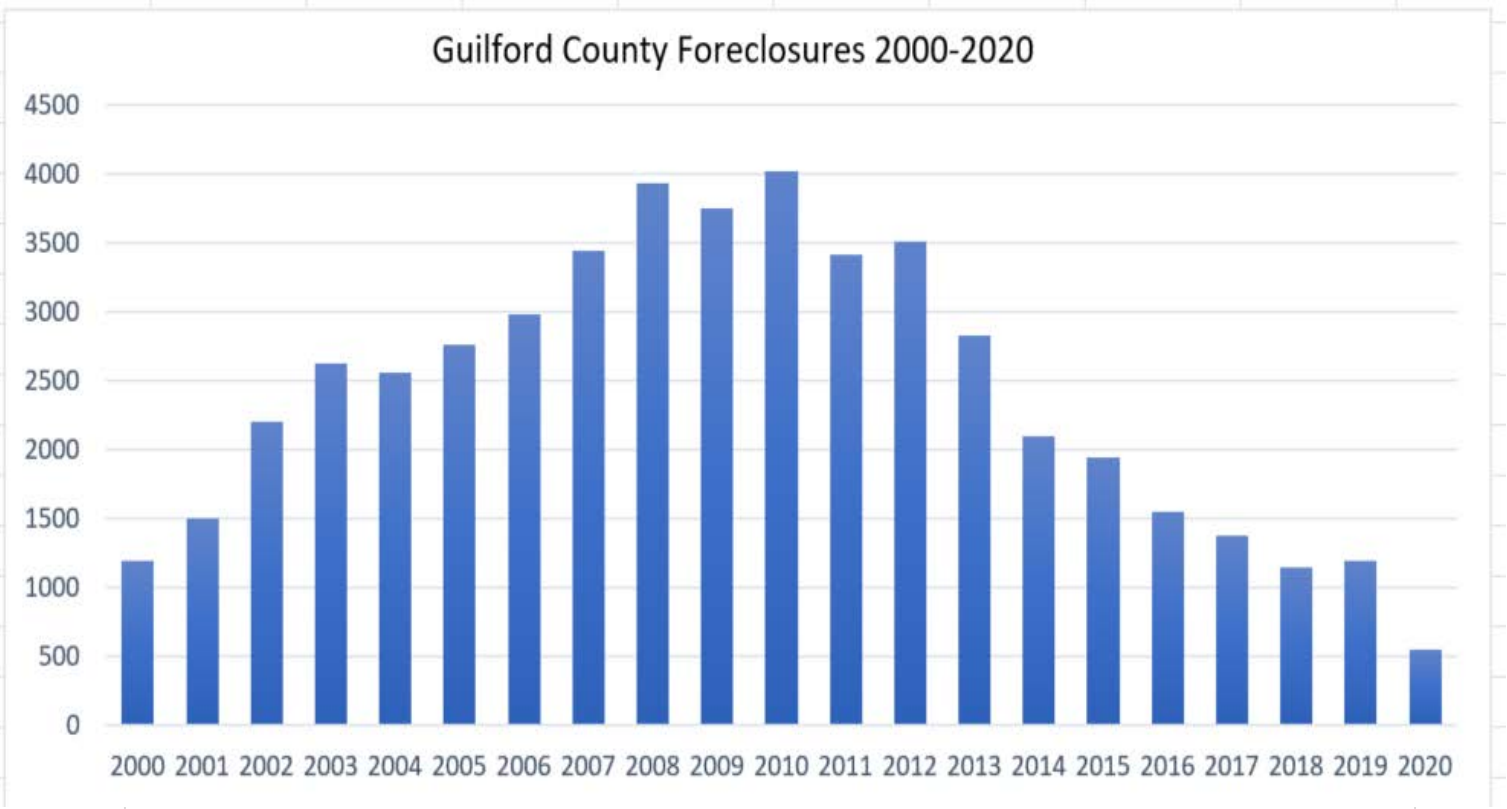
North Carolina General Statute 105-289(h) requires counties to perform annual **studies of the ratio of the assessed value of real property to its sales price. This is known as a sales ratio study. A sales ratio is simply the assessed value of a property divided by** its sales price. The sales ratio itself measures the gap between selling price and tax value. For example, if a property sells for $100,000 and is assessed for $90,000, the ratio is .90 or 90%.

$90,000 divided by $100,000 = .90 or 90%

The sales ratio study is utilized by the Tax Department to determine the level of assessment and the uniformity of assessments. Through the use of various statistical measures, the level of assessment, as well as the fairness and equity of assessments can be determined. In order to ensure the accuracy of the study, it is necessary to verify that sales prices utilized meet the definition of market value. Sales are analyzed to determine if they are arms-length transactions between willing and financially able buyers and willing sellers, with neither being under any compulsion to buy or sell. If a sale fails to meet the definition of market value for any reason, it is not utilized in the study.

Distressed and Forced Sales

Foreclosures and distressed sales had a major impact on the real estate market leading up to the 2012 Reappraisal. According to statistics from the NC Court system foreclosures peaked during 2008-2010. Since 2010 foreclosures have decreased and as of 2020 reached their lowest number in two decades. Staff appraisers review and consider all sales in their qualification process but normally disqualify foreclosure sales. Generally, a distressed or foreclosure sale is not considered an indicator of market value unless there is a large concentration of those type sales within an appraisal neighborhood.

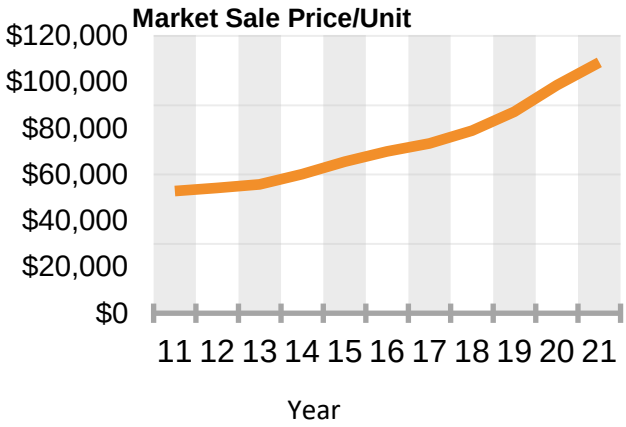


NCCourt Statistics 9/2016

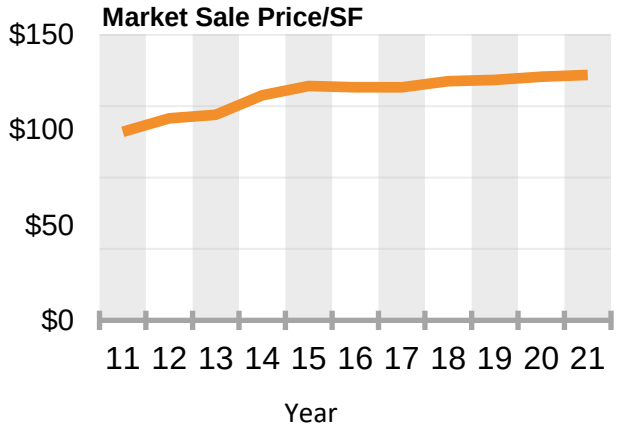
Guilford County Commercial Sales Trends

Office Sales Trend

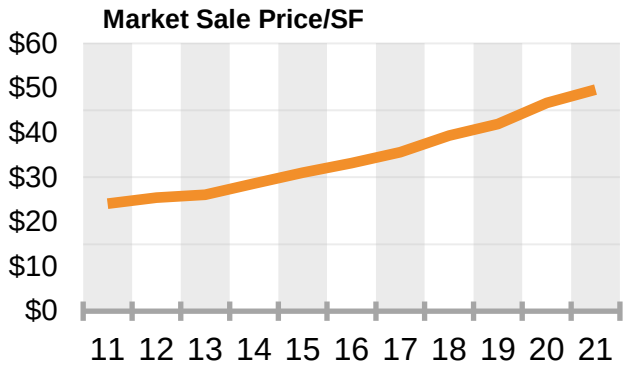
Multi Family Sales Trend



Retail Sales Trend



Industrial Sales Trends



Data From CoStar

Sales Comparison Approach

The sales comparison approach is generally considered to be the best indicator of value of single-family residential properties. This approach is based on the principle of substitution, which states that property value is set by the cost of acquiring a similar property, assuming that no costly delay is encountered. The sales comparison approach reflects the actions and reasoning of typical purchasers of real property. In this approach, properties which are similar to the subject property and have sold are located and the sales prices of the properties are analyzed.

NCGS 105-283 defines market value as "the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used".

In preparation for the 2022 Reappraisal appraisal staff continued to revise appraisal neighborhoods throughout Guilford County. The goal of each appraisal neighborhood is to have them composed of highly similar properties so that accurate comparisons could be made on sales and properties within each neighborhood. This enables the appraiser to be able to equitably appraise similar properties. Parcels within a neighborhood are of similar use and are subject to similar value-influencing factors. In preparation for the 2022 Reappraisal, staff appraisers in the tax department have divided the county into approximately 3000 appraisal neighborhoods.

In order to utilize the Sales Comparison Approach, it is necessary to collect and analyze sales of real property. The appraiser must determine if a sale meets the criteria specified in the definition of market value. Data collected includes sales price, date of sale, description of improvements on the property (if any), and type of financing. Sources of sales data include the Triad Multiple Listing Service as well as Excise Tax Stamps attached to deeds recorded in the Guilford County Register of Deeds office.

The charts on the following page indicate a more active real estate market and a trend of appreciation during 2017-2022.

Median Selling Prices of Residential Homes in Guilford County 2017-2021

	Median Sale Price				
Month	2017	2018	2019	2020	2021
Jan	$150,000	$162,683	$170,000	$189,950	$220,500
Feb	$151,000	$162,950	$177,500	$200,000	$202,000
Mar	$158,936	$174,000	$180,000	$209,000	$228,000
Apr	$164,700	$173,500	$206,950	$220,000	$235,000
May	$165,000	$169,000	$195,000	$202,500	$240,000
Jun	$169,950	$183,750	$195,000	$221,995	$252,000
Jul	$179,000	$185,000	$197,250	$217,500	$243,000
Aug	$175,800	$175,000	$196,000	$230,000	$240,000
Sep	$168,000	$175,990	$180,000	$211,495	$243,000
Oct	$161,575	$175,750	$192,500	$217,450	
Nov	$169,900	$183,995	$190,000	$222,500	
Dec	$170,000	$172,950	$186,000	$215,000	

Source: Triad MLS

CHAPTER 5 - GUILFORD COUNTY APPRAISAL NEIGHBORHOODS

Guilford County Appraisal Neighborhoods

Guilford County Appraisal Neighborhoods

The Appraisal Neighborhood

- Also known as Market Areas

The Appraisal Neighborhood is a geographic area, made up of real estate parcels that have similar characteristics, influences and complimentary land uses. The defining and analysis of appraisal neighborhoods within the market area(s) of Guilford County contributes to the achievement of more accurate and equitable property assessments. Appraisal staff reviewed and revised appraisal neighborhoods throughout the county in preparation for the 2022 reappraisal. As a result, the number of Appraisal Neighborhoods has risen, from approximately 310 in 2004, to over 3000 in 2022. Because of this, the average number of parcels within appraisal neighborhoods has decreased to less than two hundred parcels. Values in appraisal neighborhoods do not change uniformly. Market factors may be applied to some appraisal neighborhoods to adjust for market conditions.

Appraisal Neighborhood Labeling - Identification

The Appraisal Neighborhood label (identification) is made up of a total of seven characters that identifies the neighborhood and indicates its general location within Guilford County via the North Carolina State Plane Coordinate System.

Neighborhood Number Example: 7864A08

- The first four characters (7864) are (always) numerical and they represent the N.C. State Plane Coordinate System ID.
- The fifth character (A) is (always) a capital letter that represents the neighborhood type and origin.
- The last two characters (08) are (always) numerical and they represent the neighborhood item number (in relation to the Neighborhood Number's first 5 characters).

State Plane Coordinate System (Also Known As: Grid System)

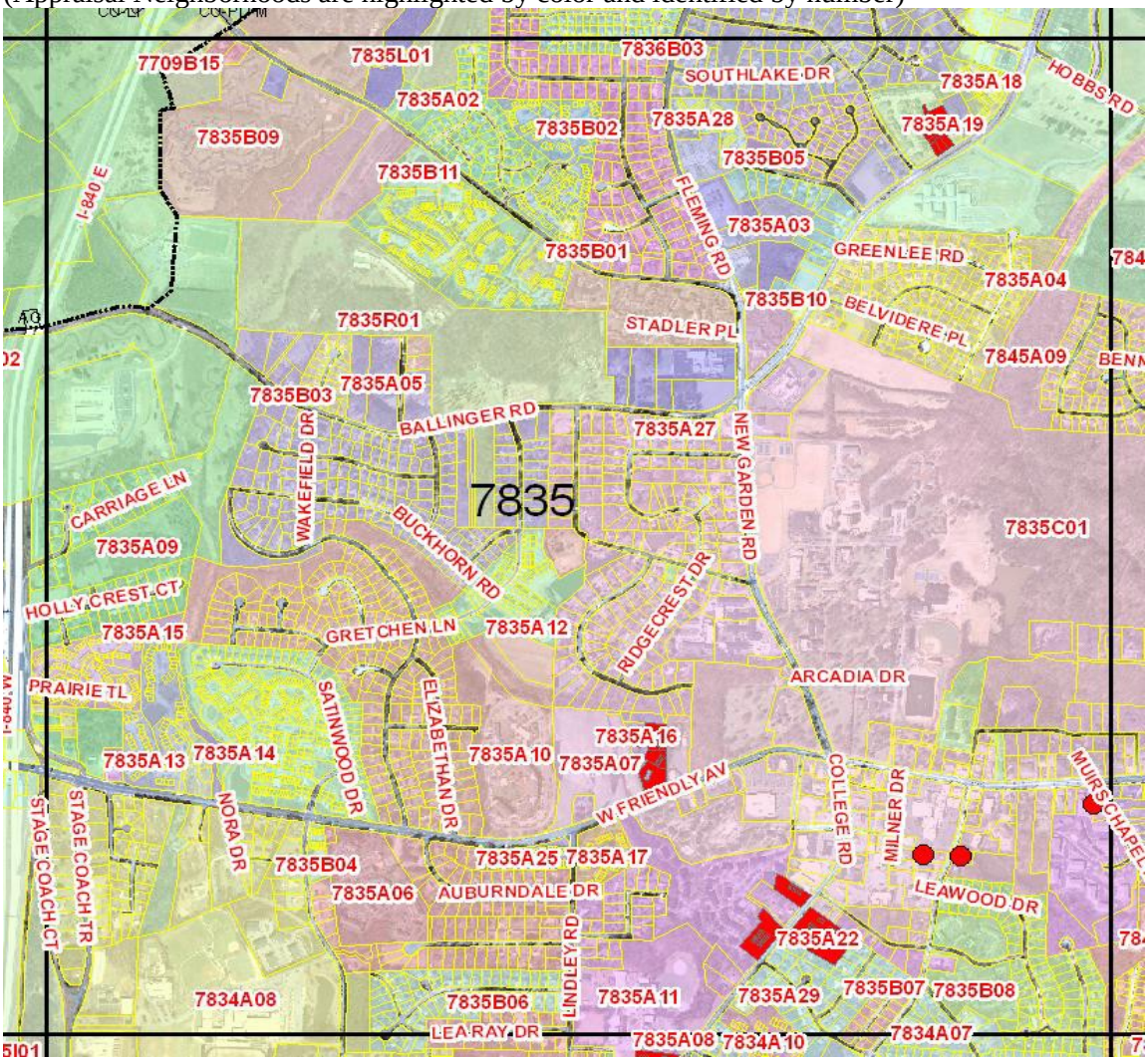
The State Plane Coordinate System (**SPCS**) was developed in the 1930s to provide a common reference system for surveyors and mappers. The goal was to design a conformal mapping system for the country with a maximum scale distortion of one part in 10,000, which at the time was considered the limit of surveying accuracy. The State Plane Coordinate System (**SPCS**) is used for local surveying and engineering applications and is also used for state and local government agencies GIS applications. Guilford County parcels are situated in approximately 233 N.C. State Plane Grids.

Appraisal Neighborhood Label (Letter) Abbreviations (Example: 7864A08)

A All neighborhoods prior to software migration.
B Residential neighborhoods after migration.
C Commercial neighborhoods.
I Industrial neighborhoods.
L Rural Unit neighborhoods less than 2 acres.
M Multifamily Apartment Complexes
P Publicly-Owned neighborhoods.
R Rural Acreage neighborhoods with acreage => 2.

Guilford County State Pane Grid (7835) *Example*

(Appraisal Neighborhoods are highlighted by color and identified by number)



CHAPTER 6 - LAND APPRAISAL

The Guilford County Tax Department has undertaken the task for the 2022 revaluation of dividing the County into many homogeneous (similar use) neighborhoods. The reason for undertaking this monumental task is to assure that Guilford County tax payers are assessed fairly and equitably as compared to their neighbors.

In creating these neighborhoods, there are different types of land use that the Tax Department has defined. The neighborhoods are defined as rural acreage, rural lots, neighborhood and subdivision lots, commercial neighborhoods, and industrial neighborhoods. Depending on the type of land use, land may be valued on a per acre basis, a per lot basis, or a per square foot basis.

In valuing land, the appraiser determines a *base price* for each of the different land types within a neighborhood. The best method for valuing vacant land is using current market sales of vacant land in the immediate area (neighborhood). If current sales are not available, then the appraiser will use the allocation method to determine the land value. The allocation method to land valuation takes the sale price of the property and subtracts the value of the improvements on the property; the remaining value is attributed to the land. Some land parcels have condition or influence factors that are atypical for the neighborhood. Condition factors are factors that have a negative influence on a parcel of land. Please see **Land Table 1** for the condition factors that Guilford County uses. Land influence factors are factors that have a positive influence on a parcel of land. Please see L**and Table 2** for the influence factors that Guilford County uses.

Rural acreage land is defined as land that is outside most city limits and is over 2 acres in size. Historically this land has been used in farming and agricultural processes. Rural large acreage tracts are valued by the acre. Appraisers determine the base acre price for the neighborhood by using sales of similar size acreage tracts sold in the neighborhood or in a highly similar neighborhood. There are several factors that can affect the value of rural acreage land. The main factors considered by an appraiser when valuing a parcel of land include location, topography, flood plain/wetlands, accessibility, shape and size.
Agricultural, Horticultural and Forestry properties receive special tax consideration by the State. (GS 105- 277.3) These considerations will be discussed in the Present Use section.

Rural lots are parcels of property that are outside most city limits and are not in a named subdivision. These lots are usually less than 2 acres in size. Rural lots are priced on a per lot basis. Appraisers determine the base lot price range for the neighborhood. The base price range is determined by sales of vacant land in the neighborhood. If vacant land is not available in the neighborhood the appraiser may use sales of vacant property in nearby areas that are similar in use. Typically, the rural lot factors that can influence the base value are the same as the factors that apply to rural acreage: location, topography, flood plain/wetlands, accessibility, shape and size.

Neighborhood and Subdivision lots are in a neighborhood or a named subdivision where the surrounding properties are similar in value and in use. Appraisers valuing the neighborhood use sales of lots in the neighborhood to determine a base land value. In neighborhoods where a subdivision is fully developed and there are no sales, the appraiser may use the allocation method to value the land. The main factors that influence the base value of neighborhood and subdivision land are topography, shape, accessibility and size.

Commercial use properties are properties that are typically zoned for commercial use by the county. Commercial neighborhoods are valued by the acre or by the square foot. Base price for the neighborhood is determined by the appraiser through sales of vacant similar use properties. If current sales are not available, the appraiser may use the allocation method of land valuation to determine the neighborhood base value. Commercial land value tends to have a higher value than residential and rural properties. Zoning can have significant influence on the value of a parcel.

Industrial use properties are properties that are specifically zoned for Industrial use by the County. Industrial neighborhoods are valued by the acre or by the square foot. Base price for the neighborhood is determined by the appraiser through sales of vacant similar use properties. If current sales are not available, the appraiser may use the allocation method of land valuation to determine the neighborhood base value. Industrial land value tends to have a higher value than all other types of properties.

Condominiums and townhouses are treated slightly different from regular parcels of land. Condominium owners do not actually own the land under their building, but the owners own a percentage share of the common area for the complex. Guilford County assigns a value to the land of condominium use types as a representation of the value of the jointly owned common areas of each complex. Townhouses are treated similarly to condos. Although the townhouse owners actually own the land below their units, all the common area and common area improvements in the townhouse development are valued and then divided amongst the townhouse owners. Townhouse owners actually have a base lot value and an additional value is added to cover the value of the common areas.

Land Use Codes are a coded description of how the land is being used or how it can legally be used according to zoning requirements. Base rate values are set for each for each land use code within each appraisal neighborhood. Establishing uniform base rates for each land use code helps to standardize and promote equitable assessments in each appraisal neighborhood.

The land size and influences factors were derived from sales of vacant land in Guilford County. By looking at acreage tracts sales over a multi-year period, Guilford County has developed a uniform size adjustment table for acreage size tracts in the County. A trending analysis was determined by plotting the sales by graph. This trending analysis shows that there is an inverse relation to the value per acre as the amount of acreage increases. This relationship is also known as economy of scale. The base acreage that the county uses is 25 acres. In other words, a parcel with 25 acres would have no influence factor (positive) or condition factor (negative) applied for the size. For properties that are less than 25 acres an influence factor is applied. For tracts of land that are larger than 25 acres a

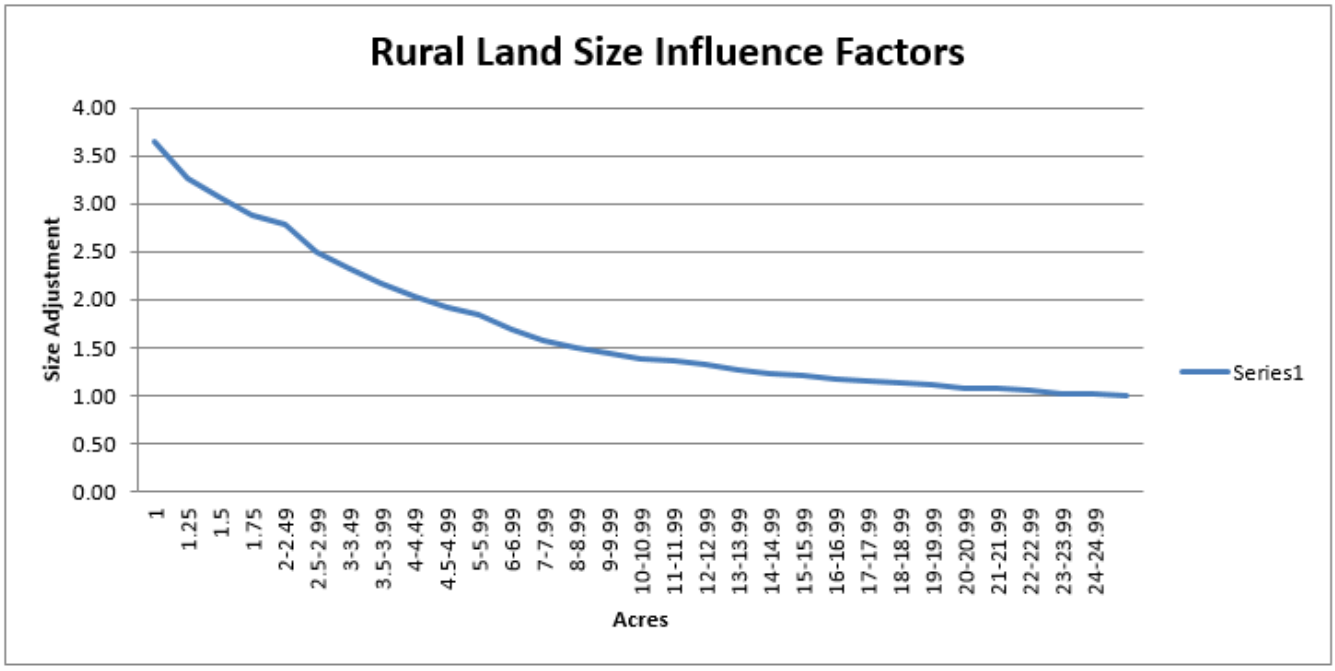
condition factor is applied. These factors are applied to the base rate per acre of a neighborhood to account for differences in land sizes of the individual parcels in the neighborhood (See Land Table 3 for the size factors).

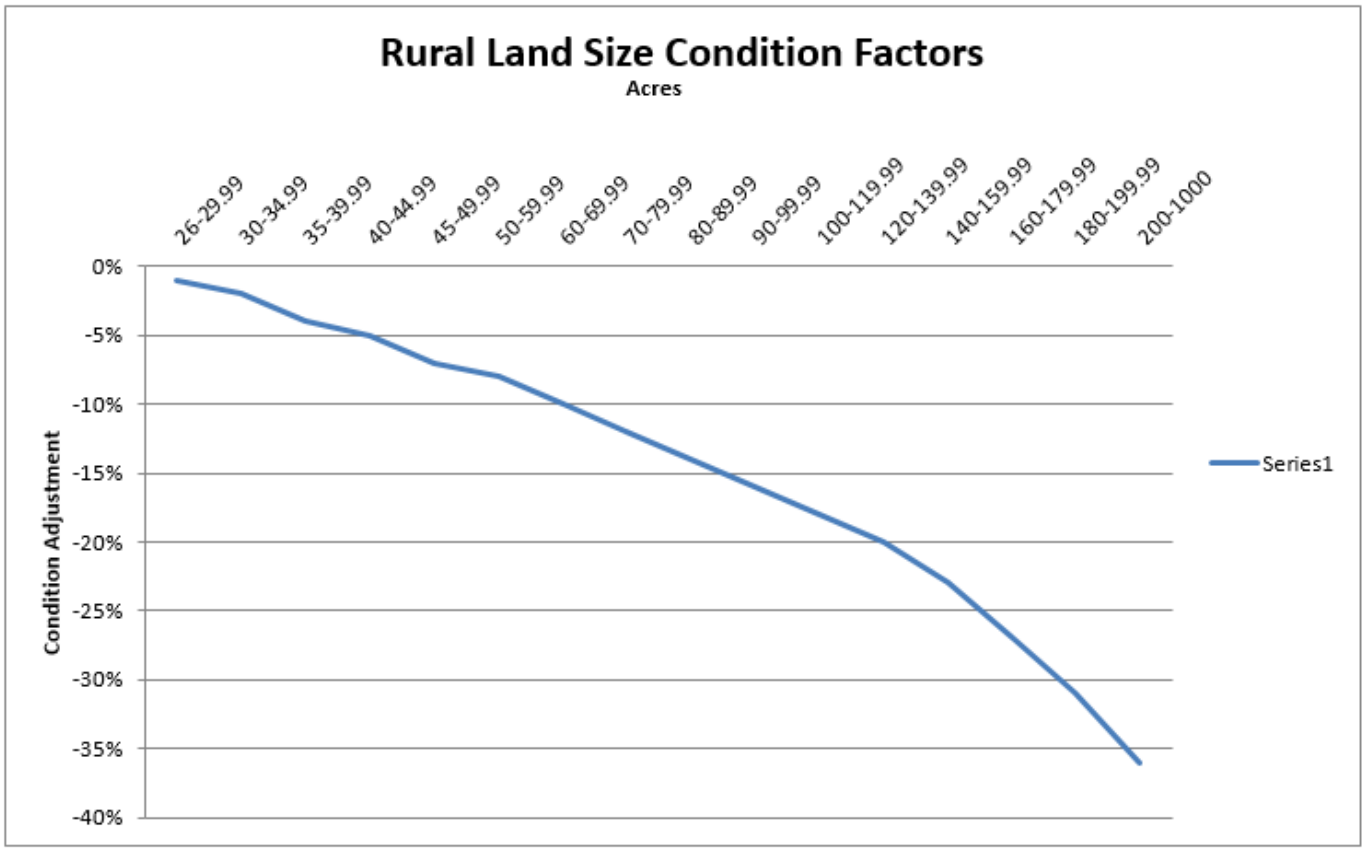
The size factor chart below following page is a guideline that appraisers use to determine the value impact of acreage size in relation to rural land value. Generally, the value percentage factor increases as the acreage size gets smaller. The opposite trend occurs for tracts of land over 25 acres as the size factor becomes a negative percentage as the acreage tract gets larger.

Size Factor Tables

Acres	Adjustment
1	3.64
1.25	3.26
1.5	3.07
1.75	2.88
2-2.49	2.79
2.5-2.99	2.50
3-3.49	2.32
3.5-3.99	2.18
4-4.49	2.03
4.5-4.99	1.92
5-5.99	1.84
6-6.99	1.69
7-7.99	1.57
8-8.99	1.50
9-9.99	1.44
10-10.99	1.39
11-11.99	1.37
12-12.99	1.32
13-13.99	1.27
14-14.99	1.24
15-15.99	1.22
16-16.99	1.18
17-17.99	1.15
18-18.99	1.13
19-19.99	1.11
20-20.99	1.09
21-21.99	1.07
22-22.99	1.06
23-23.99	1.03
24-24.99	1.01
25	1

26-29.99	-1%
30-34.99	-2%
35-39.99	-4%
40-44.99	-5%
45-49.99	-7%
50-59.99	-8%
60-69.99	-10%
70-79.99	-12%
80-89.99	-14%
90-99.99	-16%
100-119.99	-18%
120-139.99	-20%
140-159.99	-23%
160-179.99	-27%
180-199.99	-31%
200-1000	-36%


Rural Land Size Influence Factors
Size Adjustment
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
1
1.25
1.5
1.75
2-2.49
2.5-2.99
3-3.49
3.5-3.99
4-4.49
4.5-4.99
5-5.99
6-6.99
7-7.99
8-8.99
9-9.99
10-10.99
11-11.99
12-12.99
13-13.99
14-14.99
15-15.99
16-16.99
17-17.99
18-18.99
19-19.99
20-20.99
21-21.99
22-22.99
23-23.99
24-24.99
Acres
Series1


Rural Land Size Condition Factors
Acres
26-29.99
30-34.99
35-39.99
40-44.99
45-49.99
50-59.99
60-69.99
70-79.99
80-89.99
90-99.99
100-119.99
120-139.99
140-159.99
160-179.99
180-199.99
200-1000
0%
-5%
-10%
-15%
-20%
-25%
-30%
-35%
-40%
Condition Adjustment
Series1

Land Condition Factors

Code	*Short Desc*	*Long Desc*
ACC	ACCESS	ACCESS
AP	ASSOCIATED PARCEL	ASSOCIATED PARCEL
CSV	CONSERVATION EASEMEN	CONSERVATION EASEMENT
D	DRAINAGE	DRAINAGE
DE	DEPTH	DEPTH
DRD	DIRT ROAD	DIRT ROAD
EC	ECONOMIC CONDITIONS	ECONOMIC CONDITIONS
EZ	EASEMENT	EASEMENT
FP	FLOOD PLAIN	FLOOD PLAIN
FTG	FRONTAGE	FRONTAGE
FW	FLOOD WAY	FLOOD WAY
HIST	HISTORICAL PROPERTY	HISTORICAL PROPERTY
LL	LANDLOCKED/NX	LANDLOCKED/NX
LOC	LOCATION	LOCATION
LOW	LOW	LOW
M	MISIMPROVEMENT	MISIMPROVEMENT
MIGR	MIGRATION	MIGRATION
NN	NONE	NONE
OT	OTHER	OTHER
PARK	PARKING ADJUSTMENT	PARKING ADJUSTMENT
PERC	PERC UNSUITABLE	PERC Permit denied by health dept.
PL	POWER LINE	POWER LINE
RD	ROADS	ROADS
REST	RESTRICTIONS	RESTRICTIONS
RL	REAR LOT	REAR LOT
ROW	RIGHT-OF-WAY	RIGHT-OF-WAY
RR	RAIL ROAD	RAIL ROAD
SH	SHAPE	SHAPE
SZ	SIZE	SIZE
TOPO	TOPOGRAPHY	TOPOGRAPHY
TR	TRAFFIC	TRAFFIC
USE	USE	USE
UT	UTILITIES	UTILITIES
V	VIEW	VIEW
VAC	VACANT	VACANT
W	WET	WET
WR	WATER RESTRICTIONS	WATER RESTRICTIONS
Z	ZONING	ZONING

LAND INFLUENCE FACTORS

Code	*Short Desc*	*Long Desc*
ACC	Access	Access
AP	Assoc Parcel	Associated Parcel
CR	Corner	Corner
DE	Depth	Depth
EC	Economic Conditions	Economic Conditions
FTG	Frontage	Frontage
GC	Golf Course	Golf Course
LOC	Location	Location
MIGR	MIGRATION	MIGRATION
NN	NONE	NONE
NR	Natural Resources	Natural Resources
OT	Other	Other
ROW	Right of Way	Right of Way
RR	Rail Road Siding	Rail Road Siding
RS	Rear Street	Rear Street
SH	Shape	Shape
SZ	Size	Size
UT	Utilities	Utilities
V	View	View
WF	Water Front	Water Front
WV	Water View	Water View
Z	Zoning	Zoning

CHAPTER 7 – BUILDING APPRAISAL

BUILDING REVIEW

An important part of any reappraisal is the review of buildings throughout the county. County appraisal staff have reviewed buildings in several different ways. In their review appraisers have visited every neighborhood to review property information. Appraisers have also engaged in a project to increase the number of digital images of residential properties on the tax records. Appraisers have also used oblique photography for images of commercial properties as well as rural residential properties.

Building grade is an indication of the overall quality of construction of the structure. Quality of construction can be the result of many attributes including but not limited to the workmanship, building materials used, interior finish, functional design, and type of architecture. Not all buildings within a grade will have all of same features. To recognize these differences each grade level has several sub levels that can be used to account for these differences.

Mobile homes can be considered as Real property as defined in GS 105-273(13) if;

1. It is a residential structure.
2. It has the moving hitch, wheels, and axles removed.
3. It is placed upon a permanent foundation either on land owned by the owner of the manufactured home or on land in which the owner of the manufactured home has a leasehold interest pursuant to a lease with a primary term of at least 20 years and the lease expressly provides for disposition of the manufactured home upon termination of the lease.

In Guilford County single wide mobile homes are listed as personal property. Double wide mobile homes are listed as real estate.

The building grade scale listed below indicates the percentage adjustment made for differences in building quality. Average buildings are assigned a C grade which carries an adjustment of 1.00%. Higher or lower quality buildings are assigned a grade which may be higher or below the 1.00% rating of and average building. See Building Grade adjustments in Appendix section.

Residential Grade Characteristics

Structures with an **AA+ Grade** are at the top end of Quality, these are normally custom built houses using high quality materials and workmanship to exact specification of the architect as well as the owner. It will feature considerable architectural styling, large rooms including social areas with attention to detail with considerable built-ins.


AA+


AA+

A Grade homes are commonly custom built homes which have been built to the standard of the owner. It will use high quality building materials and feature some built-ins with some detail enhancements. The homes with an A grade will have many of the details of the AA grade homes, however it may not have as many of the same details as the higher grade homes.

A

A

B Grade homes can be either custom built or spec built homes. They may have considerable architectural design characteristics, including moldings and entry ways but with fewer built-ins. Grade B homes will use more moderate and readily available building materials.

B

B

C

C Grade homes are most commonly built homes in mass developments but can be Custom built.
C grade homes employ fewer architectural designs with less attention to detail.
They can also be upgraded older homes.

C

D Grade homes are usually spec homes with smaller floor plans and lower quality, built to basic building standards. Homes in this grade may include manufactured and double wide mobile homes

D

E Grade homes are built with building materials that are well below average and use designs styles that are intended to lower cost. Many homes in this category have non-ducted heating systems without central air conditioning.


E


E

Mass Valuation of Commercial Real Estate

Guilford County values commercial properties by mass appraisal accepted approaches to value. These three approaches are industry standard as defined by the **International Association of Assessing Officers (IAAO)**. The three approaches to value are The Sales Approach, the Cost Approach and the income Approach. These three approaches are used to determine market value as of the date of the revaluation.

The **Sales Approach** to value is used when there are sufficient qualified commercial sales of similar types of properties. Sales of commercial property are reviewed as they occur. This data is collected and applied commercial properties during the county wide revaluation process.

The commercial **Cost Approach** to value is based on the construction costs as defined by **Marshall and Swift Valuation Service**. In 2021 Guilford County adopted the **Marshall and Swift** commercial construction costs as the basis for valuing commercial properties using the cost approach to value. Marshall and Swift commercial base rates are available in the tax office for viewing by request but are not included for copyright reasons in this schedule of values.

The **Income Approach** to value is the valuation method based on an investor buying a property for the income stream that the property produces. In its most basic form, the Income Approach is the total income produced by the property less the total expenses of the property divided by a market derived or market resource capitalization rate. (Income – Expenses)/Capitalization Rate= Market Value.

Guilford County has many commercial and industrial resources to assist the commercial appraisers in their valuation process. Some of the resources include **TREPP (**a database of securitized mortgage loans), **CoStar** Commercial Reports, **Triad Apartment Index** and **Marshall & Swift Commercial Cost Manual.**

Building Features

Extra Features are elements of the building that may add value to the property. An example of an extra feature is a fireplace. Extra feature adjustments can either be calculated in a percentage of the base rate of the building or as a dollar amount adjustment. If the extra feature code type listed below indicates a base percentage adjustment or a blank dollar adjustment, then no adjustment has been applied for that building component. A list of all extra feature adjustments is available in Appendix II.

DEPRECIATION

Depreciation is the loss in value of an asset from any cause including time, wear & tear, and physical deterioration relative to the replacement cost new. Depreciation can only apply to buildings since land does not deteriorate or diminish over time. The actual age of a building is the chronological age or the number of years that have elapsed since construction was complete. The effective age of a building is an estimation of the amount of depreciation that may have affected its useful life. If a building has received below average maintenance, then the effective age of the structure should be close to its actual age. Conversely if a building has been well maintained or renovated then the effective year built should be substantially higher than the actual year built. The depreciation rate of a building is calculated based upon the estimated economic life of the structure. Depreciation schedules and economic lifetables are located in the Appendix II.

Building Condition

Building condition has a major impact on the market or assessed value of a property. Buildings depreciate in value with age. The rate of the depreciation depends on the degree and quality of maintenance and renovation. Properties that receive less than adequate maintenance or that have received significant damage in some way should be adjusted for additional physical depreciation. Properties that are in renovated condition should be adjusted according to the extent of the renovation by raising the effective year built of the structure. External forces such as economic obsolescence will sometimes cause additional depreciation due to factors that are occurring outside of the property affected. Photographs on the following pages are examples of differing conditions of single family residences.

Example of Below Average Condition

Example of Average Condition

Example of Above Average

Market Adjustments

Depreciation factors that occur outside of the normal maintenance or upkeep of a building are made with market adjustments. Market adjustments are used only when the normal depreciation schedule does not account for an extraordinary condition that may affect the value of the property.

AP - Abnormal Physical Depreciation is used when a structure has received less than typical maintenance.

ECON - Economic Obsolescence is the impairment of desirability or useful life due to external forces.

FUNC - Functional Obsolescence is the inability of a structure to adequately perform the function for which it is currently used.

LOC – Location is an adjustment used to reflect the positive or negative effect of where a property is situated.

PD - Physically Damaged measures the value loss in a structure due to storm damage, fire, vandalism, etc.

UC - Under Construction is used when improvements are in the process of being constructed and have not been completed. Incomplete buildings and other improvements are assessed according to their completion percentage as of January 1st for each tax year.

PD - Physically Damaged Depreciation

AP - Abnormal Physical Depreciation

FUNC-Functional Obsolescence

ECON- Economic Obsolescence (House in Commercial Area)

UC- Under Construction

CHAPTER 8 - EXEMPT AND DEFERRED PROPERTIES

Present-use value (PUV) is the value of land in its current use as agricultural land, horticultural land, or forestland based solely on its ability to produce income and assuming an average level of management. (GS 105-277)

Property that qualifies for present-use value classification is assessed at its present-use value rather than its market value. Use values are set by the North Carolina Use-Value Advisory Board according to soil type. Qualifications for PUV properties include active cultivation with acreage minimums and documented income from farm production. Applications for PUV are available on the tax department website. The Tax Office maintains a market value for the land, and the difference between the market value and the present-use value is maintained in the tax assessment records as **deferred taxes.** When land becomes disqualified from present-use value, the deferred taxes for the current year and the three previous years with interest will become due and payable.

The following schedule is taken from the 2020 Use Value Manual approved by the North Carolina Use- Value Advisory Board:

USE VALUE LAND CODES

Code	*Legacy Code*	*Short Desc*	*Long Desc*	Rate
AR1	5120	Ag 1 (rev)	Agricultural Class I (rev)	950
AR2	5220	Ag 2 (rev)	Agricultural Class II (rev)	645
AR3	5320	Ag 3 (rev)	Agricultural Class III (rev)	420
AR4	5420	Ag 4 (rev)	Agricultural Class IV (rev)	40
FR1	6120	Forestry 1 (rev)	Forestry Class I (rev)	365
FR2	6220	Forestry 2 (rev)	Forestry Class II (rev)	260
FR3	6320	Forestry 3 (rev)	Forestry Class III (rev)	250
FR4	6420	Forestry 4 (rev)	Forestry Class IV (rev)	160
FR5	6520	Forestry 5(rev)	Forestry Class V (rev)	115
FR6	6620	Forestry 6 (rev)	Forestry Class VI (rev)	40
HR1	6710	Hort 1 (rev)	Horticultural Class I (rev)	1370
HR2	6720	Hort 2 (rev)	Horticultural Class II (rev)	890
HR3	6730	Hort 3 (rev)	Horticultural Class III (rev)	615
HR4	6740	Hort 4 (rev)	Horticultural	40

Exemption Program

Real properties that are exempt from property tax must meet the qualifications established by state law. Exemption or exclusion is based on the completion of an application to provide accurate facts that show proof that the property is entitled to exemption or exclusion based on North Carolina Session law 105-282.1

§ 105-282.1. Applications for property tax exemption or exclusion; annual review of property exempted or excluded from property tax.

(a) Application. – Every owner of property claiming exemption or exclusion from property taxes under the provisions of this Subchapter has the burden of establishing that the property is entitled to it. If the property for which the exemption or exclusion is claimed is appraised by the Department of Revenue, the application shall be filed with the Department. Otherwise, the application shall be filed with the assessor of the county in which the property is situated. An application must contain a complete and accurate statement of the facts that entitle the property to the exemption or exclusion and must indicate the municipality, if any, in which the property is located. Each application filed with the Department of Revenue or an assessor shall be submitted on a form approved by the Department. Application forms shall be made available by the assessor and the Department, as appropriate.

Except as provided below, an owner claiming an exemption or exclusion from property taxes must file an application for the exemption or exclusion annually during the listing period.

(1) No application required. – Owners of the following exempt or excluded property do not need to file an application for the exemption or exclusion to be entitled to receive it:
   a. Property exempt from taxation under G.S. 105-278.1 or G.S. 105-278.2.
   b. Special classes of property excluded from taxation under G.S. 105-275(15), (16), (26), (31), (32a), (33), (34), (37), (40), (42), or (44).
   c. Property classified for taxation at a reduced valuation under G.S. 105-277(g) or G.S. 105-277.9.

(2) Single application required. – An owner of one or more of the following properties eligible to be exempted or excluded from taxation must file an application for exemption or exclusion to receive it. Once the application has been approved, the owner does not need to file an application in subsequent years unless new or additional property is acquired or improvements are added or removed, necessitating a change in the valuation of the property, or there is a change in the use of the property or the qualifications or eligibility of the taxpayer necessitating a review of the exemption or exclusion:
   a. Property exempted from taxation under G.S. 105-278.3, 105-278.4, 105-278.5, 105-278.6, 105-278.7, or 105-278.8.
   b. Special classes of property excluded from taxation under G.S. 105-275(3), (7), (8), (12), (17), (18), (19), (20), (21), (31e), (35), (36), (38), (39), (41), or (45) or under G.S. 131A-21.
   c. Special classes of property classified for taxation at a reduced valuation under G.S. 105-277(h), 105-277.1, 105-277.10, 105-277.13, or 105-278.
   d. Property owned by a nonprofit homeowners' association but where the value of the property is included in the appraisals of property owned by members of the association under G.S. 105-277.8.

(a) Late Application. – Upon a showing of good cause by the applicant for failure to make a timely application, an application for exemption or exclusion filed after the close of the listing period may be approved by the Department of Revenue, the board of equalization and review, the board of county commissioners, or the governing body of a municipality, as appropriate. An untimely application for exemption or exclusion approved under

this subsection applies only to property taxes levied by the county or municipality in the calendar year in which the untimely application is filed.

(b) Approval and Appeal Process. – The Department of Revenue or the assessor to whom an application for exemption or exclusion is submitted must review the application and either approve or deny the application. Approved applications shall be filed and made available to all taxing units in which the exempted or excluded property is situated. If the Department denies an application for exemption or exclusion, it shall notify the taxpayer, who may appeal the denial to the Property Tax Commission.

If an assessor denies an application for exemption or exclusion, the assessor must notify the owner of the decision and the owner may appeal the decision to the board of equalization and review or the board of county commissioners, as appropriate, and from the county board to the Property Tax Commission. If the notice of denial covers property located within a municipality, the assessor shall send a copy of the notice and a copy of the application to the governing body of the municipality. The municipal governing body shall then advise the owner whether it will adopt the decision of the county board or require the owner to file a separate appeal with the municipal governing body. In the event the owner is required to appeal to the municipal governing body and that body renders an adverse decision, the owner may appeal to the Property Tax Commission. Nothing in this subsection shall prevent the governing body of a municipality from denying an application which has been approved by the assessor or by the county board provided the owner's rights to notice and hearing are not abridged. Applications handled separately by a municipality shall be filed in the office of the person designated by the governing body, or in the absence of such designation, in the office of the chief fiscal officer of the municipality.

(c) Discovery of Property. – When an owner of property that may be eligible for exemption or exclusion neither lists the property nor files an application for exemption or exclusion, the assessor or the Department of Revenue, as appropriate, shall proceed to discover the property. If, upon appeal, the owner demonstrates that the property meets the conditions for exemption or exclusion, the body hearing the appeal may approve the exemption or exclusion. Discovery of the property by the Department or the county shall automatically constitute a discovery by any taxing unit in which the property has a taxable situs.

(d) Roster of Exempted and Excluded Property. – The assessor shall prepare and maintain a roster of all property in the county that is granted tax relief through classification or exemption. On or before November 1 of each year, the assessor must send a report to the Department of Revenue summarizing the information contained in the roster. The report must be in the format required by the Department. The assessor must also send the Department a copy of the roster upon the request of the Department. As to affected real and personal property, the roster shall set forth:

(1) The name of the owner of the property.
(2) A brief description of the property.
(3) A statement of the use to which the property is put.
(4) A statement of the value of the property.
(5) The total value of exempt property in the county and in each municipality therein.

(e) Annual Review of Exempted or Excluded Property. – Pursuant to G.S. 105-296(l), the assessor must annually review at least one-fifth of the parcels in the county exempted or excluded from taxation to verify that the parcels qualify for the exemption or exclusion.

APPENDIX I

Table 1 Guilford County Soil Classification Schedule

Table 2 Deed Edit Codes

Table 3 Guilford County Township List Table 4

Percentage Completion Standard Table 5

Commercial Capitalization Rates

Table 6 IAAO Standard on Mass Appraisal of Real Property Table 7

Guilford County Real Property Listing Form

GUILFORD COUNTY, NORTH CAROLINA

CLASSIFICATION OF SOILS IN MAJOR LAND RESOURCE AREA 136 (PIEDMONT)

MAP SYMBOL	USE VALUE CLASS AG	FOR	HOR
ApB	I I	I I	I
ApC	I I	I I	I
CcB	I I	I I	I
CcC	I I I	I I	I
CcD	I I I	I I	I I
CeB2	I I I	I I	I I
CeC2	I I I	I I	I I
CfB	I V	I I	I V
Ch	I I	I I I	I I I
Co	I	I I I	I I I
CrB	I I	I I	I
CrC	I I	I I	I
CuB	I V	I I	I V
EnB	I I	I I	I I
EnC	I I I	I I	I I
EnD	I I I	I I	I I
EoB2	I I I	I I	I I

EoC2	I I I	I I	I I
EoD2	I V	I I	I I
Es	I V	I I	IV
EuB	I V	I I	I V
HeC	I I I	I I	I I
HhB	I I I	I I	I I
IrB	I I I	I I	I I I
MaB	I I	I I	I I
MaC	I I	I I	I I
MaD	I I I	I I	I I
MaE	I V	I I	I I
McB2	I I I	I I	I I
McC2	I I I	I I	I I
McD2	I V	I I	I I
McE2	I V	I I	I I
Md	I V	I I	I V
MeB	I V	I I	I V
MhB2	I I I	I I	I I
MhC2	I I I	I I	I I
MuB	I V	I I	I V
Pt	I V	I I	I I
Ur	I V	V I	I V
VaB	I I	I I	I I
VaC	I I I	I I	I I

VaD	I I I	I I	I I
VuB	I V	I I	I V
Wh	I V	I I I	I I I
WkC	I V	I I	I I I
WkD	I V	I I	I I I
WkE	I V	I I	I I I

DEED EDIT SHEET

CODE REASONS FOR DISQUALIFICATION:

A. The transaction includes the conveyance of two (2) or more parcels.

B. Sales for which the improvements sold are not included in the tax assessment or the assessment included improvements built after the sale.

C. Deed shows $6.00* or less in revenue stamps. *Transaction is for $3,000 or less.

D. The date the deed was made, entered or notarized is outside the dates of the study period. (The study period runs from January 1 to December 31.)

E. The transaction is between relatives or relates businesses.

F. The grantor is only conveying an undivided or fractional interest to the grantee.

G. The deed reserves unto the grantor, a life estate or some other interest.

H. The deed reserves unto the grantor the possession of, or lease of, the property for specified period following the sale.

I. One or both of the parties involved in the transaction is governmental, a public utility, lending institution, or a relocation firm.

J. The deed conveys a cemetery lot or other tax exempt property.

K. One or both of the parties involved in the transaction is a church, school, lodge, or some other educational organization.

M. The deed indicates that the property conveyed is situated in more than one county.

N. The transaction is for minerals, timber, etc. or the rights to mine or cut same.

O. The transaction includes the conveyance of personal property, and the value of such is not specified separate from the real property value in the deed.

P. The transaction is the result of a forced sale or auction.

Q. Transaction made by the use of a Contract for Deed, the agreement for which is executed and sale actually made prior to the study.

R. The transaction involves the trade or exchange of real property.

S. The transaction is for real property which cannot be clearly identified on the county tax records.

X. Other (An explanation must be provided when this code is used.)

GUILFORD COUNTY TOWNSHIPS

LEGACY NUMBER	*TOWNSHIP NAME*
0	MOREHEAD/GILMER
1	WASHINGTON
2	ROCK CREEK
3	GREENE
4	MADISON
5	JEFFERSON
6	CLAY
7	MONROE
8	N/A
9	FENTRESS
10	CENTER GROVE
11	N/A
12	SUMNER
13	BRUCE
14	FRIENDSHIP
15	JAMESTOWN
16	OAK RIDGE
17	DEEP RIVER
18	HIGH POINT

Condition or Completion Percentage for Tax Year

State law requires that counties assess buildings according to their condition as of January 1st for each tax year. Appraisers use the chart below to estimate completion for each new building.

Percent of Completion

The following is a guideline for estimating percent of completion for a typical single family residence:

	Percent of Total	Cumulative percent of total
1. Plans, permits and survey	2	2
2. Excavation, forms, water/sewage hookup	4	6
3. Concrete	8	14
4. Rough framing	21	35
5. Windows and exterior doors	2	37
6. Roof cover	3	40
7. Rough-in plumbing	4	44
8. Insulation	1	45
9 Rough-in electrical and mechanical	11	56
10. Exterior cover	6	62
11. Interior drywall and ceiling finish	8	70
12. Built-in cabinets, interior doors, trim, etc.	13	83
13. Plumbing fixtures	5	88
14. Floor covers	3	91
15. Built-in appliances	3	94
16. Light fixtures and finish hardware	2	96
17. Painting and decorating	4	100

Total = 100%

Commercial Overall Capitalization Rate Range

Commercial Sales & Services	4.00%	14.00%
Shopping Centers & Malls	4.00%	15.00%
Office Buildings	4.00%	15.00%
Apartment Buildings & Complexes	3.00%	13.00%
Hotels & Motels	4.00%	19.00%
Industrial & Warehouses	4.00%	15.00%
Golf Course	5.00%	23.00%
Mobile Home Parks	4.00%	15.00%
Health Care & Senior Housing	4.00%	15.00%
Restaurants & Fast Food	4.00%	17.00%

(Cap rates will vary significantly according to property type and location.)

Standard on Mass Appraisal of Real Property

Acknowledgments
At the time of the 2010 revision (approved January 2011) the Technical Standards Committee was composed of Joseph Hapgood, CAE, chair; Nancy Tomberlin; Bill Marchand; Robert Gloudemans; Mary Reavey; Dennis Deegear, associate member; and Chris Bennett, staff liaison.

Revision Notes
The last full revision of the *Standard on Mass Appraisal of Real Property* was in February 2002.
The most recent partial revisions, approved January 2011, were made to sections: 3.3, 4.3

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Standard on MASS APPRAISAL OF REAL PROPERTY—2011

Standard on Mass Appraisal of Real Property

1. Scope

This standard defines requirements for the mass appraisal of real property. The primary focus is on mass appraisal for ad valorem tax purposes. However, the principles defined here should also be relevant to computer-assisted mass appraisals (or automated valuation models) used for other purposes, such as mortgage portfolio management. The standard primarily addresses the needs of the assessor, assessment oversight agencies, and taxpayers. This standard address mass appraisal procedures by which property can be appraised at market value, including mass appraisal application of the three traditional approaches to value (cost, sales comparison, and income). Appraisals made on another-than-market value basis or on an individual basis are outside the scope of this standard. Where assessed value differs from market value because of statutory constraints such as use value, acquisition value, base year value, or classification, this standard does not provide guidance for determining assessed value. Mass appraisal requires complete and accurate data, effective valuation models, and proper management of resources.

Section 3 focuses on the collection and maintenance of property data. Section 4 summarizes the primary considerations in valuation methods, including the role of the three approaches to value in the mass appraisal of various types of property. Section 5 discusses certain managerial considerations: staff levels, data processing support, contracting for reappraisals, support of valuations, and benefit-cost issues.

2. Introduction

Market value for assessment purposes is generally determined through the application of mass appraisal techniques. Mass appraisal is the process of valuing a group of properties as of a given date using common data, standardized methods, and statistical testing (IAAO [1990, chapter 5] and Gloudemans [1999, chapter 5]). To determine a parcel's value, assessing officers must rely upon valuation equations, tables, and schedules developed through mathematical analysis of market data. Unless required by law, values for individual parcels should not be based solely on the sale price of a property; rather, valuation schedules and models should be consistently applied to property data that is correct, complete, and up-to-date. Properly administered, the development, construction, and use of a computer-assisted mass appraisal system results in a valuation system characterized by accuracy, uniformity, equity, reliability, and low per-parcel costs (see section 5.5). Except for unique properties, individual analyses and appraisals of properties are not practical for ad valorem tax purposes.

3. Collecting and Maintaining Property Data

Choose software wisely because it can limit the data that can be collected. The choice of data is largely dictated by the valuation software, whether it is programmed in house or supplied by a commercial service, a mass appraisal company, or a state agency.

3.1 Overview

Uniform and accurate valuation of property requires correct, complete, and up-to-date property data. Assessing offices must establish effective procedures for collecting and maintaining property data (that is, property ownership, location, size, use, physical characteristics, sales prices, rents, costs, and operating expenses). Such data are also used for performance audits, defense of appeals, public relations, and management information. The following sections recommend procedures for collecting these data.

3.2 Geographic Data

Assessors should maintain accurate, up-to-date cadastral maps (also known as assessment maps, tax maps, parcel boundary maps, and property ownership maps) covering the entire jurisdiction. At a minimum these maps should display a unique parcel number for each parcel. Such cadastral maps allow assessing officers to identify and locate all parcels, in both the field and the office. Maps become especially valuable in the mass appraisal process when a geographic information system (GIS) is used. A GIS permits graphic displays of sale prices, assessed values, inspection dates, work assignments, land uses, and much more. In addition, a GIS permits high-level analysis of nearby sales, neighborhoods, and market trends; when linked to a computer-assisted mass appraisal system, the results can be very useful. For additional information on cadastral maps, parcel identification systems, and GIS, see the *Standard on Manual Cadastral Maps and Parcel Identifiers* (IAAO 2004), *Standard on Digital Cadastral Maps and Parcel Identifiers* (IAAO 2003), and *Procedures and Standards for a Multipurpose Cadastre* (National Research Council 1983), and *GIS Guidelines for Assessors* (URISA/IAAO 1999).

3.3 Property Characteristics Data

The assessor should collect and maintain sufficient property characteristics data for classification, valuation, and other purposes. Accurate valuation of real property by any method requires descriptions of land and building characteristics.

3.3.1 Selection of Property Characteristics Data

Property characteristics to be collected and maintained should be based on the following:

- factors that influence the market in the locale in question
- requirements of the valuation methods that will be employed
- requirements of classification and property tax policy
- requirements of other governmental and private users
- marginal benefits and costs of collecting and maintaining each property characteristic Determining what data on property characteristics to collect and maintain for a computer-assisted mass appraisal system is a crucial decision with long-term consequences.

A pilot program is one means of evaluating the benefits and costs of collecting and maintaining a particular set of property characteristics. (See IAAO [1990, chapter 5] and Gloudemans [1999, chapter 2].) In addition, much can be learned from studying the data used in successful computer-assisted mass appraisals in other jurisdictions. Data collection and maintenance are usually the costliest aspects of a computer-assisted mass appraisal. Collecting data that are of little importance in the assessment process should be avoided unless another governmental or private need is clearly demonstrated. The quantity and quality of existing data should be reviewed. If the data are sparse and unreliable, a major recanvass will be necessary. Data that have been confirmed to be reliable should be used whenever possible. New valuation programs or enhancements requiring major recanvass activity or conversions to new coding formats should be viewed with suspicion when the existing database already contains most major property characteristics and is of generally good quality. See Gloudemans (1999, chapter 2) and IAAO (1990, chapter 5) for characteristics of land, location, and improvements usually required for mass appraisal.

3.3.2 Data Collection

Collecting property characteristics data is a critical and expensive phase of reappraisal. A successful data collection program requires clear and standard coding and careful monitoring through a quality control program.

The development and use of a data collection manual is essential in achieving accurate and consistent data collection. The data collection program should result in complete and accurate data.

3.3.2.1 Initial Data Collection

A physical inspection is necessary to obtain initial property characteristics data. This inspection can be performed either by appraisers or by specially trained data collectors. In a joint approach, experienced appraisers would make key subjective decisions, such as the assignment of construction quality class or grade, and data collectors would gather all other details. Depending on the data required, an interior inspection might be necessary. At a minimum, a comprehensive exterior inspection should be conducted.

3.3.2.2 Data Collection Format

Data should be collected in a prescribed format designed to facilitate both the collecting of data in the field and entry of the data into the computer system. A logical arrangement of the collection format makes data collection easier. For example, all items requiring an interior inspection should be grouped together. The coding of data should be as objective as possible, with measurements, counts, and check-off items used in preference to items requiring subjective evaluations (such as "number of plumbing fixtures" versus "adequacy of plumbing: poor, average, good"). With respect to check-off items, the available codes should be exhaustive and mutually exclusive, so that exactly one code logically pertains to each observable variation of a building feature (such as type of room). The data collection format should promote consistency among data collectors, be clear and easy to use, and be adaptable to virtually all types of construction. Specialized data collection formats may be necessary to collect information on agricultural property, timberland, industrial parcels, and other property types.

3.3.2.3 Data Collection Manuals

A clear, thorough, and precise data collection manual is essential and should be developed, updated, and maintained. The written manual should explain how to collect and record each data item. Pictures, examples, and illustrations are particularly helpful. The manual should be simple yet complete, with a high degree of standardization for uniformity. Data collection staff should be trained in the use of the manual and related updates to maintain consistency. The manual should present guidelines for personal conduct during field inspections, and, if interior data are required, it should outline procedures to follow when the property owner has denied access or when entry might be risky.

3.3.2.4 Data Accuracy Standards

The following standards of accuracy for data collection are recommended.

• Continuous or area measurement data, such as living area and exterior wall height, should be accurate within one foot (rounded to the nearest foot) of the true dimensions or within 5% of the area. (One foot equates to approximately 30 centimeters in the metric system of measurement). If areas, dimensions, or volumes must be estimated, the property record should note where quantities are estimated.

• For each objective, categorical, or binary data field to be collected or verified, at least 95 percent of the coded entries should be accurate. Objective, categorical, or binary data characteristics include such attributes as exterior wall material, number of full bathrooms, and waterfront view. As an example, if a data collector captures 10 objective, categorical, or binary data items for 100 properties, at least 950 of the 1,000 total entries should be correct.

• For each subjective categorical data field collected or verified, data should be coded correctly at least 90 percent of the time. Subjective categorical data characteristics include data items such as quality grade, physical condition, and architectural style.

3.3.2.5 Data Collection Quality Control

A quality control program is necessary to ensure that data accuracy standards are achieved and maintained. Independent quality control inspections should occur immediately after the data collection phase begins and may be performed by jurisdiction staff, project consultants, auditing firms, or oversight agencies. The inspections should review random samples of completed work for completeness and accuracy and keep tabulations of items coded correctly or incorrectly, so that statistical tests can be used to determine whether accuracy standards have been achieved. Stratification by geographic area, property type, or individual data collector can help detect patterns of data error. Data that fails to meet quality control standards should be re-collected. The accuracy of subjective data should be judged primarily by conformity with written specifications and examples in the data collection manual. Subjective data judgment calls should be substantiated by field notes.

3.3.3 Data Entry

To avoid duplication of effort, the data collection form should be able to serve as the data entry form. Data entry should be routinely audited to ensure accuracy. Data entry accuracy should be as close to 100 percent as possible, and should be supported by a full set of range and consistency edits. These are error or warning messages generated in response to invalid or unusual data items. Examples of data errors include missing data codes and invalid characters. Warning messages should also be generated when data values exceed normal ranges (for example, more than eight rooms in a 1,200-square-foot residence). The warnings should appear as the data are entered. When feasible, action on the warnings should take place during data entry. Field data entry devices provide the ability to edit data as it is entered and also eliminate data transcription errors.

3.3.4 Maintaining Property Characteristics Data

Property characteristics data should be continually updated in response to changes brought about by new construction, new parcels, remodeling, demolition, and destruction. There are several ways of doing this. The most efficient involves building permits. Ideally, strictly enforced local ordinances would require building permits for all significant construction activity, and the assessor would be given copies of the permits. This would allow the assessor to identify properties whose characteristics are likely to change, to inspect such parcels on a timely basis (preferably as close to the assessment date as possible), and to update the files accordingly. Aerial photographs also can be helpful in identifying new or previously unrecorded construction and land use. Some jurisdictions have used self-reporting, in which property owners are given the data in the assessor's records and asked to provide additions or corrections. Information derived from multiple listing sources and other third-party vendors can be used to update property records. A system should be developed for making periodic field inspections to identify properties and ensure that property characteristics data are complete and accurate. Properties should be periodically revisited to ascertain that assessment records are accurate and current. Assuming that most new construction activity is identified through building permits or other ongoing procedures, a physical review at least every four to six years should be conducted, including an on-site verification of property characteristics. A reinspection should include partial remeasurement of the two most complex sides of improvements and a walk around the improvement to identify additions and deletions or independent review of the current measurements with specific requirements by an outside auditing firm or oversight agency. Photographs taken at previous physical inspections can help identify changes.

3.3.5 Alternative to Periodic On-Site Inspections

Provided that an initial physical inspection has been completed—and the requirements of a well-maintained data- collection and quality-management program (see sections 3.3.2.1 to 3.3.4) have been achieved, jurisdictions may employ a set of digital imaging technology tools to supplement field inspections with a computer-assisted office review. These imaging tools should include:

• Current high-resolution street-view images (at a sub-inch pixel resolution that enables quality grade and physical condition to be verified) • Orthophoto images (minimum 6" pixel resolution in urban/suburban and 12" resolution in rural areas, updated every 2 years in rapid growth areas, or 6–10 years in slow growth areas).

• Low level oblique images capable of being used for measurement verification (four cardinal directions, minimum 6" pixel resolution in urban/suburban and 12" pixel resolution in rural areas, updated every 2 years in rapid growth areas or, 6–10 years in slow growth areas). Effective tool sets validate CAMA data and incorporate change detection techniques that compare building dimension data (footprints) in the CAMA system to geo-referenced imagery or remote sensing data from sources (such as LiDAR [light detection and ranging]) and identify potential CAMA sketch discrepancies for further investigation. In addition, appraisers should visit assigned areas on an annual basis to observe changes in neighborhood condition, trends and property characteristics. An on-site physical review is recommended when significant construction changes are detected, a property is sold, or an area is affected by catastrophic damage. Building permits should be regularly monitored and affected properties that have significant change should be inspected when work is complete. It is incumbent on assessment jurisdictions and oversight agencies to ensure that images meet expected quality standards. Standards required for vendor-supplied images should be spelled out in the RFP and contract for services, and images should be checked for compliance with specified requirements. For general guidance on preparing RFPs and contracting for vendor-supplied services, see the Standard on Contracting for Assessment Services [IAAO 2008]

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3.4 Sales Data

States and provinces should seek mandatory disclosure laws to ensure comprehensiveness of sales data files. Regardless of the availability of such statutes, a file of sales data must be maintained. Sales data are required in all applications of the sales comparison approach, in the development of market-based depreciation schedules in the cost approach, and in the derivation of capitalization rates or discount rates. Refer to IAAO (1990, chapter 5) and Gloudemans (1999, chapter 2) for guidelines relating to the acquisition and processing of sales data.

3.5 Income and Expense Data

Income and expense data must be collected for income-producing property, as these data are required in the application of the income approach to value. (See section 4.4.) Refer to IAAO (1990, chapter 5) and Gloudemans (1999, chapter 2) for guidelines addressing the collection and processing of income and expense data

3.6 Cost and Depreciation Data

Current cost and depreciation data adjusted to the local market are required for the cost approach (see section 4.2). Cost and depreciation manuals and schedules may be purchased from commercial services or created in-house. See Gloudemans (1999, chapter 4) for guidelines on creating manuals and schedules.

4. Valuation

4.1 Valuation Models

Any appraisal, whether single-property appraisal or mass appraisal, uses a model, that is, a representation in words or an equation of the relationship between value and variables representing factors of supply and demand. Mass appraisal models attempt to represent the market for a specific type of property in a specified area. Mass appraisers must first specify the model, that is, identify the variables (supply and demand factors) that influence value, for example, square feet of living area. Then, mass appraisers must calibrate the model, that is, determine the adjustments or coefficients that best represent the value contribution of the variables chosen, for example, the dollar amount the market places on each square foot of living area. Careful and extensive market analysis is required for both specification and calibration of a model that estimates values accurately. All three approaches to value—the cost approach, the sales comparison approach, and the income approach—are modeled for mass appraisal. Geographic stratification is appropriate when the value of property attributes varies significantly among areas. It is particularly effective when housing types and styles are relatively uniform within areas. Separate models can be developed for market areas (also known as economic or model areas). Subareas or neighborhoods can serve as variables in modeling and can also be used in land value tables and selection of comparable sales. (See Gloudemans [1999, chapter 3].) Smaller jurisdictions may find it sufficient to develop a single residential model.

Commercial and income-producing properties should be stratified by property type. In general, separate models should be developed for apartment, warehouse/industrial, and retail properties. Large jurisdictions may be able to stratify apartment properties further by type or area or to develop multiple commercial models.

4.2 The Cost Approach

The cost approach is applicable to virtually all improved parcels and, if used properly, can produce highly accurate valuations. The cost approach is more reliable for newer structures of standard materials, design, and workmanship. Reliable cost data are imperative in any successful application of the cost approach. The data must be complete, typical, and current. Current construction costs should be based on the cost of replacing a structure with one of equal utility, using current materials, design, and building standards. Costs of individual construction components and building items should also be included in order to adjust for features that differ from the base specifications. These costs should be incorporated into a construction cost manual and related computer software. The software can perform the valuation function, and the manual, in addition to providing documentation, can be used when non-automated calculations are required.

Construction cost schedules can be developed internally, based on a systematic study of local construction costs, obtained from firms specializing in such information, or custom generated by a contractor. Cost schedules should be verified for accuracy by applying them to recently constructed improvements of known cost. Construction costs also should be updated before each assessment cycle. One weakness in the cost approach tends to occur in the estimation of accrued depreciation. This estimate must be based on non-cost data (primarily sales) and can involve considerable subjectivity. Depreciation schedules can be extracted from sales data in several ways. Methods for extracting depreciation can be found in IAAO (1990, chapter 8) and Gloudemans (1999, chapter 4). Another key difficulty in use of the cost approach is determination of land value, which is estimated independently from sales (often from sales of improved property because sales of vacant land are scarce). Land values used in the cost approach must be current and consistent. Section 4.5 provides standards for land valuation in mass appraisal.

4.3 The Sales Comparison Approach

The sales comparison approach estimates the value of a subject property by statistically analyzing the sale prices of similar properties. This approach is usually the preferred approach for estimating values for residential and other property types with adequate sales. Applications of the sales comparison approach include direct market models and comparable sales algorithms (See Gloudemans 1999, chapter 3 & 4, IAAO 1990, chapter 6 & 15, and IAAO 1999, and the IAAO standard on Automated Valuation Models 2003). Comparable sales algorithms are most akin to single property appraisal applications of the sales comparison approach. They have the advantages of being familiar and easily explained and can compensate for less well specified or calibrated models, since the models are used only to make adjustments to the selected comparables. They can be problematic if the selected comparables are not well validated or representative of market value. Because they predict market value directly, direct market models depend more heavily on careful model specification and calibration. Their advantages include efficiency and consistency, since the same model is directly applied against all properties in the model area. Users of comparable sales algorithms should be aware that sales ratio statistics will be biased if sales used in the ratio study are used as comparables for themselves in model development. This problem can be avoided by (1) not using sales as comparables for themselves in modeling or (2) using holdout or later sales in ratio studies.

4.4 The Income Approach

In general, for income-producing properties the income approach is the preferred valuation approach when reliable income and expense data are available, along with well-supported income multipliers, overall rates, and required rates of return on investment. Successful application of the income approach requires the collection, maintenance, and careful analysis of income and expense data. Mass appraisal applications of the income approach begin with collecting and processing income and expense data. (These data should be expressed on an appropriate per-unit basis; such as per square foot or per apartment unit.) Appraisers should then compute normal or "typical" gross incomes, vacancy rates, net incomes, and expense ratios. These figures can be used to judge the reasonableness of reported data for individual parcels and to estimate income and expense figures for parcels with unreported data.

Alternatively, models for estimating gross or net income and expense ratios can be developed using actual income and expense data from a sample of properties and calibrated using multiple regression analysis. For an introduction to income modeling, see IAAO (1990, chapter 14) and Gloudemans (1999, chapter 3). The developed income figures can be capitalized into estimates of value in a number of ways. The most direct method involves the application of gross income multipliers, which express the ratio of market value to gross income. At a more refined level, net income multipliers or their reciprocals, overall capitalization rates, can be developed and applied. These multipliers and rates should always be extracted from actual income and sale price data obtained from properties that have recently been sold. Income multipliers and overall rates tend to provide reliable, consistent, and readily supported valuations when good sales and income data are available.

4.5 Land Valuation

State or local laws may require the value of an improved parcel to be separated into land and improvement components. When the sales comparison or income approach is used, an independent estimate of land value must be made and subtracted from the total property value to obtain a residual improvement value. Some computerized valuation techniques provide a separation of total value into land and building components. Land values should be reviewed annually. At least once every four to six years the properties should be physically inspected and revalued. The sales comparison approach is the primary approach to land valuation and is always preferred when sufficient sales are available. In the absence of adequate sales, other techniques used in mass appraisal include allocation, abstraction, anticipated use, capitalization of ground rents, and land residual capitalization. (See IAAO [1990, chapter 7] and Gloudemans [1999, chapter 3].)

4.6 Considerations by Property Type

4.7 The appropriateness of each valuation approach varies with the type of property under consideration. Table 1 ranks the relative usefulness of the three approaches in the mass appraisal of major types of properties. The table assumes that there are no major statutory barriers to obtaining cost, sales, and income data. Again, although certain approaches tend to produce better results for a given type of property, the use of two or more approaches should produce greater accuracy.

4.7.1 Single-Family Residential Property

The sales comparison approach is the best approach for single-family residential property, including condominiums. Automated versions of this approach are highly efficient and generally accurate for the majority of these properties. The cost approach is a good supplemental approach and should serve as the primary approach when the sales data available are inadequate. The income approach is usually inappropriate for mass appraisal of single-family residential properties, because most of these properties are not rented.

4.7.2 Multifamily Residential Property

The sales comparison and income approaches are preferred in valuing multifamily residential property when sufficient sales and income data are available. Multiple regression analysis and related techniques have been successfully used in valuing this property type. Income multipliers can also be highly effective. As with other residential property, the cost approach is useful in providing supplemental valuations and can serve as the primary approach when good sales and income data are not available.

4.7.3 Commercial and Industrial Property

The income approach is the most appropriate method to apply when valuing commercial and industrial property if sufficient income data are available. Direct sales comparison models can be equally effective in large jurisdictions with sufficient sales. When a sufficient supply of sales data and income data is not available, the cost approach should be applied. However, values generated should be periodically checked against available sales data. Cost factors, land values, and depreciation schedules must be kept current through periodic review.

4.7.4 Non-Agricultural Land

The sales comparison approach is the preferred approach for non-agricultural land. Application of the sales comparison approach to vacant land involves the collection of sales data, the posting of sales data on maps, the calculation of standard unit values (such as value per square foot, per front foot, or per parcel) by area and type of land use, and the development of land valuation maps or computer-generated tables, in which the pattern of values is displayed. When vacant land sales are not available or are few, additional benchmarks can be obtained by subtracting the replacement cost new less depreciation of improvements from the sales prices of improved parcels. The success of this technique requires reliable cost data and tends to work best for relatively new improvements, for which depreciation is minimal. If neither vacant-parcel nor improved-parcel sales data are available, the assessor will need to apply allocation methods or use valuation methods that provide separate land and building values. Sometimes income approach applications can also be used.

Table 1. Rank of typical usefulness of the three approaches to value in the mass appraisal of major types of property

	Cost approach	Sales comparison approach	Income approach
Single-family residential	2	1	3
Multifamily residential	3	1,2	1,2
Commercial	3	2	1
Industrial	1,2	3	1,2
Non-agricultural land	—	1	2
Agricultural*	—	2	1
Special-purpose**	1	2,3	2,3

**Includes farm, ranch, and forest properties.*
***Includes institutional, governmental, and recreation properties*

4.7.5 Agricultural Property

If adequate sales data are available and agricultural property is to be appraised at market value, the sales comparison approach would be preferred. However, nearly every state or province provides for use-value assessment (and usually appraisal), which significantly understates the market value for agricultural property, so the sales comparison approach is usually not applicable. Because of this limitation, it is imperative to obtain good income data and to use the income approach for agricultural land. Land rents are often available, sometimes permitting the development and application of overall capitalization rates. This method, of course, also entails the estimation of normal land rents for unrented parcels. When agricultural parcels include improvements, the cost approach or sales comparison models that provide separate building values may be used to determine their value.

4.7.6 Special-Purpose Property

The cost approach tends to be most appropriate in the appraisal of special-purpose properties, due to the distinctive nature of such properties and the general absence of adequate sales or income data.

4.8 Frequency of Reappraisals

Section 4.2.2 of the *Standard on Property Tax Policy* (IAAO 2004) states that current market value implies annual assessment of all property. Annual assessment does not necessarily mean, however, that each valuation must be reviewed or recomputed individually. Instead, trending factors based on criteria such as property type, location, size, and age can be developed and applied to groups of properties. These factors

should be derived from ratio studies or other market analyses. Analysis of ratio study data can suggest groups or strata of properties in need of physical review. In general, trending factors can be highly effective in maintaining equity when appraisals are uniform within strata. However, such factors are not a substitute for physical reviews and individual reappraisals, which are required to correct lack of uniformity within strata. Although assessment trending can be effective for short periods, properties should be physically reviewed and individually reappraised at least every four to six years. This can be accomplished in at least three ways:

• reappraising all property at periodic intervals (that is, every four to six years) • reappraising properties on a cyclical basis (for example, one-fourth or one-sixth each year)

• reappraising on a priority basis as indicated by ratio studies or other considerations while still ensuring that all properties are physically reviewed at least every sixth year

5. Managerial Considerations

5.1 Overview

Mass appraisal requires human, computing, and other resources to be well managed and appropriate appraisal and analytical methods need to be employed. In this section certain key managerial considerations are discussed.

5.2 Staffing

A successful in-house appraisal program requires a sufficiently large staff composed of persons skilled in general administration and supervision, appraisal, mapping and drafting, data processing, and secretarial and clerical functions. Typical staffing sizes and patterns for jurisdictions of various sizes are illustrated in *Property Appraisal and Assessment Administration* (IAAO 1990, chapter 16). Unless efficiency or practical concerns dictate otherwise, persons performing the various mass appraisal functions should be employees of the assessor. When these functions are not performed by assessment staff, it is imperative that they be adequately provided by other departments, an oversight agency, a service bureau, a qualified contractor, or another source. Strong lines of communication must be established between the assessor's staff and the designated support groups.

5.3 Data Processing Support

Computer-assisted mass appraisals require considerable data processing support. (See the *Standard on Facilities, Equipment, Computers, and Supplies* [IAAO 2003].)

5.3.1 Hardware

The hardware should be powerful enough to permit computerization of appropriate applications of the cost, sales comparison, and income approaches, as well as providing word processing, data inquiry, and activity summaries. The requirements for efficient running of desired software should be established before the acquisition of hardware. Computer equipment can be purchased, leased, rented, or shared with other jurisdictions. If the purchase option is chosen, the equipment should be easy to upgrade so that technological developments can be taken advantage of without purchasing an entirely new system.

5.3.2 Software

Computer software can be developed internally, adapted from software developed by other public agencies, or purchased (in whole or in part) from private vendors. (Inevitably there will be some tailoring needed to adapt externally developed software to the requirements of the user's environment.) Each alternative has

advantages and disadvantages. The software should be designed so that it can be easily modified; it should also be well documented, at both the appraiser/user and programmer levels. Security measures should exist to prevent unauthorized use and to provide backup in the event of accidental loss or destruction of data.

5.4 Contracting for Appraisal Services

5.4.1 Overview

Reappraisal contracts can include mapping, data collection, data processing, and other services, as well as valuation. They offer the potential of acquiring professional skills and resources quickly. Often these skills and resources are not available internally. Contracting for these services can permit the jurisdiction to maintain a modest staff and to budget for reappraisal on a periodic basis, but also makes the assessor less likely to develop in- house expertise. (See the *Standard on Contracting for Assessment Services* [IAAO 2002].)

5.4.2 In-House Staff

The assessor's staff must have confidence in the appraisals and be able to explain and defend them. This confidence begins with application of reliable appraisal techniques, generation of appropriate valuation reports, and review of preliminary values. It may be helpful to have reports that list each parcel, its characteristics, and its calculated value. Parcels with unusual characteristics, extreme values, or extreme changes in values should be identified for subsequent individual review. Equally important, summary reports should show average values, value changes, and ratio study statistics for various strata of properties. These should be reviewed to ensure the

overall consistency of values for various types of property and various locations. (See the *Uniform Standards of Professional Appraisal Practice*, Standards
Rule 6-7, for reporting requirements for mass appraisals [The Appraisal Foundation, Appraisal Standards Board 2008–2009].) The staff should also be prepared to support individual valuations as required, preferably through comparable sales. At a minimum, staff should be able to produce a property record and explain the basic approach (cost, sales comparison, or income) used to estimate the value of the property. A property owner should never merely be told that "the computer" or "the system" produced the appraisal. Generally, the staff should tailor the explanation to the taxpayer's knowledge and expertise. Equations converted to tabular form can be used to explain the basis for valuation. Cost tables can be used to explain values based on the cost approach. In all cases, the assessor's staff should be able to produce sales or appraisals of similar properties in order to support (or at least explain) the valuation of the property in question. Comparable sales can be obtained from reports that list sales by such features as type of property, area, size, and age. Alternatively, interactive programs can be obtained or developed that identify and display the most comparable properties. Assessors should notify property owners of their valuations in sufficient time for property owners to discuss their appraisals with the assessor and appeal the value if they choose to do so (*Standard on Public Relations* [IAAO 2001]). Statutes should provide for a formal appeals process beyond the assessor's level (*Standard on Assessment Appeal* [IAAO 2001]).

5.5 Benefit-Cost Considerations

5.5.1 Overview

The object of mass appraisal is to produce equitable valuations at low costs. Improvements in equity generally require increased expenditures. Benefit-cost analysis in mass appraisal involves two major issues, one of policy and the other of administration.

5.5.2 Policy Issues

An assessment jurisdiction requires a certain expenditure level simply to inventory, list, and value properties. Beyond that point, additional expenditures make possible rapid improvements in equity initially, but marginal improvements in equity diminish as expenditure increases. At a minimum, jurisdictions should budget to meet statutory standards of equity. Refer to the *Standard on Ratio Studies* (IAAO 2007) for a listing of performance standards.

5.5.3 Administrative Issues

Maximizing equity per dollar of expenditure is the primary responsibility of assessment administration. The assessor must provide leadership, make decisions, and get results by planning, budgeting, organizing, and controlling within all social, economic, and governmental limits (IAAO 1990, chapter 16). The computer-assisted mass appraisal system selected must be designed and used to evaluate appraisal performance and ensure compliance with laws, regulations, and policies.

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Glossary

Abstraction Method—Method of land valuation in the absence of vacant land sales, whereby improvement values obtained from the cost model are subtracted from sales prices of improved parcels to yield residual land value estimates. Also called land residual technique.
Accrued Depreciation—(1) The amount of depreciation, from any and all sources, that affects the value of the property in question on the effective date of the appraisal. (2) In accounting, the amount reserved each year or accumulated to date in the accounting system for replacement of a building or other asset. When depreciation is recorded as a dollar amount, it may be deductible from total plant value or investment to arrive at the rate base for public utilities. See also Depreciation.
Acquisition Value—An assessed value based on the cost of acquiring the property; increases in this value are usually limited until the next qualifying sale.
Adaptive Estimation Procedure (AEP)—A computerized, iterative, self-referential procedure using properties for which sales prices are known to produce a model that can be used to value properties for which sales prices are not known. Also called "feedback."
Adjusted Sale Price—The sale price that results from adjustments made to the stated sale price to account for the effects of time, personal property, financing, or the like.
Adjustments—Modifications in the reported value of a variable, such as sale price or gross income. For example, adjustments can be used to estimate market value in the sales comparison approach by adjusting the sale price of the comparable for differences between comparable and subject properties.
Ad Valorem Tax—A tax levied in proportion to the value of the thing(s) being taxed.
Aerial Photograph—A photograph of a part of the earth's surface taken by an aircraft-supported camera.
Agricultural Property—Improved or unimproved land devoted to or available for the production of crops or other agricultural products, livestock, and agricultural support buildings.
Allocation Method—A method used to value land, in the absence of vacant land sales, by using a typical ratio of land to improvement value. Also called land ratio method.
Appraisal Foundation, The—The organization authorized by the United States Congress as the source of appraisal standards and appraiser qualifications.
Appraisal Ratio—(1) The ratio of the appraised value to an indicator of market value. (2) By extension, an estimated fractional relationship between the appraisals and market values of a group of properties. See also Level of Appraisal.
Appraisal Ratio Study—A ratio study using independent expert appraisals as indicators of market value.
Arm's-Length Sale—A sale between two unrelated parties, both seeking to maximize their positions from the transaction.
Assessment Cycle—A legally sanctioned reappraisal period generally ranging from one to ten years.
Assessment Date—The status date for tax purposes. Appraised values reflect the status of the property and any partially completed construction as of this date.
Assessment Equity—The degree to which assessments bear a consistent relationship to market value.
Assessment Level—The common, or overall, ratio of assessed values to market values.
Assessment Maps—See Cadastral Map.
Assessment Ratio—(1) The fractional relationship an assessed value bears to the market value of the property in question. (2) By extension, the fractional relationship the total of the assessment roll bears to the total market value of all taxable property in a jurisdiction. See Level of Assessment.
Assessment Ratio Study—An investigation intended to determine the assessment ratio and assessment equity.

Assessment Ratio—(1) The fractional relationship an assessed value bears to the market value of the property in question. (2) By extension, the fractional relationship the total of the assessment roll bears to the total market value of all taxable property in a jurisdiction. See Level of Assessment.
Assessment Ratio Study—An investigation intended to determine the assessment ratio and assessment equity. **Audit**—A systematic investigation or appraisal of procedures or operations for the purpose of determining conformity with specifically prescribed criteria.
Audit, Performance—An analysis of an organization to determine whether or not the quantity and quality of work performed meets standards. Ratio studies are an important part of performance audits of an assessing organization. **Audit, Procedural**—An examination of an organization to determine whether established or recommended procedures are being followed.
Audit Program—The procedures undertaken or particular work done by an accountant in conducting an examination.
Audit Trail—A set of records of the changes made to another set of records.
Automated Valuation Model—A computer program for property valuation that analyzes data using an automated process. See also Computer-assisted Mass Appraisal.
Base Year Value—In a nonmarket-value assessment system, the assessed value established as of a specific year.
Benchmark—(1) A term used in land surveying to mean a known point of reference. (2) In property appraisal, a property of known value and of known effective age and replacement cost. (3) By extension, a model property to be used in determining by comparison the grade or quality class of other properties.
Cadastral Map—A scale map displaying property ownership boundaries and showing the dimensions of each parcel with related information such as parcel identifier, survey lines, and easements.
Calibration—The process of estimating the coefficients in a mass appraisal model.
CAMA—See Computer-assisted Mass Appraisal.
Capitalization Rate—Any rate used to convert an estimate of future income to an estimate of market value; the ratio of net operating income to market value.
Capitalization of Ground Rents—A method of estimating land value in the absence of comparable sales; applicable where there is an income stream; for example, to farmland and commercial land leased on a net basis. **Class**—A set of items defined by common characteristics. (1) In property taxation, property classes such as residential, agricultural, and industrial may be defined. (2) In assessment, building classification systems based on type of building design, quality of construction, or structural type are common. (3) In statistics, a predefined category into which data may be put for further analysis. For example, ratios may be grouped into the following classes: less than 0.500, 0.500 to 0.599, 0.600 to 0.699, and so forth.
Coding—(1) The act of reducing a description of a unique object, such as a parcel of real estate, to a set of one or more measures or counts of certain of its characteristics, such as square footage, number of bathrooms, and the like. (2) Encoding, a related term, is usually used to refer to the act of translating coded descriptions useful to human beings into a form that can be processed by computers. (3) Coding is sometimes also used to refer to the writing of instructions that direct the processing done by computers.
Coefficient—(1) In a mathematical expression, a number or letter preceding and multiplying another quantity. For example, in the expression, 5X, 5 is the coefficient of X, and in the expression aY, a is the coefficient of Y. (2) A dimensionless statistic, useful as a measure of change or relationship; for example, correlation coefficient.
Commercial Property—Generally, any nonindustrial, nonresidential realty of a commercial enterprise. Includes realty used as a retail or wholesale establishment, hotel or motel, service station, commercial garage, warehouse, theater, bank, nursing home, and the like.

Comparable Sales; Comparables—(1) Recently sold properties that are similar in important respects to a property being appraised. The sale price and the physical, functional, and locational characteristics of each of the properties are compared to those of the property being appraised in order to arrive at an estimate of value. (2) By extension, the term comparables" is sometimes used to refer to properties with rent or income patterns comparable to those of a property being appraised.

Comparative Unit Method—(1) A method of appraising land parcels in which an average or typical value is estimated for each stratum of land. (2) A method of estimating replacement cost in which all the direct and indirect costs of a structure (except perhaps architect's fees) are aggregated and specified with reference to a unit of comparison such as square feet of ground area or floor area, or cubic content. Separate factors are commonly specified for different intervals of the unit of comparison and for different story heights, and separate schedules are commonly used for different building types and quality classes.

Computer-assisted Assessment System—A system for assessing real and personal property with the assistance of a computer. A computer may be used, for example, in the appraisal process, in keeping track of ownership and exemption status, in printing the assessment roll, in coordinating the work load of real property appraisers and personal property appraisers with respect to the assessment of commercial and industrial properties, and in a number of other areas.

Computer-assisted Mass Appraisal (CAMA)—A system of appraising property, usually only certain types of real property, that incorporates computer-supported statistical analyses such as multiple regression analysis and adaptive estimation procedure to assist the appraiser in estimating value.

Cost—The money expended in obtaining an object or attaining an objective; generally used in appraisal to mean the expense, direct and indirect, of constructing an improvement.

Cost Approach—(1) One of the three approaches to value, the cost approach is based on the principle of substitution— that a rational, informed purchaser would pay no more for a property than the cost of building an acceptable substitute with like utility. The cost approach seeks to determine the replacement cost new of an improvement less depreciation plus land value. (2) The method of estimating the value of property by (a) estimating the cost of construction based on replacement or reproduction cost new or trended historic cost (often adjusted by a local multiplier), (b) subtracting depreciation, and (c) adding the estimated land value. The land value is most frequently determined by the sales comparison approach.

Cost Schedules—Charts, tables, factors, curves, equations, and the like intended to help estimate the cost of replacing a structure from knowledge of some other factors, such as its quality class and number of square feet. **Data—**The general term for masses of numbers, codes, and symbols. "Data" is the plural of datum, one element of data.

Data Edit—The process of examining recorded data to ensure that each element of data is reasonable and is consistent with others recorded for the same object, such as a parcel of real estate. Data editing, which may be done by persons or by computer, is essentially a mechanical process, distinct from verifying the correctness of the recorded information by calling or writing property owners.

Data Management—The human (and sometimes computer) procedures employed to ensure that no information is lost through negligent handling of records from a file, that all information is properly supplemented and up-to-date, and that all information is easily accessible.

Depreciation—Loss in value of an object, relative to its replacement cost new, reproduction cost new, or original cost, whatever the cause of the loss in value. Depreciation is sometimes subdivided into three types: physical deterioration (wear and tear), functional obsolescence (suboptimal design in light of current technologies or tastes), and economic obsolescence (poor location or radically diminished demand for the product). See also Accrued Depreciation.

Depreciation Schedules—Tables used in mass appraisal that show the typical loss in value at various ages or effective ages for different types of properties.
Discount Rate—The rate of return on investment; the rate an investor requires to discount future income to its present worth.
Economic Area—A geographic area, typically encompassing a group of neighborhoods, defined on the basis that the properties within its boundaries are more or less equally subject to a set of one or more economic forces that largely determine the value of the properties in question.
Equity—(1) In assessment, the degree to which assessments bear a consistent relationship to market value. Measures include the coefficient of dispersion, coefficient of variation, and price-related differential. (2) In popular usage, a synonym for tax fairness. (3) In ownership, the net value of property after liens and other charges have been subtracted.
Expense Ratios—The ratio of expenses to gross income.
Factor—(1) An underlying characteristic of something (such as a house) that may contribute to the value of a variable (such as its sale price), but is observable only indirectly. For example, construction quality is a factor defined by workmanship, spacing of joists, and materials used. Factor definition and measurement may be done subjectively or by a computer-assisted statistical algorithm known as factor analysis. (2) Loosely, any characteristic used in adjusting the sales prices of comparables. (3) The reciprocal of a rate. Assessments may be equalized by multiplying them by a factor equal to the reciprocal of the assessment ratio, and value can be estimated using the income approach by multiplying income by a factor equal to the reciprocal of the discount rate.
Feedback—See Adaptive Estimation Procedure.
Front Foot—The unit or standard of linear measure used in measuring frontage.
Geographic Information System (GIS)—(1) A database management system used to store, retrieve, manipulate, analyze, and display spatial information. (2) One type of computerized mapping system capable of integrating spatial data (land information) and attribute data among different layers on a base map.
Gross Income—The payments to an owner that a property can generate before expenses are deducted.
Gross Income Multiplier—A capitalization technique that uses the ratio between the sale price of a property and its potential gross income or its effective gross income.
Improvements—Buildings, other structures, and attachments or annexations to land that are intended to remain so attached or annexed, such as sidewalks or sewers.
Income Approach—One of the three approaches to value, based on the concept that current value is the present worth of future benefits to be derived through income production by an asset over the remainder of its economic life. The income approach uses capitalization to convert the anticipated benefits of the ownership of property into an estimate of present value.
Industrial Property—Generally, any property used in a manufacturing activity, such as a factory, wholesale bakery, food processing plant, mill, mine, or quarry.
Integrity—The quality of a data element or program being what it says it is; usually distinguished from validity, the quality of its being what it should be in terms of some ultimate purpose. After data are edited and encoded and programs are prepared, their integrity is ensured by safeguards that prevent accidental or unauthorized tampering with them.
Land—(1) In economics, the surface of the earth and all the natural resources and natural productive powers over which possession of the earth's surface gives man control. (2) In law, a portion of the earth's surface, together with the earth below it, the space above it, and all things annexed thereto by nature or by man. See also Improvements.
Land Residual Technique—See Abstraction Method.

Legal Description—A delineation of dimensions, boundaries, and relevant attributes of a real property parcel that serve to identify the parcel for all purposes of law. The description may be in words or codes, such as metes and bounds or coordinates. For a subdivided lot, the legal description would probably include lot and block numbers and subdivision name.

Level of Appraisal—The common, or overall, ratio of appraised values to market values. Three concepts are usually of interest: the level required by law, the true or actual level, and the computed level, based on a ratio study.

Level of Assessment; Assessment Ratio—The common or overall ratio of assessed values to market values. Compare Level of Appraisal. Note: The two terms are sometimes distinguished, but there is no convention determining their meanings when they are. Three concepts are commonly of interest: what the assessment ratio is legally required to be, what the assessment ratio actually is, and what the assessment ratio seems to be, on the basis of a sample and the application of inferential statistics. When level of assessment is distinguished from assessment ratio, "level of assessment" usually means either the legal requirement or the true ratio, and "assessment ratio" usually means the true ratio or the sample statistic.

Linear Regression—A kind of statistical analysis used to investigate whether a dependent variable and a set of one or more independent variables share a linear correlation and, if they do, to predict the value of the dependent variable on the basis of the values of the other variables. Regression analysis of one dependent variable and only one independent variable is called simple linear regression, but it is the word simple (not linear) that distinguishes it from multiple regression analysis with its multiple independent variables.

Location—The numerical or other identification of a point (or object) sufficiently precise so the point can be situated. For example, the location of a point on a plane can be specified by a pair of numbers (plane coordinates) and the location of a point in space can be specified by a set of three numbers (space coordinates). However, location may also be specified in other terms than coordinates. A location may be specified as being at the intersection of two specific lines by identifying it with some prominent and known feature (for example, "on top of Pikes Peak" or "at the junction of the Potomac and Anacostia Rivers").

Map—A conventional representation, usually on a plane surface and at an established scale, of the physical features (natural, artificial, or both) of a part or the whole of the earth's surface. Features are identified by means of signs and symbols, and geographical orientation is indicated.

Map, Tax—A map drawn to scale and delineated for lot lines or property lines or both, with dimensions or areas and identifying numbers, letters, or names for all delineated lots or parcels.

Market—(1) The topical area of common interest in which buyers and sellers interact. (2) The collective body of buyers and sellers for a particular product.

Market Adjustment Factors—Market adjustment factors, reflecting supply and demand preferences, are often required to adjust values obtained from the cost approach to the market. These adjustments should be applied by type of property and area and are based on sales ratio studies or other market analyses. Accurate cost schedules, condition ratings, and depreciation schedules will minimize the need for market adjustment factors.

Market Analysis—A study of real estate market conditions for a specific type of property.

Market Area—See Economic Area.

Market Value—Market value is the major focus of most real property appraisal assignments. Both economic and legal definitions of market value have been developed and refined. A current economic definition agreed upon by agencies that regulate federal financial institutions in the United States is:

The most probable price (in terms of money) which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of

a specified date and the passing of title from seller to buyer under conditions whereby: The buyer and seller are typically motivated; Both parties are well informed or well advised, and acting in what they consider their best interests; A reasonable time is allowed for exposure in the open market; Payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

Market-Value Standard—A requirement of law or practice that the assessment ratio of all properties be equal to one. Two issues are implicit here: that fractional assessment levels be avoided and that all property be assessed on the basis of its market value and not on the basis of its value in some particular use—for example, agriculture—unless that use is the only use to which the property can legally be put (in which case its use value would be equal to its market value).

Mass Appraisal—The process of valuing a group of properties as of a given date, using standard methods, employing common data, and allowing for statistical testing.

Mass Appraisal Model—A mathematical expression of how supply and demand factors interact in a market.

Model—(1) A representation of how something works. (2) For purposes of appraisal, a representation (in words or an equation) that explains the relationship between value or estimated sale price and variables representing factors of supply and demand.

Model Area—See Economic Area.

Model Calibration—The development of adjustments, or coefficients, based on market analysis, that identifies specific factors with an actual effect on market value.

Model Specification—The formal development of a model in a statement or equation, based on data analysis and appraisal theory.

Multiple Regression, Multiple Regression Analysis (MRA)—A particular statistical technique, similar to correlation, used to analyze data in order to predict the value of one variable (the dependent variable), such as market value, from the known values of other variables (called "independent variables"), such as lot size, number of rooms, and so on. If only one independent variable is used, the procedure is called simple regression analysis and differs from correlation analysis only in that correlation measures the strength of relationship, whereas regression predicts the value of one variable from the value of the other. When two or more variables are used, the procedure is called multiple regression analysis. See Linear Regression.

Neighborhood—(1) The environment of a subject property that has a direct and immediate effect on value. (2) A geographic area (in which there are typically fewer than several thousand properties) defined for some useful purpose, such as to ensure for later multiple
regression modeling that the properties are homogeneous and share important locational characteristics.

Net Income—The income expected from a property after deduction of allowable expenses.

Net Income Multiplier—A factor expressing the relationship between value and net operating income; the reciprocal of the overall rate.

Objective—The quality of being definable by specific criteria without the need for judgment.

Open Market—A freely competitive market in which any buyer or seller may trade and in which prices are determined by competition.

Overall Rate (OAR)—A capitalization rate that blends all requirements of discount, recapture, and effective tax rates for both land and improvements; used to convert annual net operating income into an indicated overall property value.

Parcel—A contiguous area of land described in a single legal description or as one of a number of lots on a plat; separately owned, either publicly or privately; and capable of being separately conveyed.

Parcel Identifier—A code, usually numerical, representing a specific land parcel's legal description. The purpose of parcel identifiers is to permit reference to legal descriptions by using a code of uniform and manageable size, thereby facilitating record-keeping and handling. Also called parcel identification number.
Personal Property—Consists of every type of property that is not real property. Personal property is movable without damage to itself or the real estate and is subdivided into tangible and intangible.
Price, Adjusted Sale—The sale price that results from adjustments made to the stated sale price to account for the effects of time, personal property, atypical financing, and the like.
Price, Market—The value of a unit of goods or service, expressed in terms of money, as established in a free and open market. Note: This term is sometimes distinguished from "market value" on the ground that the latter term assumes that buyers and sellers are informed, but this assumption is also implied by the phrase "free and open market." Compare Price, Sale.
Price, Sale—(1) The actual amount of money exchanged for a unit of goods or services, whether or not established in a free and open market. An indicator of market value. (2) Loosely used synonymously with "offering" or "asked" price. Note: The sale price is the "selling price" to the vendor and the "cost price" to the vendee.
Property—(1) An aggregate of things or rights to things. These rights are protected by law. There are two basic types of property: real and personal. (2) The legal interest of an owner in a parcel or thing.
Property Record Card (Form)—An assessment document with blanks for the insertion of data for property identification and description, for value estimation, and for property owner satisfaction. The basic objectives of property record forms are, first, to serve as a repository of most of the information deemed necessary for identifying and describing a property, valuing a property, and assuring property owners that the assessor is conversant with their properties, and, second, to document property appraisals. Use of properly designed property record forms permits an organized and uniform approach to amassing a property inventory.
Ratio, Assessment—See Assessment Ratio.
Ratio Study—A study of the relationship between appraised or assessed values and market values. Indicators of market values may be either sales (sales ratio study) or independent "expert" appraisals (appraisal ratio study). Of common interest in ratio studies are the level and uniformity of the appraisals or assessments. See also Level of Appraisal and Level of Assessment.
RCN—Replacement cost new or reproduction cost new.
RCNLD—Replacement cost new less depreciation or reproduction cost new less depreciation.
Real Estate—The physical parcel of land and all improvements permanently attached. Compare Real Property. **Real Property**—Consists of the interests, benefits, and rights inherent in the ownership of land plus anything permanently attached to the land or legally defined as immovable; the bundle of rights with which ownership of real estate is endowed. To the extent that "real estate" commonly includes land and any permanent improvements, the two terms can be understood to have the same meaning. Also called "realty."
Reappraisal—The mass appraisal of all property within an assessment jurisdiction accomplished within or at the beginning of a reappraisal cycle (see below, sense 2). Also called revaluation or reassessment.
Reappraisal Cycle—(1) The period of time necessary for a jurisdiction to have a complete reappraisal. For example, a cycle of five years occurs when one-fifth of a jurisdiction is reappraised each year and also when a jurisdiction is reappraised all at once every five years. (2) The maximum interval between reappraisals as stated in laws.
Reassessment—(1) The relisting and revaluation of all property, or all property of a given class, within an assessment district by order of an authorized officer or body after a finding by such an officer or body that the original assessment is too faulty for correction through the usual procedures of review and equalization. (2) The

revaluation of all real property by the regularly constituted assessing authorities, as distinguished from assessment on the basis of valuations most or all of which were established in some prior year. See also Revaluation.

Reciprocal—The result obtained when 1 is divided by a given number.

Reconciliation—The final step in the valuation process wherein consideration is given to the relative strengths and weaknesses of the three approaches to value, the nature of the property appraised, and the quantity and quality of available data in formation of an overall opinion of value (either a single point estimate or a range of value). Also termed correlation" in some texts.

Regression Analysis—See Multiple Regression Analysis.

Reliability—The degree to which measures are free from random error and therefore yield consistent results; the extent to which a procedure yields consistent results on repeated trials.

Replacement Cost; Replacement Cost New—The cost, including material, labor, and overhead, that would be incurred in constructing an improvement having the same utility to its owner as a subject improvement, without necessarily reproducing exactly any particular characteristics of the subject. The replacement cost concept implicitly eliminates all functional obsolescence from the value given; thus, only physical depreciation and economic obsolescence need to be subtracted to obtain replacement cost new less depreciation (RCNLD).

Replacement Cost New Less Depreciation (RCLD)— In the cost approach, replacement cost new less physical incurable depreciation.

Reproduction Cost; Reproduction Cost New—The cost of constructing a new property, reasonably identical (having the same characteristics) with the given property except for the absence of physical depreciation, using the same materials, construction standards, design, and quality of workmanship, computed on the basis of prevailing prices and on the assumption of normal competency and normal conditions.

Residential Property—Property used for housing such as single-family residences, duplexes, or apartment buildings.

Residual—The difference between an observed value and a predicted value for a dependent variable.

Residual Technique—A method of arriving at the unknown value of a property component by subtracting the known values of other components from a known overall value.

Revaluation—A reappraisal of property; especially a complete reappraisal of real property after assessment for one or more years on valuations most (or all) of which were established in some prior year. Compare Reassessment and Reappraisal.

Review—(1) Consideration by a board of appeals, a board of equalization, a board of review, or a court, of individual, property class, or district assessments, whether for the purpose of adding omitted taxable property, removing exempt property, or equalizing the valuations placed on listed property. (2) The act or process of critically studying a report, such as an appraisal, prepared by another.

Sale, Arm's-Length—A sale in the open market between two unrelated parties, each of whom is reasonably knowledgeable of market conditions and under no undue pressure to buy or sell.

Sale Price—See Price, Sale; Price, Adjusted Sale.

Sales Comparison Approach—One of three approaches to value, the sales comparison approach estimates a property's value (or some other characteristic, such as its depreciation) by reference to comparable sales.

Sales Data—(1) Information about the nature of the transaction, the sale price, and the characteristics of a property as of the date of sale. (2) The elements of information needed from each property for some purpose, such as appraising properties by the direct sales comparison approach.

Sales File—A file of sales data.

Sales Ratio Study—A ratio study that uses sales prices as proxies for market values.

Schedules—Tables, equations, or some other means of presenting the relationship between the values of two or more variables that are functionally related. For example, cost schedules present the relationship between cost per square foot and living area for a number of quality classes, building heights, and other characteristics.

Single-Property Appraisal—Systematic appraisal of properties one at a time.

Site—The location of a person, thing, or event.

Site Characteristics—(1) Characteristics of (and data that describe) a particular property, especially land size, shape, topography, drainage, and so on, as opposed to location and external economic forces.

Software—(1) Computer programs. (2) Those parts of a computer system that are not machinery or circuits; procedures and possibly documentation are included along with programs.

Special-Purpose Property—A property adapted for a single use.

Standard 6—See *Uniform Standards of Professional Appraisal Practice*.

Stratify—To divide, for purposes of analysis, a sample of observations into two or more subsets according to some criterion or set of criteria.

Stratum, Strata (pl.)—A class or subset that results from stratification.

Subclass—A group of properties within a class, smaller than the class, usually (although not necessarily) defined by stratification rather than by sampling.

Subject Property—The property being appraised.

Subjective—Having the quality of requiring judgment in arriving at an appropriate answer of value of a variable (such as the quality class of a structure).

Three Approaches to Value—A convenient way to group the various methods of appraising a property. The cost approach encompasses several methods for estimating replacement cost new of an improvement less depreciation plus land value. The sales comparison approach estimates values by comparison with similar properties for which sales prices are known. The methods included in the income approach are based on the assumption that value equals the present worth of the rights to future income.

Time-adjusted Sale Price—The price at which a property sold, adjusted for the effects of price changes reflected in the market between the date of sale and the date of analysis.

Trending—Adjusting the values of a variable for the effects of time. Usually used to refer to adjustments of assessments intended to reflect the effects of inflation and deflation and sometimes also, but not necessarily, the effects of changes in the demand for micro-locational goods and services.

Trending Factor—A figure representing the increase in cost or selling price over a period of time. Trending accounts for the relative difference in the value of a dollar between two periods.

Uniformity—The equality of the burden of taxation in the method of assessment.

Uniform Standards of Professional Appraisal Practice— Annual publication of the Appraisal Standards Board of The Appraisal Foundation: "These Standards deal with the procedures to be followed in performing an appraisal, appraisal review, or appraisal consulting service and the manner in which an appraisal, appraisal review, or appraisal consulting service is communicated. … Standard 6 establishes requirements for the development and reporting of mass appraisals of a universe of properties for ad valorem tax purposes or any other intended use" (The Appraisal Foundation, Appraisal Standards Board 2002, Preamble, p. 6).

Unit of Comparison—A property as a whole or some smaller measure of the size of the property used in the sales comparison approach to estimate a price per unit.

Use Class—(1) A grouping of properties based on their use rather than, for example, their acreage or construction.

(2) One of the following classes of property: single-family residential, multifamily residential, agricultural, commercial, industrial, vacant land, and institutional/exempt. (3) Any subclass refinement of the above—for example, townhouse, detached single-family, condominium, house on farm, and so on.

Use Value—(1) The value of property in a specific use. (2) Property entirely used for a specific purpose or use that may entitle the property to be assessed at a different level than others in the jurisdiction. Examples of properties that may be assessed at use value under the statutes include agricultural land, timberland, and historical sites.

USPAP—See *Uniform Standards of Professional Appraisal Practice*.

Valuation—(1) The process of estimating the value— market, investment, insured, or other properly defined value—of a specific parcel or parcels of real estate or of an item or items of personal property as of a given date.

(2) The process or business of appraising, of making estimates of the value of something. The value usually required to be estimated is market value.

Valuation Date—The specific date as of which assessed values are set for purposes of property taxation. This date may also be known as the "date of finality." See also Assessment Date.

Valuation Model—A representation in words or in an equation that explains the relationship between value or estimated sale price and variables representing factors of supply and demand.

Value—(1) The relationship between an object desired and a potential owner; the characteristics of scarcity, utility, desirability, and transferability must be present for value to exist. (2) Value may also be described as the present worth of future benefits arising from the ownership of real or personal property. (3) The estimate sought in a valuation. (4) Any number between positive infinity and negative infinity. See also Market Value.

Variable—An item of observation that can assume various values, for example, square feet, sales prices, or sales ratios. Variables are commonly described using measures of central tendency and dispersion.

Verify—To check the accuracy of something. For example, sales data may be verified by interviewing the purchaser of the property, and data entries may be verified by check digits. IAAO members may access the full text of IAAO standards on the IAAO Web site, www.iaao.org. Later editions of this document are available at www.iaao.org

THIS FORM CAN BE SUBMITTED ONLINE @ http://gis.guilfordcountync.gov/realpropertylisting/

GUILFORD COUNTY REAL PROPERTY LISTING FORM FOR JANUARY 1, 2022

Guilford County Tax Department
P.O. Box 3138
Greensboro, NC 27402
Phone: (336) 641-4814
Email: taxappraisal@guilfordcountync.gov

INSTRUCTIONS: IF NO IMPROVEMENTS WERE MADE TO YOUR REAL PROPERTY DURING 2021 , YOU DO NOT HAVE TO RETURN THIS FORM. IF YOU HAVE MADE CHANGES TO YOUR REAL PROPERTY, RETURN THIS FORM BY MAIL OR SUBMIT ONLINE AT http://gis.guilfordcountync.gov/realpropertylisting/ NO LATER THAN JANUARY 31, 2022. IN THE FUTURE, IF YOU WISH TO RECEIVE THIS FORM ELECTRONICALLY, PLEASE PROVIDE YOUR EMAIL ADDRESS:_____

Section A NAME AND ADDRESS

NAME/MAILING ADDRESS:

PARCEL NUMBER
VCS
LOCATION ADDRESS

VERIFY YOUR PROPERTY RECORD DATA @
http://taxcama.guilfordcountync.gov/camapwa/

Section B NEW CONSTRUCTION IN 2021

NEW BUILDING _____ DOUBLE-WIDE MOBILE HOME _____(Year Built)

Did you purchase this property in the past six months? New Owner Name_____

Percent Complete on January 1, 2022: _____ Building Cost as of January 1, 2022: $_____

Section C REMODELING AND / OR ADDITIONS IN 2021

	DESCRIPTION		% COMPLETE 1/1/22	TOTAL COST AS OF 1/1/22
☐	ADDED FULL BATH(S)	HOW MANY _____	_____%	$_____
☐	ADDED 1/2 BATH(S)	HOW MANY _____	_____%	$_____
☐	ADDED CENTRAL AIR COND.		_____%	$_____
☐	SUN ROOM HEATED_ UNHEATED__	SIZE_____SQ FT	_____%	$_____
☐	ADDED ROOM(S)	SIZE_____SQ FT	_____%	$_____
☐	FINISHED BASEMENT	SIZE_____SQ FT	_____%	$_____
☐	FINISHED ATTIC	SIZE_____SQ FT	_____%	$_____
☐	ENCLOSED GARAGE/CARPORT INTO LIV. AREA	SIZE____SQ FT	_____%	$_____

	DESCRIPTION		% COMPLETE 1/1/20	TOTAL COST AS OF 1/1/20
☐	RENOVATION/REMODELING	TYPE_____	_____%	$_____
☐	REPLACED WINDOWS	NUMBER:_____	_____%	$_____
☐	ADDED SCREEN PORCH	SIZE_____SQ FT	_____%	$_____
☐	ADDED NEW SIDING	TYPE_____	_____%	$_____
☐	ADDED GARAGE/CARPORT	SIZE_____X_____	_____%	$_____
☐	ADDED DECK	SIZE_____X_____	_____%	$_____
☐	ADDED OUTBUILDINGS/FARM BLD.	TYPE_____ SIZE_____X_____	_____%	$_____
☐	ADDED IN GROUND SWIM. POOL	SIZE	_____%	$_____
☐	ADDED MOBILE HOME SITE(S)	HOW MANY___ TOTAL SITES_____	_____%	$_____
☐	OTHER-TYPE & DESCRIBE_____		_____%	$_____

Such as fireplace, patio, outdoor living area, finished upper floor or finished bonus room, added any type of outbuilding (10x10 or larger), manufacturing, warehouse, office area, commercial/industrial, or improvements to any real property during 2021.

Section D BUILDING DAMAGED OR REMOVED IN 2021

IN 2021, WAS A BUILDING OR OUTBUILDING SEVERELY DAMAGED OR REMOVED FROM THE PROPERTY? YES_____ NO_____

DESCRIPTION OF DAMAGE _____

DESCRIPTION OF BUILDING DESTROYED OR MOVED:_____WHERE WAS IT MOVED?_____

NAME OF NEW OWNER:_____ PHONE #:(____)_____

Section E DUTY TO LIST IMPROVEMENTS AND NEW CONSTRUCTION

Owners are required by law (N.C.G.S. 105-303 (b) (2) and N.C.G.S. 105-309 (c) (3) to report all new construction and improvements made to land and buildings within the preceding year by filing this form no later than **January 31, 2022**.

Under penalties prescribed by law, I hereby affirm that the information submitted is true and complete

PRINTED NAME:_____ **SIGNATURE:**_____

DATE:_____ Daytime #:_____ Cell #:_____

Email:_____

IF NO IMPROVEMENTS HAVE BEEN MADE THIS FORM DOES NOT NEED TO BE RETURNED

CODE AND BASE RATE TABLES

Table 1 BUILDING USE CODES

Table 2 BUILDING GRADE ADJUSTMENTS

Table 3 BUILDING ADDITION RATES

Table 4 BUILDING ADD/DEDUCTS

Table 5 BUILDING DEPRECIATION TABLES

Table 6 ECONOMIC LIFE TABLES

Table 7 OUTBUILDING CODES AND RATES

Table 8 LAND CODE DESCRIPTIONS

Table 9 REFERENCES & RESOURCES

Table 10 STAFF QUALIFICATIONS & REVIEW PROCESS

REAPPRAISAL 2022 Schedule of Values

RESIDENTIAL BUILDING USE CODES AND BASE RATES

01-SFR | BLUS01	77.00	110.000
012-TWIN HOME | BLUS012	74.00	105.714
013-TINY HOUSE | BLUS013	73.00	104.286
014-BED&BREAKFST | BLUS014	72.00	102.857
041-TOWNHOME | BLUS041	74.00	105.714
042-DETACHEDTOWNHOME | BLUS042	77.00	110.000
05-PATIOHM | BLUS05	74.00	105.714
08-DUPLEX/TRIPLEX | BLUS08	70.00	100.000
02-MANUFHM | BLUS02	52.00	74.286
04-CONDO | BLUS04	70.00	100.000
06-HIGHRSCND >4-FLRS | BLUS06	147.00	210.000

BUILDING ADDITION CODES AND BASE RATES

CAN01-CANOPY | ADDNCAN01	12.96
CAN02-CANOPY | ADDNCAN02	12.96
CAN04-CANOPY | ADDNCAN04	38.88
CAN05-CANOPY | ADDNCAN05	38.88
CAN06-CANOPY | ADDNCAN06	38.88
CAN07-CANOPY | ADDNCAN07	38.88
CLP01-LOADPLAT-COVER | ADDNCLP01	129.60
CLP04-LOADPLAT-COVER | ADDNCLP04	38.88
CLP05-LOADPLAT-COVER | ADDNCLP05	51.84
CLP06-LOADPLAT-COVER | ADDNCLP06	90.72
CLP07-LOADPLAT-COVER | ADDNCLP07	51.84
FAT01-ATTIC-FINISHED | ADDNFAT01	64.80
FAT02-ATTIC-FINISHED | ADDNFAT02	64.80
FAT03-ATTIC-FINISHED | ADDNFAT03	64.80
FAT04-ATTIC-FINISHED | ADDNFAT04	64.80
FAT05-ATTIC-FINISHED | ADDNFAT05	64.80
FAT06-ATTIC-FINISHED | ADDNFAT06	64.80
FAT07-ATTIC-FINISHED | ADDNFAT07	64.80

FBM01-BSMT-FINISHED | ADDNFBM01	58.32
FBM04-BSMT-FINISHED | ADDNFBM04	77.76
FBM05-BSMT-FINISHED | ADDNFBM05	90.72
FBM06-BSMT-FINISHED | ADDNFBM06	90.72
FBM07-BSMT-FINISHED | ADDNFBM07	77.76
FCP01-CARPORT-FIN | ADDNFCP01	32.40
FCP04-CARPORT-FIN | ADDNFCP04	38.88
FCP05-CARPORT-FIN | ADDNFCP05	38.88
FCP06-CARPORT-FIN | ADDNFCP06	51.84
FCP07-CARPORT-FIN | ADDNFCP07	38.88
FEP01-PORCH-ENCL-FIN | ADDNFEP01	90.72
FEP04-PORCH-ENCL-FIN | ADDNFEP04	103.68
FEP05-PORCH-ENCL-FIN | ADDNFEP05	103.68
FEP06-PORCH-ENCL-FIN | ADDNFEP06	103.68
FEP07-PORCH-ENCL-FIN | ADDNFEP07	103.68
FGR01-GARAGE-FIN | ADDNFGR01	58.32
FGR03-GARAGE-FIN | ADDNFGR03	58.32
FGR04-GARAGE-FIN | ADDNFGR04	64.80
FGR05-GARAGE-FIN | ADDNFGR05	77.76
FGR06-GARAGE-FIN | ADDNFGR06	90.72
FGR07-GARAGE-FIN | ADDNFGR07	77.76
FOF04-OFFICE-FAIR | ADDNFOF04	142.56
FOF05-OFFICE-FAIR | ADDNFOF05	142.56
FOF06-OFFICE-FAIR | ADDNFOF06	194.40
FOF07-OFFICE-FAIR | ADDNFOF07	149.04
FOP01-PORCH-OPEN FIN | ADDNFOP01	45.36
FOP03-PORCH-OPEN FIN | ADDNFOP03	45.36
FOP04-PORCH-OPEN FIN | ADDNFOP04	38.88
FOP05-PORCH-OPEN FIN | ADDNFOP05	51.84
FOP06-PORCH-OPEN FIN | ADDNFOP06	64.80
FOP07-PORCH-OPEN FIN | ADDNFOP07	51.84
FSP01-PORCH-SCRN-FIN | ADDNFSP01	51.84
FSP04-PORCH-SCRN-FIN | ADDNFSP04	64.80
FSP05-PORCH-SCRN-FIN | ADDNFSP05	64.80
FSP06-PORCH-SCRN-FIN | ADDNFSP06	77.76
FSP07-PORCH-SCRN-FIN | ADDNFSP07	64.80
FST01-STORAGE-FIN | ADDNFST01	64.80
FST03-STORAGE-FIN | ADDNFST03	64.80
FST04-STORAGE-FIN | ADDNFST04	64.80
FST05-STORAGE-FIN | ADDNFST05	64.80
FST06-STORAGE-FIN | ADDNFST06	90.72
FST07-STORAGE-FIN | ADDNFST07	77.76
FUS-UPPER STORY FIN | ADDNFUS	116.64
FUT04-UTILITY-FIN | ADDNFUT04	64.80
FUT05-UTILITY-FIN | ADDNFUT05	64.80

FUT06-UTILITY-FIN | ADDNFUT06	90.72
FUT07-UTILITY-FIN | ADDNFUT07	77.76
GOF01-OFFICE-GOOD | ADDNGOF01	155.52
GOF04-OFFICE-GOOD | ADDNGOF04	168.48
GOF05-OFFICE-GOOD | ADDNGOF05	168.48
GOF06-OFFICE-GOOD | ADDNGOF06	324.00
GOF07-OFFICE-GOOD | ADDNGOF07	181.44
LAB04-LABORATORY | ADDNLAB04	194.40
LAB06-LABORATORY | ADDNLAB06	388.80
LAB07-LABORATORY | ADDNLAB07	226.80
LFT04-LOFT | ADDNLFT04	38.88
LLF01-LOWER-LVL-FIN | ADDNLLF01	110.16
LLF04-LOWER-LVL-FIN | ADDNLLF04	116.64
LLF05-LOWER-LVL-FIN | ADDNLLF05	116.64
LLF07-LOWER-LVL-FIN | ADDNLLF07	116.64
LLS04-LOWER-LVL-SFIN | ADDNLLS04	64.80
LLS05-LOWER-LVL-SFIN | ADDNLLS05	90.72
LLS06-LOWERLV-SEMFIN | ADDNLLS06	129.60
LLS07-LOWER-LVL-SFIN | ADDNLLS07	90.72
LLU01-LOWR-LVL-UNFIN | ADDNLLU01	32.40
LLU04-LOWR LVL-UNFIN | ADDNLLU04	38.88
LLU05-LOWR LVL-UNFIN | ADDNLLU05	38.88
LLU07-LOWR LVL-UNFIN | ADDNLLU07	38.88
MEZ03-MEZZANINE | ADDNMEZ03	129.60
MEZ04-MEZZANINE | ADDNMEZ04	116.64
MEZ05-MEZZANINE | ADDNMEZ05	64.80
MEZ06-MEZZANINE | ADDNMEZ06	64.80
MEZ07-MEZZANINE | ADDNMEZ07	77.76
MFA-MFG-AVG | ADDNMFA	259.20
MFF-MFG-FAIR | ADDNMFF	207.36
MFG-MFG-GOOD | ADDNMFG	324.00
MFM-MFG-MIN | ADDNMFM	168.48
OEB04-BSMT-OPEN-EFIN | ADDNOEB04	90.72
OEB05-BSMT-OPEN-EFIN | ADDNOEB05	103.68
OEB06-BSMT-OPEN-EFIN | ADDNOEB06	103.68
OEB07-BSMT-OPEN-EFIN | ADDNOEB07	90.72
PTO01-PATIO | ADDNPTO01	6.48
PTO03-PATIO | ADDNPTO03	6.48
PTO04-PATIO | ADDNPTO04	6.48
PTO05-PATIO | ADDNPTO05	6.48
PTO06-PATIO | ADDNPTO06	12.96
PTO07-PATIO | ADDNPTO07	6.48
PTR-POINTER | ADDNPTR	129.60
SBM01-BSMT-SEMI-FIN | ADDNSBM01	38.88
SBM04-BSMT-SEMI-FIN | ADDNSBM04	51.84

SBM05-BSMT-SEMI-FIN | ADDNSBM05	64.80
SBM06-BSMT-SEMI-FIN | ADDNSBM06	77.76
SBM07-BSMT-SEMI-FIN | ADDNSBM07	51.84
SDA04-STORE-DIS-AREA | ADDNSDA04	129.60
SDA05-STORE-DIS-AREA | ADDNSDA05	129.60
SDA06-STORE-DIS-AREA | ADDNSDA06	207.36
SDA07-STORE-DIS-AREA | ADDNSDA07	129.60
SFB01-BASE-SEMI-FIN | ADDNSFB01	103.68
SFB04-BASE-SEMI-FIN | ADDNSFB04	103.68
SFB05-BASE-SEMI-FIN | ADDNSFB05	103.68
SFB06-BASE-SEMI-FIN | ADDNSFB06	110.16
SFB07-BASE-SEMI-FIN | ADDNSFB07	110.16
SPA04-SERVICE-P-AREA | ADDNSPA04	97.20
SPA05-SERVICE-P-AREA | ADDNSPA05	97.20
SPA06-SERVICE-P-AREA | ADDNSPA06	129.60
SPA07-SERVICE-P-AREA | ADDNSPA07	84.24
STP01-STOOP | ADDNSTP01	25.92
STP02-STOOP | ADDNSTP02	32.40
STP04-STOOP | ADDNSTP04	25.92
STP05-STOOP | ADDNSTP05	25.92
STP06-STOOP | ADDNSTP06	38.88
STP07-STOOP | ADDNSTP07	25.92
UAT01-ATTIC-UNFIN | ADDNUAT01	12.96
UAT02-ATTIC-UNFIN | ADDNUAT02	129.60
UAT03-ATTIC-UNFIN | ADDNUAT03	12.96
UAT04-ATTIC-UNFIN | ADDNUAT04	12.96
UAT05-ATTIC-UNFIN | ADDNUAT05	12.96
UAT06-ATTIC-UNFIN | ADDNUAT06	12.96
UAT07-ATTIC-UNFIN | ADDNUAT07	12.96
UBM01-BASEMENT-UNFIN | ADDNUBM01	25.92
UBM04-BASEMENT-UNFIN | ADDNUBM04	32.40
UBM05-BASEMENT-UNFIN | ADDNUBM05	32.40
UBM06-BASEMENT-UNFIN | ADDNUBM06	64.80
UBM07-BASEMENT-UNFIN | ADDNUBM07	38.88
UCP01-CARPORT-UNFIN | ADDNUCP01	19.44
UCP04-CARPORT-UNFIN | ADDNUCP04	25.92
UCP05-CARPORT-UNFIN | ADDNUCP05	25.92
UCP06-CARPORT-UNFIN | ADDNUCP06	38.88
UCP07-CARPORT-UNFIN | ADDNUCP07	25.92
UEP01-PORCH-ENCL-UNF | ADDNUEP01	64.80

UEP04-PORCH-ENCL-UNF | ADDNUEP04	77.76
UEP05-PORCH-ENCL-UNF | ADDNUEP05	77.76
UEP06-PORCH-ENCL-UNF | ADDNUEP06	77.76
UEP07-PORCH-ENCL-UNF | ADDNUEP07	77.76
UGR04-GARAGE-UNFIN | ADDNUGR04	51.84
UGR05-GARAGE-UNFIN | ADDNUGR05	64.80
UGR06-GARAGE-UNFIN | ADDNUGR06	77.76
UGR07-GARAGE-UNFIN | ADDNUGR07	64.80
ULP04-LOADPLAT-UNC | ADDNULP04	12.96
ULP05-LOADPLAT-UNC | ADDNULP05	19.44
ULP06-LOADPLAT-UNC | ADDNULP06	38.88
ULP07-LOADPLAT-UNC | ADDNULP07	19.44
UOP01-PORCH-OPEN-UNF | ADDNUOP01	25.92
UOP04-PORCH-OPEN-UNF | ADDNUOP04	25.92
UOP05-PORCH-OPEN-UNF | ADDNUOP05	38.88
UOP06-PORCH-OPEN-UNF | ADDNUOP06	51.84
UOP07-PORCH-OPEN-UNF | ADDNUOP07	38.88
USP04-PORCH-SCRN-UNF | ADDNUSP04	51.84
USP05-PORCH-SCRN-UNF | ADDNUSP05	51.84
USP06-PORCH-SCRN-UNF | ADDNUSP06	64.80
USP07-PORCH-SCRN-UNF | ADDNUSP07	51.84
UST01-STORAGE-UNFIN | ADDNUST01	51.84
UST04-STORAGE-UNFIN | ADDNUST04	51.84
UST05-STORAGE-UNFIN | ADDNUST05	51.84
UST06-STORAGE-UNFIN | ADDNUST06	77.76
UST07-STORAGE-UNFIN | ADDNUST07	64.80
UUS01-UPPER-STRY-UNF | ADDNUUS01	64.80
UUS04-UPPER-STRY-UNF | ADDNUUS04	64.80
UUS05-UPPER-STRY-UNF | ADDNUUS05	64.80
UUS06-UPPER-STRY-UNF | ADDNUUS06	64.80
UUS07-UPPER-STRY-UNF | ADDNUUS07	64.80
UUT04-UTILITY-UNFIN | ADDNUUT04	58.32
UUT05-UTILITY-UNFIN | ADDNUUT05	58.32

UUT06-UTILITY-UNFIN | ADDNUUT06	84.24
UUT07-UTILITY-UNFIN | ADDNUUT07	71.28
WDD01-WOOD-DECK | ADDNWDD01	25.92
WDD02-WOOD-DECK | ADDNWDD02	32.40
WDD04-WOOD-DECK | ADDNWDD04	19.44
WDD05-WOOD-DECK | ADDNWDD05	25.92
WDD06-WOOD-DECK | ADDNWDD06	64.80
WDD07-WOOD-DECK | ADDNWDD07	25.92

BUILDING FEATURES ADDITIONS AND DEDUCTIONS

ADD_DEDUCT_LOOKUP	BLDG_USE_LOOKUP	ADJUSTMENT_VALUE
CENTRAL | AIRCCENT		0.00
CHILLED WATER | AIRCCHILL-W		-3.00
LIMITED/ PARTIAL | AIRCLMP		-1.00
NONE | AIRCNONE		-3.00
PACKAGE ROOF TOP | AIRCPKROOF		0.00
SOLAR / GEO THERM | AIRCS/GT		1.00
WALL UNIT | AIRCWALL-U		-1.00
ALUMINUM OR VINYL | EXTFALU/VNL		0.00
ASBESTOS SHINGLE | EXTFASB		0.00
BRD & BATTEN | EXTFB&B		0.00
COR METAL HVY | EXTFCM HEAVY		0.00
CORR METAL LT. | EXTFCM LIGHT		0.00
COM BRK | EXTFCOM BRK		0.00
CONC BLOCK | EXTFCONC BLK		0.00
CORR ASBESTOS | EXTFCORR-ASB		0.00
FACE BRK | EXTFFACE BRK		8.00
FRAME | EXTFFRAME		0.00
GLASS THERMO | EXTFGL THERM		0.00
HARDIPLANK | EXTFHRDIPLNK		0.00
MASONITE | EXTFMASONITE		0.00
MASONRY | EXTFMASONRY		5.00
MOD METAL | EXTFMODMETAL		0.00
PREFIN METAL | EXTFPRE-MET		0.00
PRECAST PAN | EXTFPRE-PAN		0.00
REINF CONC | EXTFRNF CONC		0.00
STONE | EXTFSTONE		8.00
STUCCO | EXTFSTUCCO		4.00
CONTFOOT | FNDNCONTFOOT		0.00
EARTH | FNDNEARTH		0.00
PIERS | FNDNPIERS		-2.00
SPECFOOT | FNDNSPECFOOT		0.00
SPRDFOOT | FNDNSPRDFOOT		0.00
STANDARD FIREPLACE | FRPL1FP		2500.00

CUSTOM FIRE PLACE | FRPLMFP		5000.00
BASEBOARD | HEATBSEBD		-3.00
MULTIPLE SOURCE | HEATDUAL		0.00
FORCED AIR-DUCTED | HEATFA DUC		0.00
FORCE AIR-NOT DUCTED | HEATFA NOT D		-2.00
SOL/GEO THERM | HEATGREN		0.00
HEAT PUMP | HEATHEAT P		0.00
HOT WATER | HEATHOT WAT		0.00
LIMITED / PARTIAL | HEATLMP		0.00
NONE | HEATNONE		-5.00
RADIANT CEILING | HEATRAD C		-3.00
RADIANT ELEC | HEATRAD ELEC		-3.00
RADIANT WATER | HEATRAD WAT		0.00
STEAM | HEATSTEAM		0.00
CUSTOM | INTFCUSTOM		5.00
DRYWALL / SHEETROCK | INTFDRYWALL		0.00
MINIMUM | INTFMINIMUM		-2.00
PLASTER | INTFPLASTER		0.00
PLYWOOD PANEL | INTFPLYWOOD		0.00
WALL BD / WD WALL | INTFWD WALL		0.00
BATH FIXTURES | BATHEF	01-SFR | BLUS01	208.00
BATH FIXTURES | BATHEF	012-TWIN HOME | BLUS012	65.00
BATH FIXTURES | BATHEF	013-TINY HOUSE | BLUS013	6.00
BATH FIXTURES | BATHEF	014-BED&BREAKFST | BLUS014	0.00
BATH FIXTURES | BATHEF	041-TOWNHOME | BLUS041	104.00
BATH FIXTURES | BATHEF	042-DETACHEDTOWNHOME | BLUS042	0.00
BATH FIXTURES | BATHEF	05-PATIOHM | BLUS05	275.00
BATH FIXTURES | BATHEF	08-DUPLEX/TRIPLEX | BLUS08	181.00
BATH FIXTURES | BATHEF	02-MANUFHM | BLUS02	43.00
BATH FIXTURES | BATHEF	04-CONDO | BLUS04	71.00
BATH FIXTURES | BATHEF	06-HIGHRSCND >4-FLRS | BLUS06	1959.00
GENERATOR | BLTNGEN	01-SFR | BLUS01	2.00
CENTRAL | AIRCCENT	014-BED&BREAKFST | BLUS014	2.00
WD SHINGLE / LOG | EXTFWD SHING	01-SFR | BLUS01	0.00

RESIDENTIAL BUILDING SIZE FACTORS

MIN_SIZE	MAX_SIZE	BLDG_TYPE_LOOKUP	SIZE_FACTOR
0	600	01-SFR-CONST | BLTY01	1.1500
601	700	01-SFR-CONST | BLTY01	1.0900
701	800	01-SFR-CONST | BLTY01	1.0800
801	900	01-SFR-CONST | BLTY01	1.0700
901	1000	01-SFR-CONST | BLTY01	1.0600

1001	1100	01-SFR-CONST | BLTY01	1.0500
1101	1200	01-SFR-CONST | BLTY01	1.0400
1201	1300	01-SFR-CONST | BLTY01	1.0300
1301	1400	01-SFR-CONST | BLTY01	1.0200
1401	1500	01-SFR-CONST | BLTY01	1.0100
1501	1600	01-SFR-CONST | BLTY01	1.0000
1601	1700	01-SFR-CONST | BLTY01	0.9900
1701	1800	01-SFR-CONST | BLTY01	0.9800
1801	1900	01-SFR-CONST | BLTY01	0.9700
1901	2000	01-SFR-CONST | BLTY01	0.9600
2001	2100	01-SFR-CONST | BLTY01	0.9500
2101	2200	01-SFR-CONST | BLTY01	0.9400
2201	2300	01-SFR-CONST | BLTY01	0.9300
2301	2400	01-SFR-CONST | BLTY01	0.9200
2401	2500	01-SFR-CONST | BLTY01	0.9100
2501	2800	01-SFR-CONST | BLTY01	0.9000
2801	3000	01-SFR-CONST | BLTY01	0.8900
3001	3200	01-SFR-CONST | BLTY01	0.8800
3201	3600	01-SFR-CONST | BLTY01	0.8700
3601	4000	01-SFR-CONST | BLTY01	0.8600
4001	4400	01-SFR-CONST | BLTY01	0.8500
4401	4800	01-SFR-CONST | BLTY01	0.8400
4801	5200	01-SFR-CONST | BLTY01	0.8300
5201	999999999	01-SFR-CONST | BLTY01	0.8200
0	600	02-MOBILE-HOME-CONST | BLTY02	1.3000
601	610	02-MOBILE-HOME-CONST | BLTY02	1.2900
611	620	02-MOBILE-HOME-CONST | BLTY02	1.2800
621	630	02-MOBILE-HOME-CONST | BLTY02	1.2700
631	640	02-MOBILE-HOME-CONST | BLTY02	1.2600
641	650	02-MOBILE-HOME-CONST | BLTY02	1.2500
651	660	02-MOBILE-HOME-CONST | BLTY02	1.2400
661	670	02-MOBILE-HOME-CONST | BLTY02	1.2300
671	680	02-MOBILE-HOME-CONST | BLTY02	1.2200
681	690	02-MOBILE-HOME-CONST | BLTY02	1.2100
691	700	02-MOBILE-HOME-CONST | BLTY02	1.2000
701	720	02-MOBILE-HOME-CONST | BLTY02	1.1900
721	740	02-MOBILE-HOME-CONST | BLTY02	1.1800
741	760	02-MOBILE-HOME-CONST | BLTY02	1.1700
761	780	02-MOBILE-HOME-CONST | BLTY02	1.1600
781	800	02-MOBILE-HOME-CONST | BLTY02	1.1500
801	820	02-MOBILE-HOME-CONST | BLTY02	1.1400
821	840	02-MOBILE-HOME-CONST | BLTY02	1.1300
841	860	02-MOBILE-HOME-CONST | BLTY02	1.1200
861	880	02-MOBILE-HOME-CONST | BLTY02	1.1100
881	900	02-MOBILE-HOME-CONST | BLTY02	1.1000

901	920	02-MOBILE-HOME-CONST | BLTY02	1.0900
921	940	02-MOBILE-HOME-CONST | BLTY02	1.0800
941	960	02-MOBILE-HOME-CONST | BLTY02	1.0700
961	980	02-MOBILE-HOME-CONST | BLTY02	1.0600
981	1000	02-MOBILE-HOME-CONST | BLTY02	1.0500
1001	1020	02-MOBILE-HOME-CONST | BLTY02	1.0400
1021	1060	02-MOBILE-HOME-CONST | BLTY02	1.0300
1061	1080	02-MOBILE-HOME-CONST | BLTY02	1.0200
1081	1120	02-MOBILE-HOME-CONST | BLTY02	1.0100
1121	1160	02-MOBILE-HOME-CONST | BLTY02	1.0000
1161	1200	02-MOBILE-HOME-CONST | BLTY02	0.9900
1201	1240	02-MOBILE-HOME-CONST | BLTY02	0.9800
1241	1280	02-MOBILE-HOME-CONST | BLTY02	0.9700
1281	1320	02-MOBILE-HOME-CONST | BLTY02	0.9600
1321	1360	02-MOBILE-HOME-CONST | BLTY02	0.9500
1361	1400	02-MOBILE-HOME-CONST | BLTY02	0.9400
1401	1440	02-MOBILE-HOME-CONST | BLTY02	0.9300
1441	1480	02-MOBILE-HOME-CONST | BLTY02	0.9200
1481	1520	02-MOBILE-HOME-CONST | BLTY02	0.9100
1521	1560	02-MOBILE-HOME-CONST | BLTY02	0.9000
1561	1600	02-MOBILE-HOME-CONST | BLTY02	0.8900
1601	1650	02-MOBILE-HOME-CONST | BLTY02	0.8800
1651	1700	02-MOBILE-HOME-CONST | BLTY02	0.8700
1701	1800	02-MOBILE-HOME-CONST | BLTY02	0.8600
1801	999999999	02-MOBILE-HOME-CONST | BLTY02	0.8500
0	600	03-CONDO-CONST | BLTY03	1.2500
601	620	03-CONDO-CONST | BLTY03	1.2400
621	640	03-CONDO-CONST | BLTY03	1.2300
641	660	03-CONDO-CONST | BLTY03	1.2200
661	680	03-CONDO-CONST | BLTY03	1.2100
681	700	03-CONDO-CONST | BLTY03	1.2000
701	720	03-CONDO-CONST | BLTY03	1.1900
721	740	03-CONDO-CONST | BLTY03	1.1800
741	760	03-CONDO-CONST | BLTY03	1.1700
761	780	03-CONDO-CONST | BLTY03	1.1600
781	800	03-CONDO-CONST | BLTY03	1.1500
801	820	03-CONDO-CONST | BLTY03	1.1400
821	840	03-CONDO-CONST | BLTY03	1.1300
841	860	03-CONDO-CONST | BLTY03	1.1200
861	880	03-CONDO-CONST | BLTY03	1.1100
881	900	03-CONDO-CONST | BLTY03	1.1000
901	920	03-CONDO-CONST | BLTY03	1.0900
921	940	03-CONDO-CONST | BLTY03	1.0800
941	960	03-CONDO-CONST | BLTY03	1.0700
961	980	03-CONDO-CONST | BLTY03	1.0600

981	1000	03-CONDO-CONST | BLTY03	1.0500
1001	1020	03-CONDO-CONST | BLTY03	1.0400
1021	1040	03-CONDO-CONST | BLTY03	1.0300
1041	1060	03-CONDO-CONST | BLTY03	1.0200
1061	1100	03-CONDO-CONST | BLTY03	1.0100
1101	1150	03-CONDO-CONST | BLTY03	1.0000
1151	1200	03-CONDO-CONST | BLTY03	0.9900
1201	1300	03-CONDO-CONST | BLTY03	0.9800
1301	1400	03-CONDO-CONST | BLTY03	0.9700
1401	1500	03-CONDO-CONST | BLTY03	0.9600
1501	1600	03-CONDO-CONST | BLTY03	0.9500
1601	1700	03-CONDO-CONST | BLTY03	0.9400
1701	1800	03-CONDO-CONST | BLTY03	0.9300
1801	1900	03-CONDO-CONST | BLTY03	0.9200
1901	2000	03-CONDO-CONST | BLTY03	0.9100
2001	2100	03-CONDO-CONST | BLTY03	0.9000
2101	2200	03-CONDO-CONST | BLTY03	0.8900
2201	2300	03-CONDO-CONST | BLTY03	0.8800
2301	2400	03-CONDO-CONST | BLTY03	0.8700
2401	2500	03-CONDO-CONST | BLTY03	0.8600
2501	2600	03-CONDO-CONST | BLTY03	0.8500
2601	2700	03-CONDO-CONST | BLTY03	0.8400
2701	2800	03-CONDO-CONST | BLTY03	0.8300
2801	2900	03-CONDO-CONST | BLTY03	0.8200
2901	3000	03-CONDO-CONST | BLTY03	0.8100
3001	999999999	03-CONDO-CONST | BLTY03	0.8000

RESIDENTIAL ECONOMIC LIFE/DEPRECIATION SCHEDULE

BUILDING_USE_LOOKUP	LIFE
01-SFR | BLUS01	70.00
012-TWIN HOME | BLUS012	60.00
013-TINY HOUSE | BLUS013	30.00
014-BED&BREAKFST | BLUS014	60.00
02-MANUFHM | BLUS02	40.00
04-CONDO | BLUS04	60.00
041-TOWNHOME | BLUS041	60.00
05-PATIOHM | BLUS05	60.00
06-HIGHRSCND >4-FLRS | BLUS06	60.00
08-DUPLEX/TRIPLEX | BLUS08	50.00

RESIDENTIAL BUILDING GRADE ADJUSTMENTS

PURPOSE	GRADE_LOOKUP	ADJUSTMENT
Residential | R	A | GRDFA	180.00
Residential | R	A+10 | GRDFA+10	190.00
Residential | R	A+15 | GRDFA+15	195.00
Residential | R	A+20 | GRDFA+20	200.00
Residential | R	A+25 | GRDFA+25	205.00
Residential | R	A+5 | GRDFA+5	185.00
Residential | R	A-10 | GRDFA-10	170.00
Residential | R	A-15 | GRDFA-15	165.00
Residential | R	A-20 | GRDFA-20	160.00
Residential | R	A-25 | GRDFA-25	155.00
Residential | R	A-5 | GRDFA-5	175.00
Residential | R	AA | GRDFAA	275.00
Residential | R	AA+10 | GRDFAA+10	325.00
Residential | R	AA+15 | GRDFAA+15	350.00
Residential | R	AA+20 | GRDFAA+20	375.00
Residential | R	AA+25 | GRDFAA+25	400.00
Residential | R	AA+30 | GRDFAA+30	425.00
Residential | R	AA+35 | GRDFAA+35	450.00
Residential | R	AA+40 | GRDFAA+40	475.00
Residential | R	AA+45 | GRDFAA+45	500.00
Residential | R	AA+5 | GRDFAA+5	300.00
Residential | R	AA+50 | GRDFAA+50	525.00
Residential | R	AA+55 | GRDFAA+55	550.00
Residential | R	AA+60 | GRDFAA+60	575.00
Residential | R	AA+65 | GRDFAA+65	600.00
Residential | R	AA+70 | GRDFAA+70	625.00
Residential | R	AA+75 | GRDFAA+75	650.00
Residential | R	AA+80 | GRDFAA+80	675.00
Residential | R	AA+85 | GRDFAA+85	700.00
Residential | R	AA-10 | GRDFAA-10	245.00
Residential | R	AA-15 | GRDFAA-15	230.00
Residential | R	AA-20 | GRDFAA-20	220.00
Residential | R	AA-25 | GRDFAA-25	210.00
Residential | R	AA-5 | GRDFAA-5	260.00
Residential | R	B | GRDFB	125.00
Residential | R	B+10 | GRDFB+10	135.00
Residential | R	B+15 | GRDFB+15	140.00
Residential | R	B+20 | GRDFB+20	145.00
Residential | R	B+25 | GRDFB+25	150.00
Residential | R	B+5 | GRDFB+5	130.00
Residential | R	B-10 | GRDFB-10	115.00
Residential | R	B-5 | GRDFB-5	120.00
Residential | R	C | GRDFC	100.00
Residential | R	C+10 | GRDFC+10	110.00

Residential | R	C+5 | GRDFC+5	105.00
Residential | R	C-10 | GRDFC-10	90.00
Residential | R	C-5 | GRDFC-5	95.00
Residential | R	D | GRDFD	75.00
Residential | R	D+10 | GRDFD+10	85.00
Residential | R	D+5 | GRDFD+5	80.00
Residential | R	D-5 | GRDFD-5	70.00
Residential | R	E | GRDFE	60.00
Residential | R	E+5 | GRDFE+5	65.00
Residential | R	E-10 | GRDFE-10	50.00
Residential | R	E-15 | GRDFE-15	45.00
Residential | R	E-20 | GRDFE-20	40.00
Residential | R	E-25 | GRDFE-25	35.00
Residential | R	E-30 | GRDFE-30	30.00
Residential | R	E-35 | GRDFE-35	25.00
Residential | R	E-40 | GRDFE-40	20.00
Residential | R	E-45 | GRDFE-45	15.00
Residential | R	E-5 | GRDFE-5	55.00
Outbuilding | O	OA | GRDFOA	300.00
Outbuilding | O	OA+10 | GRDFOA+10	310.00
Outbuilding | O	OA+20 | GRDFOA+20	320.00
Outbuilding | O	OA+30 | GRDFOA+30	330.00
Outbuilding | O	OA+40 | GRDFOA+40	340.00
Outbuilding | O	OA+50 | GRDFOA+50	350.00
Outbuilding | O	OA-10 | GRDFOA-10	290.00
Outbuilding | O	OA-20 | GRDFOA-20	280.00
Outbuilding | O	OA-30 | GRDFOA-30	270.00
Outbuilding | O	OA-40 | GRDFOA-40	260.00
Outbuilding | O	OAA | GRDFOAA	400.00
Outbuilding | O	OAA+10 | GRDFOAA+10	410.00
Outbuilding | O	OAA+20 | GRDFOAA+20	420.00
Outbuilding | O	OAA+30 | GRDFOAA+30	430.00
Outbuilding | O	OAA+40 | GRDFOAA+40	440.00
Outbuilding | O	OAA+50 | GRDFOAA+50	450.00
Outbuilding | O	OAA-10 | GRDFOAA-10	390.00
Outbuilding | O	OAA-20 | GRDFOAA-20	380.00
Outbuilding | O	OAA-30 | GRDFOAA-30	370.00
Outbuilding | O	OAA-40 | GRDFOAA-40	360.00
Outbuilding | O	OAAA | GRDFOAAA	500.00
Outbuilding | O	OAAA+10 | GRDFOAAA+10	510.00
Outbuilding | O	OAAA+20 | GRDFOAAA+20	520.00
Outbuilding | O	OAAA+30 | GRDFOAAA+30	530.00
Outbuilding | O	OAAA+40 | GRDFOAAA+40	540.00
Outbuilding | O	OAAA+41 | GRDFOAAA+41	550.00
Outbuilding | O	OAAA+42 | GRDFOAAA+42	560.00

Outbuilding	O	OAAA+43	GRDFOAAA+43	570.00
Outbuilding	O	OAAA+44	GRDFOAAA+44	580.00
Outbuilding	O	OAAA+45	GRDFOAAA+45	590.00
Outbuilding	O	OAAA+46	GRDFOAAA+46	600.00
Outbuilding	O	OAAA+47	GRDFOAAA+47	610.00
Outbuilding	O	OAAA+48	GRDFOAAA+48	620.00
Outbuilding	O	OAAA+49	GRDFOAAA+49	630.00
Outbuilding	O	OAAA+50	GRDFOAAA+50	640.00
Outbuilding	O	OAAA+51	GRDFOAAA+51	650.00
Outbuilding	O	OAAA+52	GRDFOAAA+52	660.00
Outbuilding	O	OAAA+53	GRDFOAAA+53	670.00
Outbuilding	O	OAAA+54	GRDFOAAA+54	680.00
Outbuilding	O	OAAA+55	GRDFOAAA+55	690.00
Outbuilding	O	OAAA+56	GRDFOAAA+56	700.00
Outbuilding	O	OAAA+57	GRDFOAAA+57	710.00
Outbuilding	O	OAAA+58	GRDFOAAA+58	720.00
Outbuilding	O	OAAA+59	GRDFOAAA+59	730.00
Outbuilding	O	OAAA+60	GRDFOAAA+60	740.00
Outbuilding	O	OAAA+61	GRDFOAAA+61	750.00
Outbuilding	O	OAAA+62	GRDFOAAA+62	760.00
Outbuilding	O	OAAA+63	GRDFOAAA+63	770.00
Outbuilding	O	OAAA+64	GRDFOAAA+64	780.00
Outbuilding	O	OAAA+65	GRDFOAAA+65	790.00
Outbuilding	O	OAAA+66	GRDFOAAA+66	800.00
Outbuilding	O	OAAA+67	GRDFOAAA+67	810.00
Outbuilding	O	OAAA+68	GRDFOAAA+68	820.00
Outbuilding	O	OAAA+69	GRDFOAAA+69	830.00
Outbuilding	O	OAAA+70	GRDFOAAA+70	840.00
Outbuilding	O	OAAA+71	GRDFOAAA+71	850.00
Outbuilding	O	OAAA+72	GRDFOAAA+72	860.00
Outbuilding	O	OAAA+73	GRDFOAAA+73	870.00
Outbuilding	O	OAAA+74	GRDFOAAA+74	880.00
Outbuilding	O	OAAA+75	GRDFOAAA+75	890.00
Outbuilding	O	OAAA+76	GRDFOAAA+76	900.00
Outbuilding	O	OAAA+77	GRDFOAAA+77	910.00
Outbuilding	O	OAAA+78	GRDFOAAA+78	920.00
Outbuilding	O	OAAA+79	GRDFOAAA+79	930.00
Outbuilding	O	OAAA+80	GRDFOAAA+80	940.00
Outbuilding	O	OAAA+81	GRDFOAAA+81	950.00
Outbuilding	O	OAAA+82	GRDFOAAA+82	960.00
Outbuilding	O	OAAA+83	GRDFOAAA+83	970.00
Outbuilding	O	OAAA+84	GRDFOAAA+84	980.00
Outbuilding	O	OAAA+85	GRDFOAAA+85	990.00
Outbuilding	O	OAAA-10	GRDFOAAA-10	490.00
Outbuilding	O	OAAA-20	GRDFOAAA-20	480.00

Outbuilding | O	OAAA-30 | GRDFOAAA-30	470.00
Outbuilding | O	OAAA-40 | GRDFOAAA-40	460.00
Outbuilding | O	OB | GRDFOB	200.00
Outbuilding | O	OB+10 | GRDFOB+10	210.00
Outbuilding | O	OB+20 | GRDFOB+20	220.00
Outbuilding | O	OB+30 | GRDFOB+30	230.00
Outbuilding | O	OB+40 | GRDFOB+40	240.00
Outbuilding | O	OB+50 | GRDFOB+50	250.00
Outbuilding | O	OB-10 | GRDFOB-10	190.00
Outbuilding | O	OB-20 | GRDFOB-20	180.00
Outbuilding | O	OB-30 | GRDFOB-30	170.00
Outbuilding | O	OB-40 | GRDFOB-40	160.00
Outbuilding | O	OC | GRDFOC	100.00
Outbuilding | O	OC+10 | GRDFOC+10	110.00
Outbuilding | O	OC+20 | GRDFOC+20	120.00
Outbuilding | O	OC+30 | GRDFOC+30	130.00
Outbuilding | O	OC+40 | GRDFOC+40	140.00
Outbuilding | O	OC+50 | GRDFOC+50	150.00
Outbuilding | O	OC-10 | GRDFOC-10	90.00
Outbuilding | O	OC-20 | GRDFOC-20	80.00
Outbuilding | O	OC-30 | GRDFOC-30	70.00
Outbuilding | O	OC-40 | GRDFOC-40	60.00
Outbuilding | O	OD | GRDFOD	10.00
Outbuilding | O	OD+20 | GRDFOD+20	20.00
Outbuilding | O	OD+30 | GRDFOD+30	30.00
Outbuilding | O	OD+40 | GRDFOD+40	40.00
Outbuilding | O	OD+50 | GRDFOD+50	50.00
Residential | R	C+15 | GRDFC+15	114.00
Residential | R	C+20 | GRDFC+20	119.00
Residential | R	C+25 | GRDFC+25	124.00
Residential | R	D-10 | GRDFD-10	60.00

MISC IMPROVEMENT DEPRECIATION SCALE

BUILDING_USE_LOOKUP	LIFE
01-STORAGE | OBLG01	3.00
02-GARAGE | OBLG02	2.00
02A-GARAGE-APARTMENT | OBLG02A	2.00
03-CARPORT | OBLG03	3.00
04-PATIO | OBLG04	3.00
04A-PATIO-CUSTOM | OBLG04A	3.00
05-FENCE-WOOD/COMPOS | OBLG05	4.00
06-FENCE-METAL | OBLG06	3.00
06A-COM-FARM-FENC | OBLG06A	5.00

07-POOL/AVG | OBLG07	4.00
08-POOL/CUSTOM | OBLG08	4.00
08A-LAP-POOL | OBLG08A	5.00
08B-POOL-CABANA | OBLG08B	4.00
09-PAVING-ASP | OBLG09	4.00
10-PAVING-CON | OBLG10	4.00
10A-PAVING-LOW | OBLG10A	3.00
11-PORCH | OBLG11	4.00
12-TENNIS-CRT | OBLG12	5.00
13-GREENHOUSE | OBLG13	4.00
131-GREENHOUSE-LOWV | OBLG131	5.00
14-FIREPLACE | OBLG14	2.00
14A-FIREPLACE-CUSTOM | OBLG14A	2.00
14B-OUTDOOR-KITCHEN | OBLG14B	2.00
15-MH-SPACE | OBLG15	0.00
16-ADDITION | OBLG16	3.00
16A-MH-ADDITION | OBLG16A	3.00
17-OFFICE | OBLG17	3.00
18-PENTHOUSE | OBLG18	3.00
19-SPA/HOT-TUB | OBLG19	3.00
20-TOB-BARN | OBLG20	5.00
21-GRAIN-BIN | OBLG21	5.00
22-FARM-RETAIL-BLDG | OBLG22	2.00
23-BARN/LOW | OBLG23	3.00
24-SHED | OBLG24	4.00
25-BARN/HIGH | OBLG25	3.00
26-FARM-ANIMAL-BLDG | OBLG26	4.00
27-RIDING-ARENA-BLDG | OBLG27	4.00
27A-RIDINGARENAOUTDR | OBLG27A	1.00
28-SILO | OBLG28	5.00
29-BRIDGE | OBLG29	3.00
30-TUNNEL | OBLG30	2.00
31-COMMON-AREA-VALUE | OBLG31	0.00
32-GOLF-GREEN | OBLG32	0.00
35-TANK-WATER | OBLG35	3.00
36-TANK-PETRO | OBLG36	3.00
37-TANK-ELEVD-STEEL | OBLG37	3.00
39-CANOPY | OBLG39	5.00
40-LOAD-DOCK | OBLG40	2.00
41-DOCK-LEVEL | OBLG41	2.00
42-SPRINKLER | OBLG42	2.00
43-RAIL-SIDE | OBLG43	2.00
45-ELEV/FREIGHT/STP | OBLG45	2.00
46-ELEVATOR-P/STOP | OBLG46	2.00
47-QUONSET-HUT | OBLG47	4.00

50-LAUNDRY | OBLG50	2.00
51-CLUB-HOUSE | OBLG51	2.00
52-PARKING-DECK | OBLG52	2.00
52A-PARKING-SPACE | OBLG52A	2.00
53-ESCALATOR | OBLG53	2.00
55-GAZEBO | OBLG55	2.00
56-TANK-BULK/GAL | OBLG56	3.00
57-WALL-BRICK | OBLG57	4.00
58-WALL-BLOCK | OBLG58	4.00
59-CEMETERY-LOT | OBLG59	0.00
60-BATH-HOUSE-HIGH | OBLG60	4.00
61-CELL-TOWER-LEASEH | OBLG61	0.00
62-BILLBOARD-LEASEH | OBLG62	0.00
63-GENERATOR | OBLG63	5.00
64-CRYPT | OBLG64	0.00
64A-MAUSOLEUM | OBLG64A	3.00
65-GUARD-HSE | OBLG65	3.00
66-DWELLING | OBLG66	2.00
68-DOCK | OBLG68	5.00
69-METAL-BLDG | OBLG69	4.00
70-FIRE-ESCAPE | OBLG70	2.00
71-NICHE | OBLG71	0.00
72-LEASEHOLD | OBLG72	0.00
72A-LEASEHOLD--ATM | OBLG72A	0.00
72B-LEASEH-ICE-HOUSE | OBLG72B	0.00
72C-LEASEH-VENDING | OBLG72C	0.00
72D-LEASEH-DRIVETHRU | OBLG72D	0.00
75-CAR-WASH-DETACHED | OBLG75	5.00
76-CRANEWAY | OBLG76	2.00
77-BOATHOUSE | OBLG77	5.00
78-TRUCK-WELL | OBLG78	5.00
79-BOILER-RM | OBLG79	3.00
82-MILK-BARN | OBLG82	3.00
83-BULK-HEAD | OBLG83	3.00
84-HANGAR/CIVILIAN | OBLG84	3.00
84A-HANGAR/COM-ACRFT | OBLG84A	3.00
85-MINI-GOLF | OBLG85	0.00
86-CAMPSITES | OBLG86	0.00
87-TERRACE | OBLG87	4.00
88-DECK | OBLG88	4.00
89-APRON | OBLG89	5.00
90-PUMP-HOUSE | OBLG90	3.00
91-PATIO-OR-DECK/COV | OBLG91	4.00
92-ENERGY-LEASEHOLD | OBLG92	0.00
96-PIER | OBLG96	5.00

97-SHELTER | OBLG97	3.00
98-STADIUM | OBLG98	3.00
99-STABLE | OBLG99	3.00
99A-OUTBUILDING-FUS | OBLG99A	3.00
99B-OUTBUILDING-UUS | OBLG99B	2.00
A2-BALL-COURT | OBLGA2	5.00
A3-METAL-CARPORT | OBLGA3	3.00
A4-BOOTH | OBLGA4	3.00
A5-BRICK-BLDG | OBLGA5	3.00
A6-CLASSROOM | OBLGA6	4.00
A7-DRIVING--RANGE | OBLGA7	0.00
A9-FRAME-BLDG | OBLGA9	3.00
B1-KENNEL | OBLGB1	5.00
B2-KENNEL-BUILDING | OBLGB2	3.00
B3-REC-BLDG | OBLGB3	3.00
B4-BATH-HOUSE-LOW | OBLGB4	3.00
B5-RUNWAY/CIVILACRFT | OBLGB5	4.00
B51-RUNWAY/COMACRFT | OBLGB51	0.00
B6-SHOP/EQUIP | OBLGB6	3.00
B7-BARBEQUE | OBLGB7	5.00
B8-Z-BUILT-IN-POOL | OBLGB8	5.00
B9-STUDIO | OBLGB9	2.00
C2-WALKWAY | OBLGC2	3.00
C4-WASTE-TRMNT-STATN | OBLGC4	3.00
C5-CONDO-CONTRIBUTN | OBLGC5	0.00
COURTYARD | OBLGCOURTYD	2.00
EVENT-CENTER | OBLGEVENTCNT	2.00
LANDSCAPE-HARDSCAPE | OBLGLANDSCP	0.00
PERGOLA | OBLGPERGOLA	2.00
WATERSCAPE | OBLGWATERSCP	4.00

LAND USE CODES

LAND_USE_LOOKUP
0100-SINGLE FAM RES | LLDS0100
0109-BLD INV. | LLDS0109
0110-SINGLE-FAM-R RA | LLDS0110
0111-SEPTIC LOTORSPL | LLDS0111
0112-NO PERC | LLDS0112
0113-WELL LOT | LLDS0113
0114-SLIVER PARCEL | LLDS0114
0120-TWIN HOME | LLDS0120
0130-SINGLE FAM R-WF | LLDS0130

0140-SINGLE FAM R-GC | LLDS0140
0199-RES CORRIDOR | LLDS0199
0200-MOBILE H SUBDIV | LLDS0200
0201-MOBILE HOMESITE | LLDS0201
0210-MOBILE HOMEPARK | LLDS0210
0300-GARDEN APTS | LLDS0300
0310-STUDENT HOUSING | LLDS0310
0330-CONDO WF | LLDS0330
0340-GARDEN APARTGLF | LLDS0340
0400-CONDO/TOWNHOUSE | LLDS0400
0401-COMMON AREA | LLDS0401
0402-COMMON-AREABLDL | LLDS0402
0410-TOWN HOUSE | LLDS0410
0420-TWNHSEW/GOLFVIE | LLDS0420
0430-TWNHSEW/WATERVI | LLDS0430
0440-CONDOMINIUM GC | LLDS0440
0450-CONDO GOLF VIEW | LLDS0450
0460-CONDO W/WATERVI | LLDS0460
0500-PATIO HOMES | LLDS0500
0600-CONDO HIGH RISE | LLDS0600
0700-CONTAMINATED | LLDS0700
0710-BROWN FIELDCONT | LLDS0710
0800-MULTIFAM<4UNITS | LLDS0800
0900-TOWNHOUSE APTS. | LLDS0900
0950-APT-TAX CREDIT | LLDS0950
1000-COMMERCIAL | LLDS1000
1010-PHARMACY | LLDS1010
1020-VETERINRYCLINIC | LLDS1020
1099-COMM CORRIDOR | LLDS1099
1100-CONVENIENCESTOR | LLDS1100
1200-CAR WASH | LLDS1200
1300-DEPARTMENTSTORE | LLDS1300
1400-SUPERMARKET | LLDS1400
150-B & B RES | LLDS150
1500-SHOPCENTER MALL | LLDS1500
1600-SHOPCENTERSTRIP | LLDS1600
1700-OFFICE <3 FLOOR | LLDS1700
1799-OFFICE CORRIDOR | LLDS1799
1800-OFFICE >4 FLOOR | LLDS1800
1900-PROFESSIONLBLDG | LLDS1900
2000-MEDICAL CONDO | LLDS2000
2100-RESTAURANT/CAFÉ | LLDS2100
2200-FAST FOOD | LLDS2200
2300-BANKS | LLDS2300
2400-OFFICE CONDO | LLDS2400

2500-COMM SERVICE | LLDS2500
2600-SERVICE STATION | LLDS2600
2700-AUTO SALES&SERV | LLDS2700
2800-PARKING | LLDS2800
2900-MINI-WAREHOUSES | LLDS2900
3000-LAB/RESEARCH | LLDS3000
3100-DAYCARE CENTERS | LLDS3100
3200-THEATERS | LLDS3200
3300-LOUNGES/BARS | LLDS3300
3400-BOWLING/SKATING | LLDS3400
3411-SPORT COMPLEX | LLDS3411
3500-TOURIST ATTRCTN | LLDS3500
3510-FITNESS/RECCNTR | LLDS3510
3520-COMM NURSERY | LLDS3520
3600-MINI-LUBE | LLDS3600
3601-MARINA LAND | LLDS3601
3700-HOTELS=>4FLOORS | LLDS3700
3800-FURNITURESTORES | LLDS3800
3900-HOTELS<=3FLOORS | LLDS3900
4000-INDUSTRIAL | LLDS4000
4001-FERTILIZRPLANTS | LLDS4001
4098-INDUS CORRIDOR | LLDS4098
4099-INDUST PARK | LLDS4099
4100-LIGHT MANUF. | LLDS4100
4200-HEAVY MANUF. | LLDS4200
4300-LUMBER YARDS | LLDS4300
4400-FOOD/DRUGPLANTS | LLDS4400
4500-CIGARETTEMANUF. | LLDS4500
4600-BREWERY/WINERY | LLDS4600
4800-WAREHOUSING | LLDS4800
4810-FLEX BUILDING | LLDS4810
4820-TRUCK TERMINAL | LLDS4820
4830-IND CONDO | LLDS4830
4900-PREFABWAREHOUSE | LLDS4900
5000-RURAL HOME SITE | LLDS5000
5001-RURAL BUS SITE | LLDS5001
5110-AG 1 (TRAD) | LLDS5110
5120-AG 1 (REV) | LLDS5120
5210-AG 2 (TRAD) | LLDS5210
5220-AG 2 (REV) | LLDS5220
5310-AG 3 (TRAD) | LLDS5310
5320-AG 3 (REV) | LLDS5320
5410-AG 4 (TRAD) | LLDS5410
5420-AG 4 (REV) | LLDS5420
5510-AG 5 (TRAD) | LLDS5510

5610-AG 6 (TRAD) | LLDS5610
5900-SWAMPLAND | LLDS5900
6110-FORESTRY1(TRAD) | LLDS6110
6120-FORESTRY1 (REV) | LLDS6120
6210-FORESTRY2(TRAD) | LLDS6210
6220-FORESTRY2 (REV) | LLDS6220
6310-FORESTRY3(TRAD) | LLDS6310
6320-FORESTRY3 (REV) | LLDS6320
6410-FORESTRY4(TRAD) | LLDS6410
6420-FORESTRY4 (REV) | LLDS6420
6510-FORESTRY5(TRAD) | LLDS6510
6520-FORESTRY5(REV) | LLDS6520
6610-FORESTRY6(TRAD) | LLDS6610
6620-FORESTRY6 (REV) | LLDS6620
6710-HORT 1 (REV) | LLDS6710
6711-HORT 1 (TRAD) | LLDS6711
6720-HORT 2 (REV) | LLDS6720
6721-HORT 2 (TRAD) | LLDS6721
6730-HORT 3 (REV) | LLDS6730
6731-HORT 3 (TRAD) | LLDS6731
6740-HORT 4 (REV) | LLDS6740
6741-HORT 4 (TRAD) | LLDS6741
6751-HORT 5 (TRAD) | LLDS6751
6761-HORT 6 (TRAD) | LLDS6761
6900-TOBACCO | LLDS6900
7000-INSTITUTIONAL | LLDS7000
701-MUSEUM VISITOR C | LLDS701
7100-CHURCHES | LLDS7100
7200-PRIVATE SCHOOLS | LLDS7200
7201-CHARTER SCHL | LLDS7201
7300-PRIVATEHOSPITLS | LLDS7300
7400-RETIREMNT/ASTLI | LLDS7400
7500-ORPHANAGES | LLDS7500
7600-FUNERAL | LLDS7600
7601-CEMETERY | LLDS7601
7700-CLUBS/LODGES | LLDS7700
7800-COUNTRY CLUBS | LLDS7800
7801-PAR3GOLFCOURSES | LLDS7801
7803-REG GOLFCOURSES | LLDS7803
7810-NBH POOLTENNISC | LLDS7810
7900-AIRPORTS | LLDS7900
7901-AIRPORT PRIVATE | LLDS7901
8000-DISCOUNT STORE | LLDS8000
8100-MILITARY | LLDS8100
8200-PARKS/RECREATN | LLDS8200

8300-PUBLIC SCHOOLS | LLDS8300
8400-PUBLIC COLLEGES | LLDS8400
8500-PUBLICHOSPITALS | LLDS8500
8600-COUNTY PROPERTY | LLDS8600
8601-WATER PLANTS | LLDS8601
8602-FIREDEPARTMENTS | LLDS8602
8611-COMMUNTYUTILITY | LLDS8611
8700-STATE | LLDS8700
8701-STATE MARSHLAND | LLDS8701
8800-FEDERAL | LLDS8800
8900-MUNICIPAL | LLDS8900
8901-MUNICIPAL ED. | LLDS8901
8903-HOUSINGAUTHORIT | LLDS8903
8910-COUNTYPARKS/REC | LLDS8910
9000-LEASEHOLDINTRST | LLDS9000
9001-LEASEHOLDINCOME | LLDS9001
9002-CELL TOWER LOT | LLDS9002
9005-BILL BOARD LOT | LLDS9005
9010-NO LANDINTEREST | LLDS9010
9020-ROAD CORRIDOR | LLDS9020
9100-UTILITY | LLDS9100
9200-WHSE DIS STORE | LLDS9200
9300-ENERGYPETRO/GAS | LLDS9300
9301-ENRGY-SOLARFARM | LLDS9301
9400-RIGHT OF WAY | LLDS9400
9500-RIVERS/LAKES | LLDS9500
9510-DRAINAGE AREA | LLDS9510
9600-WASTELAND | LLDS9600
9610-CONS ESMNT | LLDS9610
9620-DEDICATED SPACE | LLDS9620
9700-MINERAL RIGHTS | LLDS9700
9800-OWNER UNKNOWN | LLDS9800

LAND SIZE FACTORS (RESIDENTIAL ACREAGE)

MIN_MEASUREMENT	MAX_MEASUREMENT	SIZE_FACTOR
1.00	1.24	3.640000
1.25	1.49	3.260000
1.50	1.74	3.070000
1.75	1.99	2.880000
2.00	2.49	2.790000
2.50	2.99	2.500000
3.00	3.49	2.320000
3.50	3.99	2.180000
4.00	4.49	2.030000
4.50	4.99	1.920000

5.00	5.99	1.840000
6.00	6.99	1.690000
7.00	7.99	1.570000
8.00	8.99	1.500000
9.00	9.99	1.440000
10.00	10.99	1.390000
11.00	11.99	1.370000
12.00	12.99	1.320000
13.00	13.99	1.270000
14.00	14.99	1.240000
15.00	15.99	1.220000
16.00	16.99	1.180000
17.00	17.99	1.150000
18.00	18.99	1.130000
19.00	19.99	1.110000
20.00	20.99	1.090000
21.00	21.99	1.070000
22.00	22.99	1.060000
23.00	23.99	1.030000
24.00	24.99	1.010000
25.00	25.99	1.000000
26.00	29.99	0.990000
30.00	34.99	0.980000
35.00	39.99	0.960000
40.00	44.99	0.950000
45.00	49.99	0.920000
50.00	59.99	0.900000
60.00	69.99	0.880000
70.00	79.99	0.860000
80.00	89.99	0.840000
90.00	99.99	0.820000
100.00	119.99	0.800000
120.00	159.99	0.770000
160.00	179.99	0.730000
180.00	199.99	0.690000
200.00	1000.00	0.640000

References/Resources

Triad Business Journal, American Cities Business Journals, Inc.

Triad Apartment Association

Triad Business Index

Triad Commercial Information Exchange

Triad Multiple Listing Service

Marshall and Swift Valuation Service

LoopNet Commercial real estate listings

CoStar

Trepp

Pictometry/Eagleview Sketch Check

REIS-Real Estate Information Service

Integra Realty

IAAO-International Association of Assessing Officers

Institute of Government, UNC-Chapel Hill

North Carolina Department of Revenue, Ad Valorem Tax Division

North Carolina Machinery Act

Guilford County Geographic Information System

PUBLIC REVIEW OF 2022 REAPPRAISAL

Appraisal Staff

For the 2022 Reappraisal Guilford County conducted an in-house revaluation. This means that all work done on this reappraisal was by appraisers that live in the local area. There were no outside or contracted companies employed as part of the reappraisal process. All staff appraisers working on the 2022 reappraisal have completed certifications as real property appraisers with the NC Department of Revenue and/or the NC Appraisal Board.

Verification & Transparency

Reappraisal notices in 2022 will again be sent to property owners with instructions on how to appeal if they disagree with their new values. With the assistance of the Guilford County GIS Department and Information Systems we continue to offer a user friendly record verification and appeal system on to the public website. Property owners will be able to log on to the website to verify that their real property listings are accurate. An enhanced comparable search tool is also being added to give property owners a view of residential sales that have sold recently in their neighborhood. After reviewing property information and comparable sales, an on-line appeal form will be available on the public website for all wish to enter an informal appeal. Additional information on tax records and the reappraisal is available at the Guilford County Tax Department Web Page.

https://www.guilfordcountync.gov/our-county/tax

Questions about the reappraisal? Send us an email: **taxappraisal@guilfordnc.gov**

Reappraisal Appeal Timeline

February	Reappraisal Notices Mailed
February-March	Informal Appeal period for 2022 reappraisal
June 1	Board of Equalization & Review Appeal Deadline