

**BRUNSWICK COUNTY
2023
REAL PROPERTY
APPRAISAL MANUAL**



**AND
PRESENT USE MANUAL
FOR
AGRICULTURE
HORTICULTURE
AND FOREST LAND**

**PREPARED BY: BRUNSWICK COUNTY TAX ADMINISTRATOR'S OFFICE
BRUNSWICK COUNTY, NORTH CAROLINA
PURSUANT TO: G.S.105 – 317
APPRAISAL OF REAL PROPERTY; ADOPTION OF SCHEDULES,
STANDARDS AND RULES
www.brunswickcountync.gov**

Table of Contents

Schedules, Standards and Rules

- 1. Introduction**
- 2. Standards for Professional Practice and Ethics**
- 3. Approaches to Value**
- 4. Land Valuation**
- 5. Instrument Coding**
- 6. Principles & Essentials of Uniform Property Valuation and Assessment**
- 7. Income Property Valuation**
- 8. Appendix**

And

**The 2023 Use - Value Manual for Agricultural,
Horticultural and Forest Land**

Introduction

The North Carolina General Statute (NCGS) §105-283 requires that all real property shall as far as practicable be appraised or valued at its true value in money. The statute further states that the words "true value" shall be interpreted as meaning "market value, that is, 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 sell and both having a reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used."

The intent of the property revaluation program is to readjust the appraised values of real property so that values are brought into line with true value, or "market value", as of January 1, 2023. The Tax Administrator's office estimates market value by accumulating descriptive data of the real property in our county and by studying the property transactions in our county. The goal of this effort is to uniformly estimate property values in an efficient manner.

Although the resulting estimates of value for each property will be used later in calculation of property tax, at this point the sole responsibility of the Tax Administrator and his appraisal staff is to reasonably approach and estimate the most probable total selling price for all parcels.

Also at this point, the property owner should acknowledge only that the Tax Administrator did, or did not, reasonably estimate the approximate market value for the property. The appraisal staff will be available to informally discuss any concerns a property owner may have prior to the meeting of the *Board of Equalization and Review*. A general provision, set out by North Carolina General Statute (NCGS) §105-394, states that Immaterial irregularities in the listing, appraisal, or assessment of property for taxation ... or in any other proceeding or requirement of this Subchapter shall not invalidate the tax imposed upon any property or any process of listing, appraisal, assessment, levy, collection, or any other proceeding under this Subchapter.

All real estate appraisal work in the United States should be accomplished in compliance with the *Uniform Standards of Professional Appraisal Practice (USPAP)*. For the purposes of this Schedule of Values, appraisers preparing assessments under the mass appraisal process, including assessment appeals to be heard before the Board of Equalization of Review, shall be guided by *USPAP Standard 6*, which governs real estate appraisal practice for *ad valorem* tax purposes, which together with the Tax Administrator's statements of compliance, compose the main body of this *2023 Schedule of Values*. However, in the preparation of assessment appeals to be heard before the North Carolina Property Tax Commission or the North Carolina Court of Appeals, the appraisers shall be guided by *USPAP Standard Rule 1*.

To assist property owners, employees, and administrative personnel interested in understanding and applying assessment standards, this manual of values, standards, and rules is required.

Sections 2 through 8 of this manual contain the detail that the Tax Administrator needs to comply with *USPAP Standard 6*.

North Carolina General Statute §105-286 requires general reappraisal of real property at least every eight years. Over a long period of time, values assessed under a given revaluation's Schedule of Values lose a uniform relationship to the true market value, as defined by statute. When compared to sale prices year-by-year during a revaluation's life-cycle, some assessed values become too high while others become too low.

From time to time the State of North Carolina may deem it necessary to add or modify guiding statute contained in The Machinery Act. All such statutory changes and changes to Department of Revenue Rules and Regulations are hereby incorporated by reference into this Schedule of Values.

STANDARDS FOR PROFESSIONAL PRACTICE AND ETHICS

1. International Association of Assessing Officers (IAAO)⁽¹⁾

The International Association of Assessing Officers (IAAO) is an educational and research association of individuals in the assessment profession and others with an interest in property taxation. Membership is open to anyone, and includes individuals working in government, private industry, academia and members of the general public. This section covers Code of Ethics and Standards of Mass appraisal.

- a. Code of Ethics
- b. Standards of Professional Conduct

a. Code of Ethics

Canon 1

Members shall conduct their professional duties and activities in a manner that reflects credit upon themselves and their profession.

Ethical Rules

E.R. 1-1 It is unethical for members to conduct their professional duties in a manner that could reasonably be expected to create the appearance of impropriety.

E.R. 1-2 It is unethical for members to accept an appraisal or assessment-related assignment, which they are not qualified to perform

E.R. 1-3 It is unethical for members knowingly to fail in performance of their duties according to applicable laws and regulations or in the uniform application of such laws and regulations.

E.R. 1-4 It is unethical for members not to make available all public records in their custody for public review, unless access to such records is specifically limited or prohibited by law, or the information has been obtained on a confidential basis and the law permits such information to be treated confidentially. Assessing officers must make every reasonable effort to inform the public about their rights and responsibilities under the law and the property tax system.

E.R. 1-5 It is unethical for members not to cooperate with public officials to improve the efficiency and effectiveness of the property tax in particular and public administration in general.

E.R. 1-6 It is unethical to engage in misconduct of any kind that leads to a conviction for a crime involving fraud, dishonesty, false statements, or moral turpitude.

E.R. 1-7 It is unethical to perform any appraisal, assessment, or consulting service that is not in compliance with the IAAO Constitution or the Uniform Standards of Professional Appraisal Practice.

Canon 2

Members shall not make public statements, written or oral, that are untrue or tend to mislead or deceive the public in the course of performing their professional duties.

Ethical Rules

E.R. 2-1 It is unethical to use advertising or promotions that are not totally accurate and truthful to solicit assessment-related assignments or to use misleading claims or promises of relief that could lead to loss of confidence in appraisal or assessment professionals by the public.

E.R. 2-2 It is unethical to claim an IAAO professional designation unless authorized, whether the claim is verbal or written, or to claim qualifications that are not factual or may be misleading.

E.R. 2-3 It is unethical not to give full credit to the source(s) of any materials quoted or cited in writings or speeches.

Canon 3

Members shall not engage in appraisal or assessment-related assignments in which they have, or may reasonably be considered by the public as having, a conflict of interest.

Ethical Rules

E.R. 3-1 It is unethical for members to accept an appraisal or assessment-related assignment that can reasonably be construed as being in conflict with their responsibility to their jurisdiction, employer, or client, or in which they have an unrevealed personal interest or bias.

E.R. 3-2 It is unethical for assessment personnel to perform private appraisal assignments (moonlight) in their assessment jurisdictions.

Comment A. It is not unethical for assessment personnel to perform special appraisal assignments for other government agencies when such assignments are part of their duties as assessment professionals.

Comment B. It is not unethical for assessment personnel to perform private appraisal assignments (moonlight) outside of their assessment jurisdictions.

Canon 4

Members shall accept no appraisal or assessment-related assignment, which is contingent upon or influenced by any condition that could impair their objectivity.

Ethical Rules

E.R. 4-1 It is unethical, in the performance of an appraisal or assessment-related assignment, to develop an appraisal, analysis, or opinion that is biased or to prepare, orally present, sign, or deliver an appraisal report that contains any biased analysis or opinion. Further, it is unethical for a member knowingly to permit a business entity that is wholly owned, or wholly or partially controlled by such member, to prepare, orally present, sign, or deliver a biased report or an appraisal report that contains any biased analysis or opinion.

E.R. 4-2 It is unethical to accept or perform an appraisal assignment if the compensation to be paid for the assignment is contingent upon a reduction or increase in assessed value or taxes, or the consequences of such assignment.

Comment: Property tax consulting assignments are not considered to be appraisal assignments within the meaning of the Code, unless an appraisal as defined by the Uniform Standards of Professional Appraisal Practice is made. Therefore, unless an appraisal as defined by the Uniform Standards of Professional Appraisal Practice is made and expressed, it is not a violation of this E.R. for a member to accept or perform a property tax consulting assignment for which compensation is contingent upon a reduction or increase in assessed value or taxes. For further explanation, see Standards 4 and 5 of the Uniform Standards of Professional Appraisal Practice.

E.R. 4-3 It is unethical to accept or perform an appraisal assignment where the member has a personal interest in the subject property or personal bias toward the parties, unless certain conditions are met. Such conditions are:

- (a) The member shall disclose such personal interest or bias to the client or employer prior to acceptance of the appraisal assignment, and
- (b) The member shall disclose such personal interest or bias in each written or oral appraisal report resulting from such appraisal assignment.

E.R. 4-4 It is unethical to perform appraisal assignments without clear and full disclosure of the form of compensation as required by the Uniform Standards of Professional Appraisal Practice.

Canon 5

Members shall abide by and support the provisions of the IAAO Constitution, Bylaws, and Procedural Rules.

Ethical Rules

E.R. 5-1 It is unethical for an IAAO member:

- (a) Knowingly to make false statements or submit misleading information when completing a membership application, or to refrain from promptly submitting any significant information in the possession of such member when requested to do so as part of an IAAO membership application.
- (b) Knowingly to submit misleading information to the duly authorized Ethics Committee or subcommittee; to refrain from promptly submitting any significant information in the possession of the member as requested by the committee or subcommittee; to refuse to appear for a personal interview or participate in an interview conducted by telephone as scheduled by the committee or subcommittee; or to refuse to answer promptly all relevant questions concerning an appraisal or assessment-related assignment or related testimony being investigated by the committee or subcommittee. Any member who has submitted misleading information to the Ethics Committee may be subject to ethical charges filed by the committee.
- (c) To fail or refuse to submit promptly to an authorized IAAO committee a written appraisal report or file memorandum containing data, reasoning, and conclusions, or to fail or refuse to permit an authorized committee to review an appraisal report, assessment-related assignment, or file memorandum when requested to do so by a person or persons authorized to review such material.
- (d) To fail or refuse to submit promptly any significant information in the possession of a member concerning the status of litigation related to an ethics matter when requested to do so by the chair of the Ethics Committee; or knowingly to submit misleading information to the chair of the Ethics Committee concerning the status of litigation.

E.R. 5-2 It is unethical to fail to comply with the terms of a summons issued by the Ethics Committee.

E.R. 5-3 It is unethical not to cooperate fully with the IAAO Executive Board, Ethics Committee and the staff of IAAO in all matters related to the enforcement of this Code, as set forth in the Ethics Committee's Rules and Procedures, as amended from time to time.

E.R. 5-4 It is unethical to violate the IAAO Constitution, Bylaws, or Procedural Rules.

Canon 6

Members shall comply with the requirements of the Uniform Standards of Professional Appraisal Practice.

Ethical Rules

E.R. 6-1 It is unethical to fail to observe the requirements of the Uniform Standards of Professional Appraisal Practice.

Source: (1) IAAO, Code of Ethics and Standards, 2001 by IAAO Website.
<http://www.iaao.org>

1. International Association of Assessing Officers

b. Standards on Mass Appraisal of Real Property

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 addresses 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. There are some aspects that need to be addressed. One focus is on the collection and maintenance of property data. Another focus is summarizing the primary considerations in valuation methods, including the role of the three approaches to value in the mass appraisal of various types of property. Also be aware and discuss certain managerial considerations: staff levels, data processing support, contracting for reappraisals, support of valuations, and benefit-cost issues.

This standard combines and replaces the 1983 Standard on the Application of the Three Approaches to Value in Mass Appraisal, the 1984 Standard on Mass Appraisal, and the 1988 Standard on Urban Land Valuation. The IAAO's assessment standards represent a consensus in the assessing profession and have been adopted by the Executive Board of the International Association of Assessing Officers (IAAO). The objective of the IAAO's standards is to provide a systematic means by which concerned assessing officers can improve and standardize the operation of their offices. The IAAO's standards are advisory in nature and the use of, or compliance with, such standards are purely voluntary. If any portion of these standards is found to be in conflict with the Uniform Standards of Professional Appraisal Practice (USPAP) or state laws, USPAP and state laws shall govern.

At the time of the completion of this standard, the Technical Standards Subcommittee was composed of Nancy C. Tomberlin, chair; Sheldon Bluestein; Pamela M. Dubov, CAE; James L. Pence; Jan Vann; and Edward Crane, associate member.

This standard also benefited from the recommendations and thorough reviews of many IAAO members. In particular, the subcommittee would like to thank Peter L. Davis; Alan S. Dornfest, AAS; Robert J. Gloude-mans; Wayne D. Llewellyn, CAE; Al Mobley, CAE, AAS; Steve D. Pruitt; and Joan Young, RES.

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. 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 correct, complete, and up-to-date property data. Properly administered, the development, construction, and use of computer-assisted mass appraisal systems results in a valuation system characterized by accuracy, uniformity, equity, reliability, and low per-parcel costs. Except for unique properties, individual analyses and appraisals of properties are not practical for ad valorem tax purposes.

Collecting and Maintaining Property Data

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

Valuation

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). Sub-areas or neighborhoods can serve as variables in modeling and can also be used in land value tables and selection of comparable sales. 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, ware-house/industrial, and retail properties. Large jurisdictions may be able to stratify apartment properties further by type or area or to develop multiple commercial models.

Managerial Considerations

Mass appraisal requires people, mathematical computations, and other resources. Mass appraisal also needs to be well managed and have established appropriate appraisal and analytical methods. In this section certain key managerial considerations are discussed such as staffing and data processing support.

A. 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 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.

B. Data Processing Support

Computer-assisted mass appraisals require considerable data processing support from hardware and software.

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.

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.

(1) Source. IAAO, Code of Ethics and Standards, 2001 by the IAAO Website, Standard on Mass Appraisal of Real Property, January/February 2002 Journal <http://www.IAAO.Org>.

2. Uniform standards of Professional Appraisal Practice (USPAP)¹

STANDARD 6: MASS APPRAISAL, DEVELOPMENT AND REPORTING

In developing a mass appraisal, an appraiser must be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce and communicate credible mass appraisals.

Comment: STANDARD 6 applies to all mass appraisals regardless of the purpose or use of such appraisals. Standard 6 is directed toward the substantive aspects of developing and communicating competent analyses, opinions, and conclusions in the mass appraisal of properties, whether real property or personal property. Mass appraisals can be prepared with or without computer assistance. The reporting and jurisdictional exceptions applicable to public mass appraisals prepared for purposes of ad valorem taxation do not apply to mass appraisals prepared for other purposes.

A mass appraisal includes:

1. Identifying properties to be appraised
2. Defining market area of consistent behavior that applies to properties.
3. Identifying characteristics (supply and demand) that affect the creation of value in that market area.
4. Developing a model structure that reflects the relationship among the characteristics affecting value in the market area
5. Calibrating the model structure to determine the contribution of the individual characteristics affecting value.
6. Applying the conclusions reflected in the model to the characteristics of the property or properties being appraised
7. Reviewing the mass appraisal results

The JURISDICTIONAL EXCEPTION RULE may apply to several sections of STANDARD 6 because ad valorem tax administration is subject to various state, county, and municipal laws.

Standards Rule 6-1

In developing a mass appraisal, an appraiser must:

- (a) Be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce a credible mass appraisal;

Comment: Mass appraisal provides for a systematic approach and uniform application of appraisal methods and techniques to obtain estimates of value that allow for statistical review and analysis of results.

This requirement recognizes that the principle of change continues to affect the manner in which appraisers perform mass appraisals. Changes and developments in the real property and personal property fields have a substantial impact on the appraisal profession.

To keep abreast of these changes and developments, the appraisal profession is constantly reviewing and revising appraisal methods and techniques and devising new methods and techniques to meet new circumstances. For this reason it is not sufficient for appraisers to simply maintain the skills and the knowledge they possess when they become appraisers. Each appraiser must continuously improve his or her skills to remain proficient in mass appraisal.

- (b) Not commit a substantial error of omission or commission that significantly affects a mass appraisal; and

Comment: An appraiser must use sufficient care to avoid errors that would significantly affect his or her opinions and conclusions. Diligence is required to identify and analyze the factors, conditions, data, and other information that would have a significant effect on the credibility of the assignment results.

- (c) Not render a mass appraisal in a careless or negligent manner.

Comment: Perfection is impossible to attain, and competence does not require perfection. However, an appraiser must not render appraisal services in a careless or negligent manner. This rule requires an appraiser to use due diligence and due care.

Standards Rule 6-2

In developing a mass appraisal, an appraiser must observe the following specific appraisal requirements:

- (a) Identify the client and other intended users;
- (b) Identify the purpose and intended use of the appraisal;

Comment: An appraiser must not allow the intended use of an assignment or a client's objectives to cause the assignment results to be biased.

- (c) Identify the type and definitions of value, and, if the value opinion to be developed is market value, ascertain whether the value is to be the most probable price:
 - (i) in terms of cash; or

- (ii). in terms of financial arrangements equivalent to cash; or
- (iii). in such other terms as may be precisely defined; and
- (iv). if the opinion of value is based on non-market financing or financing with unusual conditions or incentives, the terms of such financing must be clearly identified and the appraiser's opinion of their contributions to or negative influence on value must be developed by analysis of relevant market data:

Comment: For certain types of appraisal assignments in which a legal definition of market value has been established and takes precedence, the JURISDICTIONAL EXCEPTION RULE may apply.

(d) Identify the effective date of the appraisal;

- (e) Identify the characteristics of the properties that are relevant to the type and definition of value and intended use, including:
- (i). the group with which a property is identified according to similar market influence;
 - (ii). the appropriate market area and time frame relative to the property being valued; and
 - (iii). their location and physical, legal, and economic characteristics;

Comment: The properties must be identified in general terms, and each individual property in the universe must be identified, with the information on its identity stored or referenced in its property record.

When appraising proposed improvements, an appraiser must examine and have available for future examination, plans, specifications, or other documentation sufficient to identify the extent and character of the proposed improvements.

Ordinarily, proposed improvements are not appraised for ad valorem tax purposes. Appraisers, however, are sometimes asked to provide opinions of value to proposed improvements so that developers can estimate future property tax burdens. Sometimes units in condominiums and planned unit developments are sold with an interest in unbuilt community property, the prorated value of which, if any, must be considered in the analysis of sales data.

- (f) Identify the characteristics of the properties that are relevant to the purpose and intended use of the mass appraisal, including:
- (i). location of the market area; and
 - (ii). physical, legal, and economic attributes; and
 - (iii). time frame of market activity; and
 - (iv). property interests reflected in the market.

(g) In appraising real property or personal property:

- (i). identify the appropriate market area and time frame relative to the property being valued
- (ii). when the subject is real property, identify and consider any personal property, trade fixtures, or intangibles that are not real property but are included in the appraisal;
- (iii). when the subject is personal property, identify and consider any real property or intangibles that are not personal property but are included in the appraisal;
- (iv). identify known easements, restrictions, encumbrances, leases, reservations, covenants, contracts, declarations, special assessments, ordinances, or other items of similar nature;
- (v). identify and analyze whether an appraised fractional interest, physical segment or partial holding contributes pro rata to the value of the whole;

Comment: The above requirements do not obligate the appraiser to value the whole when the subject of the appraisal is a fractional interest, physical segment, or a partial holding. However, if the value of the whole is not identified, the appraisal must clearly reflect that the value of the property being appraised cannot be used to develop the value opinion of the whole by mathematical extension.

(h) Analyze the relevant economic conditions at the time of the valuation, including market acceptability of the property and supply, demand, scarcity, or rarity;

(i) Identify any extraordinary assumption and any hypothetical conditions necessary in the assignment; and

Comment: As an extraordinary assumption may be used in an assignment only if:

- it is required to properly develop credible opinions and conclusions;
- the appraiser has reasonable basis for the extraordinary assumption;
- use of the extraordinary assumption results in a credible analysis; and
- the appraiser complies with the disclosure requirements set forth in USPAP for extraordinary assumptions.

A hypothetical condition may be used in an assignment only if:

- use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, or for purposes of comparison;
- use of the hypothetical condition results in a credible analyses; and
- the appraiser complies with the disclosure requirements set forth in USPAP for hypothetical conditions.

(j) Determine the scope of work necessary to produce credible assignment results in accordance with the SCOPE OF WORK RULE.

Standards Rule 6-3

When necessary for credible assignment result, an appraiser must:

(a) In appraising real property, identify and analyze the effect on use and value of the following factors: existing land use regulations, reasonably probable modifications of such regulations, economic supply and demand, the physical adaptability of the real estate, neighborhood trends, and highest and best use of the real estate; and

Comment: This requirement sets forth a list of factors that affect use and value. In considering neighborhood trends, an appraiser must avoid stereotyped or biased assumptions relating to race, age, color, gender, or national origin or an assumption that race, ethnic, or religious homogeneity is necessary to maximize value in a neighborhood. Further, an appraiser must avoid making an unsupported assumption or premise about neighborhood decline, effective age, and remaining life. In considering highest and best use, an appraiser must develop the concept to the extent required for a proper solution to the appraisal problem.

(b) In appraising personal property: identify and analyze the effects on use and value of industry trends, value-in-use, and trade level of personal property. Where applicable, identify the effect of highest and best use by measuring and analyzing the current use and alternative uses to encompass what is profitable, legal, and physically possible, as relevant to the purpose and intended use of the appraisal. Personal property has several measurable marketplaces; therefore, the appraiser must define and analyze the appropriate market consistent with the purpose of the appraisal;

Comment: The appraiser must recognize that there are distinct levels of trade and each may generate its own data. For example, a property may have a different value at a wholesale level of trade, a retail level of trade, or under various auction conditions. Therefore, the appraiser must analyze the subject property within the correct market context.

Standards Rule 6-4

In developing a mass appraisal, an appraiser must:

(a) Identify the appropriate procedures and market information required perform the appraisal, including all physical, functional, and external market factors as they may affect the appraisal;

Comment: Such efforts customarily include the development of standardized data collection forms, procedures, and training materials that are used uniformly on the universe of properties under consideration.

(b) Employ recognized techniques for specifying property valuation models; and

Comment: The formal development of a model in a statement or equation is called model specification. Mass appraisers must develop mathematical models that, with reasonable accuracy, represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. The models may be specified using the cost, sales comparison, or income approaches to value. The specification format may be tabular, mathematical, linear, nonlinear, or any other structure suitable for representing the observable property characteristics. Appropriate approaches must be used in appraising a class of properties. The concept of recognized techniques apply to both real and personal property valuation models.

(c) Employ recognized techniques for calibrating mass appraisal models.

Comment: Calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model. The table entries in a cost manual are examples of calibrated parameters, as well as the coefficients in a linear or nonlinear model. Models must be calibrated using recognized techniques, including, but not limited to, multiple linear regression, nonlinear regression, and adaptive estimation.

Standards Rule 6-5

In developing a mass appraisal, when necessary for credible assignment results, an appraiser must:

(a) Collect, verify, and analyze such data as are necessary and appropriate to develop, when applicable:

- (i). the cost new of the improvements;
- (ii). accrued depreciation;
- (iii). value of the land by sales of comparable properties
- (iv). value of the property by sales of comparable properties;
- (v). value by capitalization of income—i.e., rentals, expenses, interest rates, capitalization rates, and vacancy data;

Comment: This rule requires appraisers engaged in mass appraisal to take reasonable steps to ensure that the quantity and quality of the factual data that are collected are sufficient to produce credible appraisals. For example, in real property, where applicable and feasible, systems for routinely collecting and maintaining ownership, geographic, sales, income and expense, cost, and property characteristics data must be established. Geographic data must be contained in as complete a set of cadastral maps as possible, compiled according to current standards of detail and accuracy. Sales data must be collected, confirmed, screened, adjusted, and filed according to current standards of practice. The sales file must contain, for each sale, property characteristic data that are contemporaneous with the date of sale. Property characteristic data must be appropriate and relevant to the mass appraisal models being used. The property characteristics data file must contain data contemporaneous with the date of appraisal including historical data on sales, where appropriate and available. The data

collection program must incorporate a quality control program, including checks and audits of the data to ensure current and consistent records.

(b) Base estimates of capitalization rates and projections of future rental rates, expenses, interest rates, and vacancy rates on reasonable and appropriate evidence;

Comment: This requirement calls for an appraiser, in developing income and expense statements and cash flow projections, to weigh historical information and trends, current market factors affecting such trends, and reasonably anticipated events, such as competition from developments either planned or under construction.

(c) Identify and, as applicable, analyze terms and conditions of any available leases; and

(d) Identify the need for and extent of any physical inspection.

Standards Rule 6-6

When necessary for credible assignment results in applying a calibrated mass appraisal model an appraiser must:

(a) Value improved parcels by recognized methods or techniques based on the cost approach, the sales comparison approach, and income approach, as applicable;

(b) Value sites by recognized methods or techniques; such techniques include but are not limited to the sales comparison approach, allocation method, abstraction method, capitalization of ground rent, and land residual technique;

(c) When developing the value of a leased fee estate or a leasehold estate, analyze, as applicable, the effect on value, if any, of the terms and conditions of the lease;

Comment: In ad valorem taxation the appraiser may be required by rules or law to appraise the property as if in fee simple, as though unencumbered by existing leases. In such cases, market rent would be used in the appraisal, ignoring the effect of the individual, actual contract rents.

(d) Analyze the effect on value, if any, of the assemblage of the various parcels, divided interests, or component parts of a property; the value of the whole must not be developed by adding together the individual values of the various parcels, divided interests, or component parts; and

Comment: When the value of the whole has been established and the appraiser seeks to value a part, the value of any such part must be tested by reference to appropriate market data and supported by an appropriate analysis of such data.

(e) When analyzing anticipated public or private improvements, located on or off the site, analyze the effect on value, if any, of such anticipated improvements to the extent they are reflected in market actions.

Standards Rule 6-7

In reconciling a mass appraisal an appraiser must:

(a) Reconcile the quality and quantity of data available and analyzed within the approaches used and the applicability and relevance of the approaches, methods and techniques used; and

(b) Employ recognized mass appraisal testing procedures and techniques to ensure that standards of accuracy are maintained.

Comment: It is implicit in mass appraisal that, even when properly specified and calibrated mass appraisal models are used, some individual value estimates will not meet standards of reasonableness, consistency, and accuracy. However, appraisers engaged in mass appraisal have a professional responsibility to ensure that, on an overall basis, models produce value estimates that meet attainable standards of accuracy. This responsibility requires appraisers to evaluate the performance of models, using techniques that may include but are not limited to, goodness-of-fit statistics, and model performance statistics such as appraisal-to-sale ratio studies, evaluation of hold-out samples, or analysis of residuals.

Standards Rule 6-8

A written report of a mass appraisal must clearly communicate the elements, results, opinions, and value conclusions of the appraisal.

Each written report of a mass appraisal must:

(a) Clearly and accurately set forth the appraisal in a manner that will not be misleading;

(b) Contain sufficient information to enable the intended users of the appraisal to understand the report properly;

Comment: Documentation for a mass appraisal for ad valorem taxation may be in the form of (1) property records, (2) sales ratios and other statistical studies, (3) appraisal manuals and documentation, (4) market studies, (5) model building documentation, (6) regulations, (7) statutes, and (8) other acceptable forms.

(c) Clearly and accurately disclose any extraordinary assumptions, hypothetical conditions, and limiting conditions used in the assignment.

Comment: The report must clearly and conspicuously:

- state all extraordinary assumptions and hypothetical conditions; and
- state that their use might have affected the assignment results.

(d) State the identity of the client and any intended users, by name and type

(e) State the purpose and intended use of the appraisal;

(f) Disclose any assumptions or limiting conditions that result in deviation from recognized methods and techniques or that affect analyses, opinions, and conclusions;

(g) Set forth the effective date of the appraisal and the date of the report;

Comment: In ad valorem taxation the effective date of the appraisal may be prescribed by law. If no effective date is prescribed by law, the effective date of the appraisal, if not stated, is presumed to be contemporaneous with the data and appraisal conclusions.

The effective date of the appraisal establishes the context for the value opinion, while the date of the report indicates whether the perspective of the appraiser, on the market or property use conditions as of the effective date of the appraisal was prospective, current, or retrospective.

(h) State the type and definition of value and cite the source of the definition;

Comment: State the type and definition of value also requires any comments needed to clearly indicate to intended users how the definition is being applied.

When reporting an opinion of market value, state whether the opinion of value is:

- In terms of cash or financing terms equivalent to cash, or
- Based on non-market financing with unusual condition or incentives.

When an opinion of market value is not in terms of cash or based on financing terms equivalent to cash, summarize the terms of such financing and explain their contributions to or negative influence on value.

(i) Identify the properties appraised including the property rights;

Comment: The report documents the sources for location, describing and listing the property. When applicable, include references to legal descriptions, addresses, parcel identifiers, photos, and building sketches. In mass appraisal this information is often included in property records. When the property rights to be appraised are specified in a statute or court ruling, the law must be referenced.

(j) Describe the scope of work used to develop the appraisal; exclusion of the sales comparison approach, cost approach, or income approach must be explained;

Comment: Because intended users' reliance on an appraisal may be affected by the scope of work, the report must enable them to be properly informed and not misled. Sufficient information includes disclosure of research and analyses performed and might also include disclosure of research and analyses not performed.

When any portion of the work involves significant mass appraisal assistance, the appraiser must describe the extent of that assistance. The signing appraiser must also state the name(s) of those providing the significant mass appraisal assistance in the certification, in accordance with SR 6-9.

(k) Describe and justify the model specification(s) considered, data requirements, and the model(s) chosen;

Comment: The user and affected parties must have confidence that the process and procedures used conform to accepted methods and result in credible value estimates. In the case of mass appraisal for ad valorem taxation, stability and accuracy are important to the credibility of value opinions. The summary report must include a discussion of the rationale for each model, the calibration techniques to be used, and the performance measures to be used.

(l) Describe the procedure for collecting, validating, and reporting data;

Comment: The summary report must describe the sources of data and the data collection and validation processes. Reference to detailed data collection manuals must be made, as appropriate, including where they may be found for inspection.

(m) Describe calibration methods considered and chosen, including the mathematical form of the final model(s); describe how value estimates were reviewed; and, if necessary, describe the availability of individual value estimates;

(n) When an opinion of highest and best use, or the appropriate market or market level was developed, discuss how that opinion was determined;

Comment: The mass appraisal summary report must reference case law, statute, or public policy that describes highest and best-use requirements. When actual use is the requirement, the report must discuss how use-value opinions were developed. The appraiser's reasoning in support of the highest and best use opinion must be provided in the depth and detail required by its significance to the appraisal.

- (o) Identify the appraisal performance tests used and set forth the performance measures attained;
- (p) Describe the reconciliation performed, in accordance with Standards Rule 6-7; and
- (q) Include a signed certification in accordance with Standards Rule 6-9.

Standards Rule 6-9

Each written mass appraisal report must contain a signed certification that is similar in content to the following form:

I certify that, to the best of my knowledge and belief,

The statements of fact contained in this report are true and correct.

The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.

I have no (or the specified) present or prospective interest in the property that is the subject of this report, and I have no (or the specified) personal interest with respect to the parties involved.

I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment. My engagement in this assignment was not contingent upon developing or reporting predetermined results.

My compensation for completing this assignment is not contingent upon the reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.

I have (or have not) made a personal inspection of the properties that are the subject of this report. (If more than one person signs the report, this certification must clearly specify which individuals did and which individuals did not make a personal inspection of the appraised property.)

No one provided significant mass appraisal assistance to the person signing this certification. (If there are exceptions, the name of each individual providing significant mass appraisal assistance must be stated.)

Comment: The above certification is not intended to disturb an elected or appointed assessors work plans or oaths of office. A signed certification is an integral part of the appraisal report. An appraiser, who signs any part of the mass appraisal report, including a letter of transmittal, must also sign this certification.

In an assignment that includes only assignment results developed by the real property appraiser(s) who signs a certification accepts full responsibility for all elements of the certification, for the assignment results, and for the contents of the appraisal report. In an assignment that includes personal property assignment results not developed by the real property appraiser(s), any real property appraiser(s) who signs a certification accepts full responsibility for the real property contents of the appraisal report.

In an assignment that includes only assignment results developed by the personal property appraiser(s) who sign a certification accepts full responsibility for all elements of the certification, for the assignment results, and for the contents of the appraisal report. In an assignment that includes real property assignment results not developed by the personal property appraiser(s), any personal property appraiser(s) who signs a certification accepts full responsibility for the personal property elements of the certification, for the personal property assignment results, and for the personal property contents of the appraisal report.

When a signing appraiser(s) has relied on work done by others who do not sign the certification, the signing appraiser is responsible for the decision to rely on their work. The signing appraiser(s) is required to have a reasonable basis for believing that those individuals performing the work are competent and that their work is credible.

The names of individuals providing significant mass appraisal assistance who do not sign a certification must be stated in the certification. It is not required that the description of their assistance be contained in the certification, but disclosure of their assistance is required in accordance with SR 6-8(j).

- (1) Source: USPAP 2010-2011 Uniform Standards of Professional Appraisal Practice Standard 6. Mass Appraisal, Development and Reporting.
<http://www.ncarea.org/images/2010USPAP.pdf>

Approaches to Value

1. Cost Approach

The cost method of valuation follows the general formula, $MV = LV + (RCN - D)$. Where MV is Market Value, LV is Land Value, RCN is replacement cost new, and D is depreciation. Cost tries to replicate market value by adding an estimate of land value to the difference between the cost of the improvements and total depreciation. The cost approach is most applicable to industrial and special use properties for which market and/or income data is scarce or nonexistent.

The value of the improvements can be developed through the use of cost manuals from such firms as Marshall and Swift and then indexed for local economic conditions. Local construction firms and contractors are also a source for cost information and verification for the indexing of data from manuals.

Depreciation is the loss, from all causes, in value of the replacement cost new. The simplest form is that caused by aging. Newer homes will sell at a higher price than similar homes built at an earlier date. This is because normal wear and tear, neglect and physical decay begin to affect the structure and therefore its marketability.

The method used for normal depreciation will be the economic age-life method whereby a lump sum is deducted from the RCN. This sum is a function of actual age and effective age (effective age is the age indicated by condition and utility and may be less or greater than chronological age) and perceptions by the market. The figure is developed into a percentage adjustment. The RCN is multiplied by this adjustment. Functional and economic depreciation are then deducted if applicable.

Two other forms of depreciation exist. They are functional and economic obsolescence.

Functional obsolescence is the inability of the structure to adequately fulfill its purpose given current market demand and the state of construction technology. A rather common example of this is being over built. An owner of a home with 3000 square feet of living area in a neighborhood of 1000 square foot homes will not be able to realize the same per square foot sale price as the smaller homes. The owner of the 3000 square foot home has a superadequacy. Buyers will perceive a loss of utility for the extra space and therefore only offer the owner a marginal return on the extra space. The measurement of curable functional obsolescence is done by calculating the cost to cure the inadequacy. If a superadequacy exist, the simplest way is the subtraction of the reproduction cost by the replacement cost. If sales are available the sales comparison method is the most preferable.

Economic obsolescence is incurable. The total loss must be allocated to improvements. The appraiser must compare sales sharing the same negative influence to those that are not. The estimated loss is then applied. If the property is income producing then the loss in net operating income can be capitalized if appropriate rates for building and land are available. Economic obsolescence is caused by factors external to the property and totally out of control of the owner. Examples of this might be heavy traffic through a residential neighborhood.

The method must also account for other indirect cost such as entrepreneurial profit accounting, legal fees, administration etc., all of which must be verified by market data.

2. Market Approach¹

The market approach (also called the sales comparison approach) uses analysis of recent comparable sales to value subject properties. The Market Approach is used to estimate property at its "fair market value". Ergo, the best technique for the valuation of property is abstracting data from actual sales and applying the results to unsold properties. The general formula for the market is:

$$MV = S +/- A.$$

Where MV is market value, S is the sales of comparable property, and A is the amount of adjustments.

The sales comparison approach models the behavior of the market by comparing the properties being appraised (subjects) with similar properties that have recently sold (comparable properties). Comparable properties are selected for similarity to the subject property. The sales are then adjusted for their differences from the subject. Finally, a market value for the subject is estimated from the adjusted sales prices of the comparable properties.

Typically, adjustments originate from one of the following.

- Paired data set analysis
- Statistical analysis
- Graphic analysis
- Cost-related analysis
- Secondary data analysis

Comparable properties are selected and adjusted to the subject property. The sales comparison approach requires adjustments for differences, such as time, attribute differences, competitiveness in the same market, and other factors.

In the sales comparison approach, appraisers estimate a price per unit. The unit of comparison may be the property as a whole or some smaller measure of the size of the property. Converting the sale price to a unit of measure makes it easier to compare and adjust properties that compete in the same market. The price per unit of comparison is the dependent variable - what is being estimated - in the valuation model. The value of the dependent variable is predicted by the values of the other variables, such as property attributes. The unit of comparison should never be the grounds for selecting comparables. Property attributes should be used instead.

Once the attributes have been selected and the adjustments determined, the appraiser can apply the sales comparison model. The appraiser first describes subject and comparables in a comparative attribute display, then selects an adjustment method and adjusts each comparable to the subject. After adjustments have been made an estimate of value can be determined about the subject property.

3. Income Approach

The income approach restates market value by converting the future benefits of property ownership into an expression of present worth.

The general model is $MV = I/R$.

Where MV = market value, I = net income, and R = capitalization rate. The underlying assumption of this approach is that the value of the property as perceived by the buyer lies in its ability to generate income. The consumer is anticipating a future benefit (the income stream and or future sale of the property). It is the anticipated future benefits that the Assessor is appraising and discounting to their present worth.

The process begins with an estimation of gross potential income (GPI). This is the maximum possible receipt that the owner may realize in an annual period. Example: An apartment complex has 10 units for which the market rent is \$350 per month. The GPI is the 12 months X 350 X 10 units = \$4,200. It is important to note that the rent is market rent. This is often different from contract rent. Market rent is the prevailing current rate that would maximize the owners return on his investment. Contract rent is that which is denoted in the lease or rental agreement between lessor and lessee. The importance of this difference will be explained below.

Next is the calculation of vacancy and collections losses. Since most properties are rarely 100% occupied, the owner suffers a loss from his potential gross. The Assessor's Office and references to secondary sources establish this in market surveys. After subtracting these potential losses miscellaneous income is added to the difference.

Miscellaneous income may come from various sources: common area charges, overage agreements, utility charges, unclaimed deposits, laundry room charges, etc. After this addition, the sum is the effective gross income.

From the EGI, (effective gross income) allowable expenses are deducted. These include maintenance, administration, utilities, insurance and replacement for reserves. This leaves net operating income.

Net operating income is then divided by the capitalization rate to equal market value. Two important concepts to understand are the use of market versus contract rent and allowable expenses. Market rent is that which would currently maximize the investors return for a given type of property given current (January 1, 2023) conditions. This means that in some cases the market rent used for the appraisal is in excess of the actual contract rent. The reason for this is that an injudicious lessor may not be maximizing his return. This lowers his net income and therefore lowers the final estimate of value. His neighbor who is charging market on an exact same type of property will have a higher net and therefore be assessed at a higher level. Deducting more than allowable expenses have the same effect since it lowers the net operating income.

To prevent any inequities arising from either non-market rents or claims of excessive expenses, economic rents and standard industry expense ratios will be applied.

The courts have recognized this potential problem and addressed it. In *Re Greensboro Office Partnership*, 72 NC APP. 635, 325 S.E. 2D 24, Cert Denied, 313 NC 602, 330 S.E.2D 610 (1985) the North Carolina Appellate Court stated: "Section 105-317(A) in fixing the guide which assessors must use in valuing property for taxes, includes as a factor the past income, and its probable future income. But the income referred to is not necessarily actual income. The language is sufficient to include the income which could be obtained by the proper and efficient use of the property. To hold otherwise would penalize the competent and diligent and to reward the incompetent or indolent." This provides the rationale for using market rents and a certain level of allowable expenses.

The last step is the choice of a capitalization rate. Direct capitalization rates may be used from data collected from the market. Care must be used so that if the rate is market extracted it is applied to similar properties. A list of overall rates derived from valid sales will if not directly applied be used as benchmarks to check the reasonableness of rates developed through other techniques. Yield capitalization and discounted cash flow (DCF) are based on expectations of changes in the income stream, appreciation, depreciation of the property, and expenses. Income capitalization rates will not be limited to any particular method since with proper application they will yield similar results. All elements of build-up methods (e.g. band-of-investment) must be supported by market data. Proper documentation of income and expenses should include three years of income tax returns for the subject or audited statements by a CPA using the Generally Accepted Accounting Principles (GAAP). Other forms such as income statements, leases, etc. are acceptable if enough supporting documentation is presented as a supplement to a single years return.

MANUALS AND PUBLICATIONS

To develop, support, and supplement the valuation of real property, nationally recognized cost manuals and publications have been used in the development of the Schedule of Values. Two of the most recognizable cost manuals that were referred to are Marshall Valuation Service, Marshall and Swift Residential Cost Handbook.

GOVERNMENTAL RESOURCES

The Use-Value Advisory Board (UVAB) submits a Use Value Procedures Manual annually to the Department of Revenue. The creation of the UVAB, as well as guidelines for the development of the manual, are authorized and set forth in the General Statutes of North Carolina. The contents of the manual reflect the combined judgment and effort of many professionals in the North Carolina Cooperative Extension Service and cooperating Federal and State agencies. This manual is provided to each County for inclusion in their statutorily required octennial revaluation. Although considered a part of the Schedule of Values, the Present Use Value Manual will be submitted for approval under a separate cover.

Personnel at the Property Tax Division, Department of Revenue, and Institute of Government were consulted on several occasions concerning a variety of questions. Their involvement was solicited based on their knowledge and expertise in the revaluation process.

ADOPTED

LAND VALUATION PROCESS

Overview¹

Accurate land Values are crucial to an effective assessment system.

Physically, land may be defined as the surface of the earth together with everything beneath and above. The shape of a parcel is like a three dimensional pyramid, with its apex at the center of the earth, extending upward through the surface into space. Land ownership is the collection of rights to enjoy, use, and dispose of this physical space, subject to the limitations imposed by government. The assessor first identifies, lists, and values all land and improvements thereto. This task requires the use of cadastral maps showing boundaries and other features. Second an accurate inventory of land data, including location, ownership, classification and use, size, shape, and physical characteristics. The assessor analyzes the local market and estimates the assessed value.

There are several methods that can be used to extract and arrive at an assessment. These are:

- a. Sales Comparison
- b. Abstraction
- c. Allocation
- d. Anticipated Use
- e. Capitalization of Ground Rents
- f. Land Residual Capitalization

Sales Comparison

The sales comparison approach uses analysis of recent comparable sales to value subject properties. The sales comparison approach is used to estimate property at its "fair market value". The best technique for the valuation of property is abstracting data from actual sales and applying the results to unsold properties. The general formula for the market is:

$$MV = S \pm A.$$

Where MV is market value, S is the sales of comparable property, and A is the amount of adjustments.

The sales comparison approach models the behavior of the market by comparing the properties being appraised (subjects) with similar properties that have recently sold (comparable properties). Comparable properties are selected for similarity to the subject property. The sales are then adjusted for their differences from the subject. Finally, a market value for the subject is estimated from the adjusted sales prices of the comparable properties.

There are two principle applications of the sales comparison approach in land valuation. The first is the comparative unit method and secondly the base lot method.

1. The appraiser uses the comparative unit method after a determination of the average or typical unit value. The average value is found by calculating the median or mean sale price per unit.
2. The appraiser uses the base lot method after a base parcel is selected to represent the stratum from a neighborhood sales file. Once the base lot is selected it is used as a benchmark to establish values for individual parcels for that neighborhood.

Land values are derived primarily by the sales comparison method. It is therefore important that certain factors, which are listed in N.C.G. S. 105-317(a)(1), be accurately shown and considered in accordance with G.S. 105-317(b)(3).

Abstraction Method

In the Abstraction Method we use the ability to subtract the depreciated replacement cost new of the improvement value from the sales price to arrive at the residual land value estimate. These calculated land values supplement the land value database. Sales with newer improvement make it easier to estimate depreciation, which in turn gives a better land value estimate. When using the abstraction method ensure that the correct comparative unit is used. Taking the time to convert the land value estimates to a comparative unit value will enhance uniformity and consistency among parcels in the market.

Allocation

The Allocation Method is also known as the land ratio method. In theory for a given type of property there tends to be a consistent overall relationship between land and improvement values. With this relationship an appraiser can seek comparable areas with sufficient land sales, determine the typical ratio to sales of improved parcels in the subject area. The abstraction method is useful primarily in older established neighborhoods with few vacant land sales. This method can be useful if applied with care and validated to ensure that calculated land and improvement value estimates are consistent with available sale price data.

Anticipated Use or Cost of Development Method

In the absence of sufficient sales the Anticipation use method can that can be used to develop a land value for a property. This method is not the preferred method but can project a value based on the principle that the projected improvement must represent the highest and best use of the land. The results based on the principle of surplus productivity, indicates that the price a developer will pay for land in its present undeveloped state and by subtracting the total development cost from the projected sales price of the lots as if developed. The appraiser can calculate the residual land value after the satisfaction of labor, capital, and management has been met.

CAPITALIZATION OF LAND

When studying Income property, or the ability for a parcel to generate income, all properties have one common appraisal characteristic: the capitalization of income generated by land is an important indication of value. Their value is based on the quantity, quality, and durability of their estimated net income before debt and after expenses is deducted. To arrive at a value for a property based on income some methods can be used.

Capitalization of Ground Rents

Capitalization of ground rents is used best when land rented or leased independently of improvements. This method can be used with farmland or commercial land that is leased on a net basis, where lessee is responsible for property taxes and all other expenses. This is best achieved if the lease is new or current for market conditions.

Land Residual Capitalization

When you apply this method it is important to understand several things. One that this method assumes that the parcel of land has an improvement on it and that the improvement is relatively new and that it represents the highest and best use of the property. Plus the improvement has no depreciation. This method also requires some other information.

1. A net operating income
2. A building value
3. A proper discount rate
4. A recapture rate
5. And an effective tax rate

UNITS OF COMPARISON

When valuing land a standard unit of comparison is needed to establish an average or typical value for an area or neighborhood. The use of market analysis is used to arrive at a standard by calculating the median or mean of an area or neighborhood. There are several different units of comparison. Each different type of comparison can be used for different property classes. There are typically five different unit types.

- a. Lot or Site
- b. Site / Units Buildable
- c. Acre
- d. Square foot
- e. Front foot

a. Lot or Site

Lot or site value may be used when the market does not indicate a difference in land size. This is typically used in residential subdivisions that are planned or developed in such a way that there is some degree of uniformity to the neighborhood.

b. Site or Units Buildable

When a parcel of land sells on a unit basis, for example an apartment complex, this method of comparison can be used. Apartment property is typically sold as a unit and as such, the unit of comparison would be buildable units.

c. Acre

In general, when the market analysis shows that tracts of land sells for a per acre rate then this unit of comparison is used. Typically, rural tracts of land and industrial property use this type of comparison since they are sold commonly in larger portions.

d. Square Foot

This type of comparison is used mostly for commercial property. Since this type of property sells on a square foot basis.

e. Front Foot

A front foot unit of comparison may be used when a property value indicates that the amount of exposure significantly contributes to value. This type of comparison is used typically when a parcel is more desirable and value based on how much frontal exposure there maybe. Some examples are commercial and even water front residential property.

In addition to the selection of a method and unit of comparison, analysis of the neighborhood itself must occur. Neighborhood analysis reflects the effect of social, environmental, economic and governmental forces that directly affect the properties within a neighborhood. Neighborhood delineation is a key component in this endeavor. Neighborhood delineation is the analysis of the geographic influences and economic forces that contribute or change value. A neighborhood for analytical purposes is defined as the largest geographic grouping of properties where the significant economic forces exerted on the properties are generally uniform. Neighborhoods can be defined by

natural, man-made, or political boundaries and are established by a commonality based on land uses, types and age of buildings, population, and the desire for homogeneity. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is the time of development and construction. In the period of stability, or equilibrium, the forces of supply and demand are relatively equal. The period of decline reflects diminishing demand or desirability. During decline, general property use may change. Declining neighborhoods may become economically desirable again and experience renewal, reorganization, rebuilding, or restoration, marked by modernization and increasing demand. The appraiser must analyze whether a particular neighborhood is in a period of growth, stability or decline and predict changes that will affect future use and value.

(1) Source: Property Assessment Valuation, second edition International Association of Assessing Officers, Copyright 1996 130 East Randolph St. Suite 850, Chicago, Illinois 60601.

VALUATION OF SUBDIVIDED LANDS

Brunswick County will value all subdivided land, considering but not limited to location, access, topography, presence or absence of infrastructure and market demand within the subdivision. Utilizing this approach will allow all subdivided land to be valued in accordance with the General Statutes of the State of North Carolina.

ADOPTED

Building Notes:

Only particularly relevant data related to a particular building is to be entered here.

PROPERTY ADDRESS

The property address is a 40 character alpha-numeric field that is treated as notes, i.e. it is not edited into the system. It is not mandatory that it be completed. A typical use for this is to help in locating the parcel on subsequent field trips so the address should have meaning in this regard.

House #: Unit #: Direction: Street Name:
 Type: Suffix: Municipality:

The street type (TY) is edited for consistency.

SALES DATA

SALES DATA						
OFF. RECORD						
DEED BOOK	DEED PAGE	DEED DATE	DEED TYPE	Qualified	Improved	SALES PRICE
01489	0166	1995	WD	Q	V	7000

Market sales represent the key to this appraisal system in that all the analysis and adjustments made in the system interact in some way with the market behavior of certain parcels. Each sale should have been thoroughly screened and the status of the parcel (i.e. vacant or improved) at the time of sale noted. This section allows all relevant sales data to be assembled.

There are NO OPTIONAL FIELDS, all fields must be marked.

DEED BOOK - D-BK [] The Deed Book may be alpha or numeric.

DEED PAGE - D-PG [] Official records page may be alpha or numeric.

DEED DATE - Must be a valid month, day and year for date of sale and date recorded.

DEED TYPE - IN [] (Not required).

QUALIFIED

- Q = Qualified (arm's length transaction)
- U = Unqualified sale (not a valid market sale)

IMPROVED

- V = Vacant. The sale was for an unimproved parcel at time of sale.
- I = Improved. The sale was for an improved parcel at time of sale

SALES PRICE - Record the sales price to the nearest dollar as recorded in the Register of Deeds. Do not use punctuation. *The system ranks sales internally with the most recent qualified sale appearing first with the remainder ranked in chronological order followed by disqualified sales ranked in chronological order starting with the most recent. Therefore, new sales data is entered and subsequently ranked in the proper order by the System.

LAND LINE DATA

Completion of the land coding is not difficult. It does, however, present more possibilities for combinations than do other

sections of the form due to the OTHER ADJUSTMENTS which may be free form coded for each land use.

USE CODE-A four digit numeric use code is always required.

LOCAL ZONING

It is a required field and alpha and numeric codes can be used.

FRONTAGE AND DEPTH

Frontage is defined as the number of feet of the land located on the most desirable feature or road. Frontage and depth are used to calculate land value when used with models 1, 2, 3, and 4. When pricing using Land Model 0 both Frontage and Depth are normally entered as information. If lot dimensions are not known, then these fields may be left blank when using Land Model 0.

DE/FA (Depth or Size Factor)

The factor for depth or size is calculated from computerized depth or size tables. If no depth or size factor is used the system defaults to 1.00 for this factor.

LAND MODEL

Land model codes 1-4 internally adjust to frontage and depth. Model 4 works only when the land unit type is "AC". The field must not be left blank, if depth table is not used, zero fill. Land Model 5 is used for Present Use Value, and the Condo Model Code 9 works for Condominiums.

CONDITION FACTOR

This factor may be entered and is a decimal fraction of the form. The condition factor times the depth/size factor times the unit price will give the total adjusted unit price. This calculation is done internally by the system and is not shown on the collection instrument. It is then applied to the number of units to determine land value.

OTHER ADJUSTMENTS AND NOTES

This area is handled in one of two ways depending on the land model and code. When Land Model 4 is used, a plus or minus percent is automatically assigned for RF (road frontage) and AC (access), depending on the RT (road type). The LC (location), TO (topography), and OT (other) are manually done by property type, and may be added or removed. Additional notes may be added in the Additional Notes Field.

LAND UNIT PRICE

When using land model code 5, this field is table driven, except for home sites. This is the UNADJUSTED UNIT PRICE from where value is calculated. Use code 9010 (no land ownership) is not adjustable.

NUMBER OF UNITS

This entry is always required and is the basis upon which value is extended such as the total number of acres, square footage, front feet, lots or units.

UNIT TYPE

The appropriate unit type must always be entered. The appropriate codes for unit type are: AC (acres), LT (lot), FF (front feet), SF (square feet) or UT (unit).

AD (LAND) NOTES

Used for additional information pertaining to the land.

OTHER BUILDINGS/EXTRA FEATURES (OB/XF)

These types of building and structures are handled in a separate calculation based on number of units, percent condition, and unit price used with the cost tables. Such items as boat houses, docks, pools, garages and other items of major value must be recorded to properly value the parcel.

Examples of items commonly handled in this manner include:

OTHER BUILDINGS:

Carports	Sheds	Horse Stables
Garages	Utility Buildings	Poultry Houses
Barns	Farm Buildings	Green Houses
Gazebos		

EXTRA FEATURES:

Paving
Boat Ramps
Fences

Yard Lights
Pools
Weigh Scales

Tennis Courts
Docks
Silos

Elevators, Escalators, Sprinkler Systems, Bank Features, and Refrigerated Coolers should be listed on the Building Page.

- CODE:** You may place an appropriate code in this field.
- GRADE** You may place an appropriate grade in this field and the computer will automatically fill in the unit price.
- DESCRIPTION:** The description is an auto fill area based on Code keyed.
- LENGTH:** If available, this data should be filled in.
- WIDTH:** If available, this data should be filled in.
- OB/XF UNITS:** Enter the length and width of the extra feature or outbuilding, and it automatically calculates the total units. If length and width are entered in addition to the total number of units, the system will ONLY use the total number of units keyed in.
- OB/XF UNIT PRICE:** The per unit price by which the Other Building or Extra Feature is valued will be entered here from the tables in Principles and Essentials Section.
- % COND:** Enter the percent condition of the extra feature when it is listed.
- YR.BLT:** Year Built, Actual, Effective. For Actual year built, enter the year the item was initially built. Effective year built indicates the year from which depreciation will be based, and is always equal to or greater than Actual Year Built.
- %DEP OVR** A depreciation rate entered here will override the standard rate used for the OBXF Code.
- DEP.RATE:** An ANNUAL depreciation rate for each item. These are table driven.
- OVR VALUE** Override Value. Instead of using the pricing schedules you may place a value on the OB/XF by entering the desired price in the OB/XF OVR VALUE field.
- TR1** Use this field to define how this value will be counted on the TR1 Report, such as C for Commercial, R for Residential, and I for Industrial.

STRUCTURAL ELEMENTS

This section covers the structural characteristics which are recorded by the appraiser. Because the data applicable to commercial and industrial buildings is not necessary for the single family residence, it is contained on another part of the card. For all buildings other than those covered by "Extra Features and Other Buildings", the indicated portion of the form must be filled out. Other data which is not in the valuation model is input only when needed for the valuation model used. Bedrooms and Bathrooms are actual numbers; no code is used.

Structural Elements			
Foundation	Roofing Structure	Interior Flooring	Quality Grade
1 Piers	01 Flat	01 None	1 Minimum
2 Piers > 8ft.	02 Shed	02 Minimum, Plywood, Linoleum	2 Fair
3 Piers > 8ft. w/ Concrete	03 Gable	03 Concrete Finished	3 Average
4 Continuous Footing/ Crawl	04 Hip	04 Concrete Coated	4 Above Average
5 Spread Footing	05 Mansard	05 Asphalt Tile	5 Custom
6 Special Footing	06 Gambrel	06 Cork	6 Excellent
7 None	07 Irregular Ceiling	07 Rubber	
	08 Wood Truss	08 Vinyl	Style
Sub Floor System	09 Rigid Frame w/ Bar Joist	09 Pine or Soft Woods	1 1.0 Story
1 None	10 Steel Frame or Truss	10 Terrazzo	2 1.5 Story
2 Slab on Grade	11 Bowstring Truss	11 Ceramic Tile	3 2.0 Story
3 Slab Above Grade	12 Reinforced Concrete	12 Hardwood	4 2.5 Story
4 Plywood/ Particle Board	13 Prestress Concrete	13 Parquet	5 3.0 Stories or More
5 Wood		14 Carpet	6 A-Frame
6 Platform Hgt	Roofing Cover	15 Hard Tile	7 Split Level
7 Structural Slab	01 Min. Roofing	16 Seamless	8 Split Foyer
	02 Rolled Composition	17 Precast Concrete	9 Log
Exterior Walls	03 Asphalt or Composition Shingle	18 Slate	
01 Siding Minimum	04 Built Up Tar and Gravel	19 Marble	Fireplace
02 Corrugated Metal (Light)	05 Rubber	20 Laminate	1 None
03 Composition or Wall Board	06 Architectural Shingle	21 Bamboo	2 1 Story Single
04 Single Siding (No Sheathing)	07 Fiberglass Tile		3 2 Story Single/ 1 Double
05 Asbestos Shingle	08 Clay Tile	Heating Fuel	4 2 or More
06 Board & Batten, on Plywood	09 Enamel Metal Shingle	1 None	5 Massive > 6ft.
07 Corrugated Asbestos	10 Cedar Shingle	2 Oil, Wood, or Coal	6 >2 Massive
08 Masonite on Sheathing	11 Slate/ Copper	3 Gas	7 Prefab
09 Wood On Sheathing or Plywood	12 Pre-Finished Metal	4 Electric	8 Prefab >2
10 Aluminum/ Vinyl Siding	13 Metal Standing Seam	5 Solar	
11 Concrete Block	14 Concrete Form		Market and Construction
12 Stucco on Concrete Block		Heating Type	1
13 Stucco on Tile or Wood Frame	Interior Walls	01 None	2
14 Log	1 Masonry or Minimum	02 Baseboard Heat	3
15 Board & Batten	2 Wall Board Or Wood Wall	03 Forced Air - Not Ducted	4
16 Wood/ Vinyl Siding	3 Plastered	04 Forced Air - Ducted	5
17 Cedar or Redwood Siding	4 Plywood Panel	05 Hot Water	6
18 Siding Maximum	5 Drywall Sheetrock	06 Steam	7
19 Hardi Plank	6 Custom Interior	07 Radiant - Electric	8
20 Common Brick	7 >8 foot Ceiling	08 Radiant - Water	9
21 Face Brick		09 Heat Pump	10
22 Stone		10 Space Heater	11
23 Corrugated Metal (Heavy)			12
24 Modular Metal		Air Conditioning	13
25 Reinforced Concrete		1 None	14
26 Precast Panel		2 Wall Unit	15
27 Pre-Finished Metal		3 Central	16
28 Glass/ Thermopane		4 Packaged Roof Top	17
29 Architectural Block		5 Chilled Water	18

FOUNDATION

Foundation	
1	Piers
2	Piers > 8 ft.
3	Piers > 8 ft. With Concrete
4	Concrete Footing / Crawl
5	Spread Footing
6	Special Footing
7	None

Foundation codes 1-4 are generally for residential type construction, while 5 & 6 describe commercial construction. Generally wall height and type roof determine the thickness of the foundation

SUB FLOOR SYSTEM

Sub Floor System	
1	None
2	Slab on Grade
3	Slab Above Grade
4	Plywood / Particle Board
5	Wood
6	Platform Hgt
7	Structural Slab

Residential construction generally has codes 1-5 while commercial construction is generally coded 2, 3, 6 & 7.

EXTERIOR WALLS

Exterior Walls	
01	Siding Minimum
02	Corrugated Metal (light)
03	Composition or Wall Board
04	Single Siding (No Sheathing)
05	Asbestos Shingle
06	Board & Batten, on Plywood w/
07	Corrugated Asbestos
08	Masonry on Sheathing
09	Wood on Sheathing or Plywood
10	Aluminum / Vinyl Siding
11	Concrete Block
12	Stucco on Concrete Block
13	Stucco on Tile or Wood Frame
14	Log
15	Board & Batten
16	Wood / Vinyl Shingle
17	Cedar or Redwood Siding
18	Siding Maximum
19	Hard Plank
20	Common Brick
21	Face Brick
22	Stone
23	Corrugated Metal (Heavy)
24	Modular Metal
25	Reinforced Concrete
26	Precast Panel
27	Pre-finished Metal
28	Glass / Thermopane
29	Architectural Block

ONE or TWO exterior wall types may be entered in the appropriate spaces. Whenever possible mark only one exterior wall; however, when the structure does have relatively large areas of two distinct types of exterior walls, then mark as appropriate. Codes 01 - 22 are generally residential while all codes are used for commercial.

ROOF STRUCTURE AND ROOF COVER

Roofing Structure	
01	Flat
02	Shed
03	Gable
04	Hip
05	Mansard
06	Gambrel
07	Irregular Ceiling
08	Wood Truss
09	Rigid Frame w/ Bar Joist
10	Steel Frame or Truss
11	Bowstring Truss
12	Reinforced Concrete
13	Prestress Concrete
Roofing Cover	
01	Min. Roofing (Corr. or Sheet Me
02	Roller Composition
03	Asphalt or Composition Shingle
04	Built Up Tar and Gravel
05	Rubber
06	Architectural Shingle
07	Fiberglass Tile
08	Clay Tile
09	Enamel Metal Shingle
10	Cedar Shingle
11	Slate / Copper
12	Modular Metal
13	Metal Standing Seam
14	Concrete Form

One roof structure must be picked which best corresponds to the observed roof structure. Residential codes are usually 1 to 6 while commercial are usually coded 7 to 13. One roof cover must be picked which is the predominant roof cover.

INTERIOR WALL CONSTRUCTION

Interior Walls	
1	Masonry or Minimum
2	Wall Board or Wood Wall
3	Plastered
4	Plywood Panel
5	Drywall Sheetrock
6	Custom Interior
7	> 8 Foot Ceiling

One or two items may be entered. If the interior of the structure has a large proportion of two distinct wall types (this commonly would occur when you have a paneled wall and drywall), both would be marked.

INTERIOR FLOORING

Interior Flooring	
01	None
02	Minimum, Plywood, Linoleum
03	Concrete Finished
04	Concrete Coated
05	Asphalt Tile
06	Cork
07	Rubber
08	Sheet Vinyl
09	Pine or Soft Woods
10	Terrazzo
11	Ceramic Tile
12	Hardwood
13	Parquet
14	Carpet
15	Hard Tile
16	Seamless
17	Precast Concrete
18	Slate
19	Marble
20	Laminate
21	Bamboo

Observe the predominant floor type of the structure. One or two items may be entered. If the interior flooring of the structure has a large proportion of two flooring types (e.g. vinyl and hardwood), then both would be marked.

HEATING FUEL, HEATING TYPE AND AIR CONDITIONING TYPE

Heating Fuel	
1	None
2	Oil, Wood or Coal
3	Gas
4	Electric
5	Solar
Heating Type	
01	None
02	Baseboard Heat
03	Forced Air - Not Ducted
04	Forced Air - Ducted
05	Hot Water
06	Steam
07	Radiant - Electric
08	Radiant - Water
09	Heat Pump
10	Space Heater
Air Conditioning Type	
1	None
2	Wall Unit
3	Central
4	Packaged Roof Top
5	Chilled Water

These three elements are to be entered to indicate the method and fuels used to heat or cool a structure. Only one element may be entered under each category but one must be entered. Observation and a few simple questions will enable you to be very accurate in obtaining this data.

BEDROOMS AND BATHS - RESIDENTIAL

Bedroom-Baths Residential			
Location	BAS	FUS	LL
Bedroom			
Baths			
1/2 Baths			

For a single family residential, the total number of bedrooms, baths, and half baths should be entered per floor. Actual number of units is recorded.

COMMERCIAL PLUMBING

Commercial Plumbing			
Restrooms			
Total Fix.			

Enter the total number of restrooms per building. Enter the total number of fixtures per building.

STYLE OF DWELLING

Style	
1	1.0 Story
2	1.5 Stories
3	2.0 Stories
4	2.5 Stories
5	3.0 Stores or More
6	A-Frame
7	Split Level
8	Split Foyer
9	Log

Enter the appropriate code for the number of stories for single family properties.

FIREPLACES

Fireplace	
1	None
2	1 Story Single
3	2 Story Single / 1 Double
4	2 or more
5	Massive > 6 ft.
6	> 2 Massive
7	Prefab
8	Prefab > 2

Enter the appropriate code for the number of fireplaces for single family properties. Massive generally refers to those fireplaces with components such as extra-large hearths, extra-large fireplaces, decorative stone, ornamentation, and trim, etc.

MARKET FACTOR: Factors 1 through 25 adjust the neighborhood to market conditions.

CONSTRUCTION FACTOR: Factors 1 through 18 adjust the neighborhood to construction conditions.

QUALITY ADJUSTMENT

Quality Grade	
1	Minimum
2	Fair
3	Average
4	Above Average
5	Excellent
6	Superior

This entry must be made and must be one of the allowable codes.

DEPRECIATION

Act. YR Built	
Eff. YR Built	
Economic Obs.	
Functional Obs.	

Actual Year Built: MUST be entered and must reflect the original year of construction.

Effective Year Built: MUST be entered and should reflect any modernization or refurbishing done to extend the useful life of the original structure beyond its normal life span.

Economic Obsolescence: If it exists it should be entered as a percentage amount to be added to normal physical depreciation.

Functional Obsolescence: If it exists it should be entered as a percentage amount to be added to normal physical depreciation.

UNUSUAL DEPRECIATION (Special Condition Codes, Percent Condition)

Spcl Condition Code	
Percent Condition	

These entries allow the user to indicate special conditions such as fire or weather damage or where the dwelling has not been normally maintained.

There are three Special Condition Codes which may be entered if applicable. Otherwise, they should be left BLANK.

UC = Under Construction*

PD = Physically Damaged*

AP = Abnormal Physical Depreciation

*UC and PD will over ride Normal Depreciation

PERCENT CONDITION must be used if one of these codes (UC, PD, AP,) is used. PERCENT CONDITION is that percent good after you apply UC or PD. PERCENT CONDITION is added to normal depreciation if you use code AP. NOTE: To use the Percent Condition one of the Special Condition Codes **MUST BE USED**. Also, care must be taken in the use of these codes as they will override the depreciation developed from the normal depreciation, economic obsolescence and functional obsolescence. AP should be entered as a percentage amount to be added to normal depreciation. When using Under Construction (UC) or Physical Damage (PD), remember, that if you assign 60% for either of these codes and the dwelling is 70 years old and should really be 30% good, it will change it to 60% good because these codes override any normal physical, functional or economic depreciation.

CONDO AND COMMERCIAL

For Condo Model see pages 51-54 in Principles and Essentials

FLOOR NUMBER

Floor Number	<input type="text"/>
---------------------	----------------------

When used with the 03 model this is the floor number on which the unit is located. When used with all other models, this is the number of floors in the building. Enter 01 - 99.

LOCATION (See pages 51-54 in sec Principles and Essentials)

NUMBER OF UNITS

Total Units/Bldg	<input type="text"/>
-------------------------	----------------------

This is the total number of units in the building. Enter 001 - 099.

STRUCTURAL FRAME

Structural Frame		<input type="text"/>
1	Pre Fabricated	
2	Wood Frame	
3	Masonry	
4	Reinforced Concrete	
5	Steel	
6	Fireproof Steel	
7	Special	

For commercial models this item **MUST** be completed.

CEILING AND INSULATION

Ceiling & Insulation		<input type="text"/>
Suspended		
01	Ceiling Insulated	
02	Wall Insulated	
03	Ceiling & Wall Insulated	
04	No Insulation	
Not Suspended		
05	Ceiling Insulated	
06	Wall Insulated	
07	Ceiling & Wall Insulated	
08	No Insulation	
No Ceiling		
09	Roof Insulated	
10	Wall Insulated	
11	Roof & Wall Insulated	
12	No Insulation	

Mark one of the entries which best describes the ceiling insulation. First find the applicable category of ceiling (Suspended Ceiling, Not Suspended, or No Ceiling) and then mark the appropriate type of insulation within that category. If there is no ceiling and no insulation the field should be zero filled.

AVERAGE NUMBER OF ROOMS PER FLOOR (Used in Model #4 only)

Avg # Rooms/Floor

Enter 001 - 999. When the property has numerous floors, it is too time consuming to determine the total number of rooms for the entire structure. Therefore, investigate one or two stories to develop the approximate average. It would be advisable to check floors above the base floor as it usually contains a greater percentage of open area than the remainder of the floors. This field cannot be zero filled.

NONSTANDARD WALL HEIGHT

Non-Std Wall Height

The height of the first floor wall should be entered to the closest foot. The program will determine if it is non-standard and mark appropriate adjustments. If the field is zero filled, the standard height for the particular model will be assumed.

APPRAISAL SYSTEM OVERRIDE CONTROL OR DIRECTED VALUE

There are a few instances in which the nature of a parcel is so unique that none of the seven valuation models can be applied to give the desired results. For example, such things as an imported Spanish castle or a moon rocket assembly building cannot be readily handled by the regular methods.

Therefore, the appraiser has been given the ability to override the system and make the value adjustment necessary to achieve the proper appraisal on a specific parcel. The property appraiser should utilize the system override only after careful consideration of the subject and the capabilities of the various models.

Disclaimer: Cosmetic changes may occur on the screen shots due to changes in name, address, etc., in order to maintain system accuracy.

No Schedule of Value changes will result from these changes.

ADOPPEL

PRINCIPLES & ESSENTIALS OF UNIFORM PROPERTY

VALUATION AND ASSESSMENT

This manual represents the guidelines that will ensure the uniform, consistent, accurate and efficient valuation of all property within Brunswick County. The appraiser's experience and expertise in applying the guidelines within this manual, as well as their personal judgment, will add to the overall quality and accuracy of the work.

The replacement cost of dwellings and outbuildings is the starting point of most appraisals. General construction specifications vary widely with the quality of materials and workmanship. Therefore, the guidelines in this manual are designed to enable the appraiser to distinguish between variations in replacement costs.

Included in the manual are depth factor charts, residential pricing examples, and rural land pricing charts. These guidelines, when applied properly, will ensure a fair and uniform valuation of property.

Ultimately the Uniform Appraisal Standards as set forth in the North Carolina General Statute 105-283 will be the standard upon which "true value" is based. It states:

"All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this subchapter, the words "true value" shall be interpreted as meaning market value, that is, 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. For the purposes of this section, the acquisition of an interest in land by an entity having the power of eminent domain with respect to the interest acquired shall not be considered competent evidence of the true value in money of comparable land."

VALUATION MODELS

The following valuation models are the mathematical expressions of value used in determining estimated market value. The quality factors and formulas for determining the index values of each are shown. All fields shown require an entry even though the entry may be zero.

USE	MODEL	DESCRIPTION	BASE RATE
01	01	SINGLE FAMILY RESIDENTIAL	120.00
02	02	MANUFACTURED HOME-DOUBLE WIDE	80.00
03	02	SINGLE WIDE AS REAL PROPERTY	80.00
04	03	CONDOMINIUM	100.00
05	01	PATIO HOME	120.00
06	01	CONDOMINIUM BEACH	170.00
07	01	SINGLE FAMILY BEACH	200.00
08	01	MODULAR	110.00
09	01	TOWNHOME	118.00
10	07	COMMERCIAL RETAIL	124.00
11	07	CONVENIENCE STORE	137.00
12	07	CAR WASH	87.00
12A	07	CAR WASH-AUTOMATIC	143.00
12D	07	CAR WASH-DRIVE THRU	110.00
13	07	STRIP RETAIL NO ANCHOR	124.00
14	07	BIG BOX	76.00
15	07	SHOPPING CENTER-MALL	121.00
16	07	SHOPPING CENTER-STRIP W/ANCHOR	111.00
17	04	OFFICE	148.00
18	04	OFFICE HIGH RISE >4FLOORS	149.00
19	04	MEDICAL OFFICE	204.00
20	03	MEDICAL OFFICE CONDO	153.00
21	07	RESTAURANT/CAFETERIA	193.00
22	07	FAST FOOD FRANCHISE	205.00
23	04	BANK	214.00
24	03	COMMERCIAL OFFICE CONDO	112.00
25	07	COMMERCIAL SERVICE SHOP	71.00
26	07	FRANCHISE AUTO SERVICE (LUBE EXPRESS)	97.00
27	07	AUTO PARTS	92.00
28	04	AUTO SHOWROOM	128.00
29	06	MINI WAREHOUSE	46.00
30	04	LABORATORY	212.00
31	04	CHILD CARE CENTER	158.00
32	07	THEATRE	144.00
33	07	NIGHT CLUB, BAR, ETC.	128.00
34	07	BOWLING ALLEY	110.00
35	07	LAUNDROMAT/DRY CLEANERS	109.00
36	04	VETERINARIAN OFFICE	174.00
37	05	HOTEL/MOTEL 4 FLOORS OR MORE	174.00
38	07	FURNITURE STORE	81.00
39	05	HOTEL/MOTEL 3 FLOORS OR LESS	137.00
40	06	INDUSTRIAL	92.00
41	06	LIGHT MANUFACTURING	66.00
42	06	HEAVY MANUFACTURING	153.00
43	07	BUILDING SUPPLY	46.00
44	06	PACKING PLANT	96.00
45	04	RADIO/TV STATION	128.00
46	06	FOOD PROCESSING PLANT	97.00
47	03	WAREHOUSE CONDO	56.00
48	06	WAREHOUSE	56.00
49	06	STEEL FRAME WAREHOUSE	82.00

USE	MODEL	DESCRIPTION	BASE RATE
50	00	RESERVED FOR FUTURE USE	XXXX
51	04	POST OFFICE	179.00
52	00	RESERVED FOR FUTURE USE	XXXX
53	06	FLEX WAREHOUSE/OFFICE	66.00
54	00	SINGLE WIDE MH, PERSONAL	XXXX
55	00	MOBILE HOME PARK, PERSONAL	XXXX
56	04	MODULAR OFFICE	81.00
57	07	DRUG STORE	161.00
58	05	SUBSIDIZED HOUSING	124.00
59	00	MISC. COMMERCIAL BLDG FIRE FEE ONLY	XXXX
60	05	GARDEN APARTMENT	174.00
61	05	TOWNHOUSE APARTMENT	99.00
62	05	DUPLEX/TRIPLEX	97.00
63	05	HIGH RISE APARTMENT>3 FLOORS	160.00
64	05	DUPLEX BEACH	190.00
64T	01	TOWNHOME BEACH	160.00
66	07	CONVIENCE/FAST FOOD	186.00
67	01	HISTORICAL HOME	175.00
68	04	OFFICE BHI	300.00
69	07	COMMERCIAL BHI	275.00
70	04	INSTITUTIONAL	145.00
71	07	CHURCH	177.00
71W	07	CHURCH NON CONFORMING	88.00
72	04	PRIVATE SCHOOL, COLLEGE	164.00
73	04	PRIVATE HOSPITAL	204.00
74	04	REST HOME/CONVALESCENT	190.00
75	04	LIBRARY	174.00
76	04	FUNERAL, MORTUARY	153.00
77	07	CIVIC CLUB, LODGE, HALL	188.00
78	07	COUNTRY CLUB HOUSE	184.00
79	07	PAVILLION/ARCADE	66.00
80	06	MARINA	71.00
81	07	AUDITORIUM	171.00
82	07	GYM/FITNESS STUDIO	152.00
83	04	PUBLIC SCHOOL	181.00
84	04	PUBLIC COLLEGE	181.00
85	04	HOSPITAL PUBLIC	153.00
86	04	COUNTY OFFICE	128.00
87	04	STATE OFFICE	128.00
88	04	FEDERAL OFFICE	128.00
89	04	MUNICIPAL OFFICE	133.00
90	07	ARMORY	123.00
91	04	UTILITIES OFFICE	77.00
92	07	FIRE/RESCUE STATION	87.00
93	04	POLICE STATION/JAIL	179.00
94	01	SFR-BALD HEAD	300.00
95	03	MULTI FAMILY BALD HEAD	275.00
96	01	PATIO HOME BALD HEAD	300.00
97	03	CONDOMINIUM-BALD HEAD	205.00
98	00	VACANT LAND	XXXX
99	00	NEW ADD	XXXX

*** The model codes used here are the most common for the use code. All models can be used for each use code.

MODEL 01			RESIDENTIAL					
FOUNDATION			ROOF COVER			HEATING TYPE		
		PTS			PTS			PTS
01	PIERS	2	01	CORR-SHT MET	1	01	NONE	0
02	PIERS>8FT	8	02	ROLL COMP/MIN	2	02	BASEBOARD	2
03	PIERS>8FT W/CON	10	03	COMP SHINGLE	4	03	AIR NO DUCT	2
04	CON FTG/CRAWL	5	04	BLT UP TAR & GRAV	3	04	AIR DUCTED	4
05	SPREAD FOOTING	4	05	RUBBER	4	05	HOT WATER	5
06	SPECIAL FOOTING	10	06	ARCH SHINGLE	5	06	STEAM	5
07	NONE	0	07	FIBERGLASS TILE	9	07	RADIANT-ELEC	3
FLOOR SYSTEM			08	CLAY TILE	11	08	RADIANT WATER	8
01	NONE	0	09	ENAM. METAL SHG	10	09	HEAT PUMP	4
02	SLAB ON GRADE	5	10	CEDAR SHINGLE	11	10	SPACE HEATERS	2
03	SLAB AB GRADE	9	11	SLATE/COPPER	14	FIREPLACE		
04	PLYWD/PTL BD	8	12	PREFIN METAL	5	01	NONE	0
05	WOOD	9	13	METAL STANDING SM	8	02	1 STORY SINGLE	3000
06	PLATFORM HGT	10	14	CONCRETE FORM	6	03	2 STY SGL/1 DBL	3500
07	STRUCT SLAB	11	INTERIOR WALL			04	2 OR MORE	5000
EXTERIOR WALLS			01	MASONRY/MIN	5	05	MASSIVE>6 FT	4000
01	SIDING MIN	6	02	WALL BRD/WOOD	9	06	>2 MASSIVE	7000
02	CORR METAL	7	03	PLASTER	21	07	PREFAB	1800
03	COMP OR WLBD	10	04	PLYWOOD PANEL	18	08	PREFAB >1	2500
04	SIDG NO SHTG	19	05	DRYWALL/SHEETROCK	21	MARKET AND		
05	ASBSTS SHINGLE	15	06	CUSTOM INTERIOR	35	CONSTRUCTION FACTORS		
06	BRD&BAT ON PLYW	21	07	>8 FT CEILING	30	01		0.80
07	CORR ASBSTS	30	INTERIOR FLOOR			02		0.85
08	MASONITE	29	01	NONE	0	03		0.90
09	WOOD ON SHTG	30	02	MIN PLYWOOD	3	04		0.95
10	AL/VNL SIDING	30	03	CONCRETE FIN	2	05		1.00
11	CONCRETE BLK	21	04	CONCRETE COATED	4	06		1.05
12	STUCCO/BLOCK	30	05	ASPH TILE	4	07		1.10
13	STUCCO/TL-WD	33	06	CORK	7	08		1.15
14	LOG	31	07	RUBBER	7	09		1.20
15	BOARD/BAT 12"BRD	31	08	VINYL	7	10		1.25
16	WD/VNL SHINGLE	32	09	PINE/SOFT WOOD	6	11		1.30
17	CEDAR/REDWOOD	32	10	TERRAZZO	20	12		1.35
18	SIDING MAX	36	11	CERAMIC CLAY TILE	13	13		1.40
19	HARDI PLANK	32	12	HARDWOOD	12	14		1.45
20	COMMON BRICK	33	13	PARQUET	9	15		1.50
21	FACE BRICK	36	14	CARPET	8	16		1.55
22	STONE	40	15	HARD TILE	13	17		1.60
23	CORR METAL HEAVY	6	16	SEAMLESS	14	18		1.65
24	MODULAR METAL	15	17	PRECAST CONCRETE	29	19		1.70
25	REFCD CONCRETE	40	18	SLATE/COPPER	21	20		1.75
26	PRECAST PANEL	36	19	MARBLE	46	21		1.80
27	PREFIN METAL	43	20	LAMINATE	10	22		1.85
28	GLASS/THERMAL	46	21	BAMBOO	14	23		1.90
29	ARCH BLOCK	33	HEATING FUEL			24		1.95
ROOF STRUCTURE			01	NONE	0	25		2.00
01	FLAT	3	02	OIL/WOOD/COAL	0	QUALITY		
02	SHED	5	03	GAS	1	01	MINIMUM	0.75
03	GABLE	7	04	ELECTRIC	1	02	FAIR	0.90
04	HIP	9	05	SOLAR	1	03	AVERAGE	1.00
05	MANSARD	8	AIR COND TYPE			04	ABOVE AVERAGE	1.10
06	GAMBREL	8	01	NONE	0	05	EXCELLENT	1.25
07	IRR CEIL	13	02	WALL UNIT	0	06	SUPERIOR	1.50
08	WOOD TRUSS	7	03	CENTRAL	4			
09	BAR JOIST	11	04	PCKG ROOF	4			
10	STL FRM /TRUSS	13	05	CHILLED WATER	4			
11	BOWSTRING TRUSS	9						
12	REFCD CONCRETE	17						
13	PRESTRESS CONC	19						

MODEL O1 SINGLE FAMILY RESIDENTIAL

<u>BEDROOMS</u>	<u>BATHS</u>	<u>½ BATHS</u>	<u>POINTS</u>		<u>BEDROOMS</u>	<u>BATHS</u>	<u>½ BATHS</u>	<u>POINTS</u>
1	0	0	0		4	0	0	2
1	0	1	2		4	0	1	4
1	1	0	4		4	1	1	8
1	1	1	6		4	1	1	10
2	0	0	0		4	2	0	14
2	0	1	3		4	2	1	15
2	1	0	7		4	3	0	16
2	1	1	9		4	3	1	17
2	2	0	11		4	3	2	17
2	2	1	12		5	0	0	2
3	0	0	1		5	0	1	4
3	0	1	4		5	1	0	8
3	1	0	8		5	1	1	10
3	1	1	10		5	2	0	13
3	2	0	12		5	2	1	15
3	2	1	13		5	3	0	17
3	2	2	14		5	3	1	18
3	3	0	15		5	3	2	18
3	3	1	16					

If Bedroom/Bath count exceeds chart's figures, carry highest point

SIZE FACTOR CHART FOR MODEL 01

Square footage comes from AOF, APT, BAS, CRH, EOF, FBM, FEP, FOG, FUS, FUT, GOF, LAB, LLB, LLF, LLS, MEZ, SFB, SOL, SPA

SQ.FT	SIZE FACTOR
0 - 630	130%
631 - 660	129%
661 - 690	128%
691 - 720	127%
721 - 750	126%
751 - 780	125%
781 - 810	124%
811 - 840	123%
841 - 870	122%
871 - 900	121%
901 - 930	120%
931 - 960	119%
961 - 990	118%
991 -1020	117%
1021- 1050	116%
1051- 1080	115%
1081- 1110	114%
1111- 1140	113%
1141- 1170	112%
1171- 1200	111%
1201- 1230	110%
1231- 1260	109%
1261- 1290	108%
1291- 1320	107%
1321- 1350	106%
1351- 1380	105%
1381- 1410	104%
1411- 1440	103%
1441- 1470	102%
1471- 1500	101%
1501- 1530	100%
1531- 1600	99%
1601- 1670	98%
1671- 1740	97%
1741- 1810	96%
1811- 1880	95%
1881- 1950	94%
1951- 2020	93%
2021- 2090	92%
2091- 2160	91%
2161- 2230	90%
2231- 2300	89%
2301- 2370	88%
2371- 2440	87%
2441- 2510	86%
2511- 2580	85%
2581- 2650	84%
2651- 2720	83%
2721- 2790	82%
2791- 2860	81%
2861- 999999999.000000	80%

MODEL 02

<u>FOUNDATION</u>	<u>PTS</u>
01 PIERS	5
02 PIERS>8FT	6
03 PIERS>8FT W/CON	7
04 CON FTG/CRAWL	8
05 SPREAD FOOTING	9
06 SPECIAL FOOTING	12
07 NONE	0
<u>FLOOR SYSTEM</u>	
01 NONE	0
02 SLAB ON GRADE	7
03 SLAB AB GRADE	12
04 PLYWD/PTL BD	11
05 WOOD	12
06 PLATFORM HGT	12
07 STRUCT SLAB	14
<u>EXTERIOR WALLS</u>	
01 SIDING MIN	8
02 CORR METAL	5
03 COMP OR WLBD	15
04 SIDG NO SHTG	21
05 ASBSTS SHINGLE	26
06 BRD&BAT ON PLYW	26
07 CORR ASBTS	26
08 MASONITE	33
09 WOOD ON SHTG	34
10 AL/VNL SIDING	34
11 CONCRETE BLK	34
12 STUCCO/BLOCK	34
13 STUCCO/TL-WD	37
14 LOG	37
15 BOARD/BAT 12"BRD	35
16 WD/VNL SHINGLE	34
17 CEDAR/REDWOOD	36
18 SIDING MAX	41
19 HARDI PLANK	32
20 FACE BLK/COM BRK	38
21 FACE BRICK	39
22 STONE	43
23 CORR METAL HEAVY	13
24 MODULAR METAL	12
25 REFCD CONCRETE	48
26 PRECAST PANEL	42
27 PREFIN METAL	55
28 GLASS/THERMAL	60
29 ARCH BLOCK	40
<u>ROOF STRUCTURE</u>	
01 FLAT	4
02 SHED	6
03 GABLE	9
04 HIP	10
05 MANSARD	12
06 GAMBREL	12
07 IRR CEIL	14
08 WOOD TRUSS	8
09 RIGID FR W/BAR	12
10 STL FRM TRUSS	14
11 BOWSTRING TRUSS	10
12 REFCD CONCRETE	18
13 PRESTRESS CONC	20

MANUFACTURED

<u>ROOF COVER</u>	<u>PTS</u>
01 CORR-SHT METAL	2
02 ROLL COMP/MIN	2
03 COMP SHINGLE	4
04 BLT UP TAR & GRAVEL	3
05 RUBBER	16
06 ARCH SHINGLE	5
07 FIBERGLASS TILE	9
08 CLAY TILE	23
09 ENAM. METAL SHINGLE	22
10 CEDAR SHINGLE	11
11 SLATE/COPPER	28
12 PREFIN METAL	7
13 METAL STANDING SM	8
14 CONCRETE FORM	6
<u>INTERIOR WALL</u>	
01 MASONRY/MIN	8
02 WALL BRD/WOOD	12
03 PLASTER	30
04 PLYWOOD PANEL	22
05 DRYWALL/SHEETROCK	28
06 CUSTOM INTERIOR	35
07 >8 FT CEILING	0
<u>INTERIOR FLOOR</u>	
01 NONE	0
02 MIN PLYWOOD	3
03 CONCRETE FIN	2
04 CONCRETE COATED	4
05 ASPH TILE	4
06 CORK	9
07 RUBBER	9
08 VINYL	7
09 PINE/SOFT WOOD	7
10 TERRAZZO	22
11 CERAMIC CLAY TILE	22
12 HARDWOOD	19
13 PARQUET	18
14 CARPET	8
15 HARD TILE	24
16 SEAMLESS	11
17 PRECAST CONCRETE	20
18 SLATE/COPPER	30
19 MARBLE	59
20 LAMINATE	13
21 BAMBOO	14
<u>HEATING FUEL</u>	
01 NONE	0
02 OIL/WOOD/COAL	0
03 GAS	1
04 ELECTRIC	1
05 SOLAR	1
<u>AIR COND TYPE</u>	
01 NONE	0
02 WALL UNIT	1
03 CENTRAL	2
04 PCKG ROOF	2
05 CHILLED WATER	3

<u>HEATING TYPE</u>	<u>PTS</u>
01 NONE	0
02 BASEBOARD	1
03 AIR NO DUCT	1
04 AIR DUCTED	2
05 HOT WATER	5
06 STEAM	5
07 RADIANT-ELEC	3
08 RADIANT WATER	8
09 HEAT PUMP	4
10 SPACE HEATERS	2

<u>FIREPLACE</u>	
01 NONE	0
02 1 STORY SINGLE	1800
03 2 STY SGL/1 DBL	2250
04 2 OR MORE	3600
05 MASSIVE>6 FT	3900
06 >2 MASSIVE	5600
07 PREFAB	1000
08 PREFAB >1	1500

<u>MARKET AND CONSTRUCTION FACTORS</u>	
01	0.80
02	0.85
03	0.90
04	0.95
05	1.00
06	1.05
07	1.10
08	1.15
09	1.20
10	1.25
11	1.30
12	1.35
13	1.40
14	1.45
15	1.50
16	1.55
17	1.60
18	1.65

<u>QUALITY</u>	
01 MINIMUM	0.75
02 FAIR	0.90
03 AVERAGE	1.00
04 ABOVE AVERAGE	1.10
05 EXCELLENT	1.25
06 SUPERIOR	1.50

Model 02 - MANUFACTURED HOME CONSTRUCTION

SIZE FACTOR - USE CODE 02 Double Wide.

Square footage comes from AOF, APT, BAS, FEP, FOG, FUS, CRH, FBM, SFB, LLF, LLS, EOF, MEZ, GOF, LAB

<u>HEATED SQ. FT.</u>	<u>SIZE FACTOR</u>
-1000	110%
1001-1100	108%
1101-1200	106%
1201-1300	104%
1301-1400	102%
1401-1700	100%
1701-1800	98%
1801-1900	96%
1901-2000	94%
2001-2100	92%
2101-2200	90%
2201-2300	88%
2301-UP	85%

SIZE FACTOR - USE CODE 02 Single Wide

<u>HEATED SQ.FT.</u>	<u>SIZE FACTOR</u>
-800	106%
801-900	104%
901-1000	102%
1001-1300	100%
1301-1400	98%
1401-1500	96%
1501-1600	94%
1601-1700	92%
1701 OVER	90%

MODEL 03

<u>FOUNDATION</u>	<u>PTS</u>
01 PIERS	2
02 PIERS>8FT	3
03 PIERS>8FT W/CON	4
04 CON FTG/CRAWL	5
05 SPREAD FOOTING	6
06 SPECIAL FOOTING	10
07 NONE	0
<u>FLOOR SYSTEM</u>	
01 NONE	0
02 SLAB ON GRADE	4
03 SLAB AB GRADE	5
04 PLYWD/PTL BD	6
05 WOOD	7
06 PLATFORM HGT	11
07 STRUCT SLAB	15
<u>EXTERIOR WALLS</u>	
01 SIDING MIN	6
02 CORR METAL	7
03 COMP OR WLBD	9
04 SIDG NO SHTG	16
05 ASBSTS SHINGLE	20
06 BRD&BAT ON PLYW	18
07 CORR ASBTS	26
08 MASONITE	25
09 WOOD ON SHTG	26
10 AL/VNL SIDING	26
11 CONCRETE BLK	18
12 STUCCO/BLOCK	26
13 STUCCO/TL-WD	29
14 LOG	29
15 BOARD/BAT 12"BRD	27
16 WD/VNL SHINGLE	26
17 CEDAR/REDWOOD	28
18 SIDING MAX	32
19 HARDI PLANK	26
20 FACE BLK/COM BRK	29
21 FACE BRICK	31
22 STONE	43
23 CORR METAL HEAVY	5
24 MODULAR METAL	13
25 REFCD CONCRETE	35
26 PRECAST PANEL	31
27 PREFIN METAL	37
28 GLASS/THERMAL	40
29 ARCH BLOCK	29
<u>ROOF STRUCTURE</u>	
01 FLAT	2
02 SHED	2
03 GABLE	4
04 HIP	4
05 MANSARD	6
06 GAMBREL	5
07 IRR CEIL	8
08 WOOD TRUSS	4
09 RIGID FR W/BAR	7
10 STL FRM TRUSS	5
11 BOWSTRING TRUSS	5
12 REFCD CONCRETE	8
13 PRESTRESS CONC	12

CONDOS

<u>ROOF COVER</u>	<u>PTS</u>
01 CORR-SHT MET	1
02 ROLL COMP/MIN	2
03 COMP SHINGLE	4
04 BLT UP TAR & GRAVEL	3
05 RUBBER	4
06 ARCH SHINGLE	5
07 FIBERGLASS TILE	9
08 CLAY TILE	11
09 ENAM. METAL SHINGLE	10
10 CEDAR SHINGLE	11
11 SLATE/COPPER	14
12 PREFIN METAL	5
13 METAL STANDING SM	8
14 CONCRETE FORM	6
<u>INTERIOR WALL</u>	
01 MASONRY/MIN	5
02 WALL BRD/WOOD	15
03 PLASTER	30
04 PLYWOOD PANEL	25
05 DRYWALL/SHEETROCK	28
06 CUSTOM INTERIOR	35
07 >8 FT CEILING	30
<u>INTERIOR FLOOR</u>	
01 NONE	0
02 MIN PLYWOOD	3
03 CONCRETE FIN	2
04 CONCRETE COATED	17
05 ASPH TILE	4
06 CORK	9
07 RUBBER	9
08 VINYL	9
09 PINE/SOFT WOOD	7
10 TERRAZZO	22
11 CERAMIC CLAY TILE	22
12 HARDWOOD	14
13 PARQUET	11
14 CARPET	10
15 HARD TILE	22
16 SEAMLESS	16
17 PRECAST CONCRETE	31
18 SLATE/COPPER	23
19 MARBLE	48
20 LAMINATE	11
21 BAMBOO	14
<u>HEATING FUEL</u>	
01 NONE	0
02 OIL/WOOD/COAL	0
03 GAS	1
04 ELECTRIC	1
05 SOLAR	1
<u>AIR COND TYPE</u>	
01 NONE	0
02 WALL UNIT	0
03 CENTRAL	4
04 PCKG ROOF	4
05 CHILLED WATER	4

<u>HEATING TYPE</u>	<u>PTS</u>
01 NONE	0
02 BASEBOARD	2
03 AIR NO DUCT	2
04 AIR DUCTED	4
05 HOT WATER	5
06 STEAM	5
07 RADIANT-ELEC	3
08 RADIANT WATER	8
09 HEAT PUMP	4
10 SPACE HEATERS	2
<u>FIREPLACE</u>	
01 NONE	0
02 1 STORY SINGLE	3000
03 2 STY SGL/1 DBL	3500
04 2 OR MORE	5000
05 MASSIVE>6 FT	4000
06 >2 MASSIVE	7000
07 PREFAB	1500
08 PREFAB >1	2500
<u>STRUCTURAL FRAME</u>	
01 PREFAB	4
02 WOOD	5
03 MASONRY	16
04 REINFCD CONC	15
05 STEEL	9
06 FIREPROOF STEEL	16
07 SPECIAL	23
<u>MARKET AND CONSTRUCTION FACTORS</u>	
01	0.80
02	0.85
03	0.90
04	0.95
05	1.00
06	1.05
07	1.10
08	1.15
09	1.20
10	1.25
11	1.30
12	1.35
13	1.40
14	1.45
15	1.50
16	1.55
17	1.60
18	1.65
<u>QUALITY</u>	
01 MINIMUM	0.75
02 FAIR	0.90
03 AVERAGE	1.00
04 ABOVE AVERAGE	1.10
05 EXCELLENT	1.25
06 SUPERIOR	1.50

MODEL 03 CONDOMINIUMS

Bedroom	Bath	1/2 Bath	Points	Bedroom	Bath	1/2 Bath	Points
1	0	0	0	4	0	0	1
1	0	1	2	4	0	1	3
1	1	0	4	4	1	0	5
1	1	1	6	4	1	1	7
2	0	0	1	4	2	0	10
2	0	1	2	4	2	1	11
2	1	0	4	4	3	0	13
2	1	1	6	4	3	1	15
2	2	0	8	5	0	0	1
2	2	1	10	5	0	1	3
3	0	0	1	5	1	0	5
3	0	1	3	5	1	1	7
3	1	0	5	5	2	0	9
3	1	1	7	5	2	1	11
3	2	0	9	5	3	0	13
3	2	1	11	5	3	1	15
3	3	0	13	5	3	2	17

If Bedroom/Bath count exceeds chart's figures, carry highest points

SIZE FACTOR

Square footage comes from BAS, AOF, FUS, SFB, LLF, FEP, GOF, EOF, FBM, APT, CRH, MEZ, LAB, FOG

<u>Square Footage</u>	<u>Factor</u>	<u>Square Footage</u>	<u>Factor</u>
0-600	125%	901-920	109%
601-620	124%	921-940	108%
621-640	123%	941-960	107%
641-660	122%	961-980	106%
661-680	121%	981-1000	105%
681-700	120%	1001-1020	104%
701-720	119%	1021-1040	103%
721-740	118%	1041-1060	102%
741-760	117%	1061-1100	101%
761-780	116%	1101-1150	100%
781-800	115%	1151-1200	99%
801-820	114%	1201-1300	98%
821-840	113%	1301-1400	97%
841-860	112%	1401-1500	96%
861-880	111%	1501-UP	95%
881-900	110%		

MODEL 04			OFFICE					
FOUNDATION			ROOF COVER			HEATING TYPE		
		PTS			PTS			PTS
01	PIERS	2	01	CORR-SHT MET	1	01	NONE	0
02	PIERS>8FT	4	02	ROLL COMP/MIN	2	02	BASEBOARD	4
03	PIERS>8FT W/CON	5	03	COMP SHINGLE	4	03	AIR NO DUCT	3
04	CON FTG/CRAWL	5	04	BLT UP TAR & GRAVEL	3	04	AIR DUCTED	5
05	SPREAD FOOTING	6	05	RUBBER	4	05	HOT WATER	8
06	SPECIAL FOOTING	12	06	ARCH SHINGLE	5	06	STEAM	8
07	NONE	0	07	FIBERGLASS TILE	9	07	RADIANT-ELEC	4
FLOOR SYSTEM			08	CLAY TILE	11	08	RADIANT WATER	9
01	NONE	0	09	ENAM. METAL SHINGLE	10	09	HEAT PUMP	5
02	SLAB ON GRADE	5	10	CEDAR SHINGLE	11	10	SPACE HEATERS	3
03	SLAB AB GRADE	11	11	SLATE/COPPER	14	AIR COND TYPE		
04	PLYWD/PTL BD	9	12	PREFIN METAL	5	01	NONE	0
05	WOOD	11	13	METAL STANDING SM	8	02	WALL UNIT	2
06	PLATFORM HGT	16	14	CONCRETE FORM	6	03	CENTRAL	6
07	STRUCT SLAB	16	INTERIOR WALL			04	PCKG ROOF	7
EXTERIOR WALLS			01	MASONRY/MIN	5	05	CHILLED WATER	6
01	SIDING MIN	3	02	WALL BRD/WOOD	15	CEILING & INSULATION		
02	CORR METAL	5	03	PLASTER	30	SUSPENDED		
03	COMP OR WLBD	10	04	PLYWOOD PANEL	25	01	CEILING INSLTD	4
04	SIDG NO SHTG	16	05	DRYWALL/SHEETROCK	30	03	WALL INSLTD	4
05	ASBSTS SHINGLE	15	06	CUSTOM INTERIOR	35	05	CEL&WALL INSLTD	5
06	BRD&BAT ON PLYW	17	07	>8 FT CEILING	0	07	NO INSULATION	3
07	CORR ASBSTS	19	INTERIOR FLOOR			NOT SUSPENDED		
08	MASONITE	18	01	NONE	0	02	CEILING INSLTD	3
09	WOOD ON SHTG	19	02	MIN PLYWOOD	3	04	WALL INSLTD	3
10	AL/VNL SIDING	19	03	CONCRETE FIN	2	06	CEL&WALL INSLTD	4
11	CONCRETE BLK	16	04	CONCRETE COATED	17	08	NO INSULATION	2
12	STUCCO/BLOCK	19	05	ASPH TILE	4	NO CEILING		
13	STUCCO/TL-WD	23	06	CORK	9	09	ROOF INSULATED	1
14	LOG	22	07	RUBBER	9	10	WALL INSLTD	1
15	BOARD/BAT 12"BRD	20	08	VINYL	9	11	ROOF&WALL INSLTD	2
16	WD/VNL SHINGLE	20	09	PINE/SOFT WOOD	7	12	NO INSULATION	0
17	CEDAR/REDWOOD	21	10	TERRAZZO	22	MARKET AND CONSTRUCTIONS FACTORS		
18	SIDING MAX	24	11	CERAMIC CLAY TILE	22	01		0.80
19	HARDI PLANK	20	12	HARDWOOD	14	02		0.85
20	FACE BLK/COM BRK	22	13	PARQUET	11	03		0.90
21	FACE BRICK	25	14	CARPET	10	04		0.95
22	STONE	35	15	HARD TILE	22	05		1.00
23	CORR METAL HEAVY	10	16	SEAMLESS	16	06		1.05
24	MODULAR METAL	12	17	PRECAST CONCRETE	31	07		1.10
25	REFCD CONCRETE	27	18	SLATE/COPPER	23	08		1.15
26	PRECAST PANEL	22	19	MARBLE	48	09		1.20
27	PREFIN METAL	36	20	LAMINATE	6	10		1.25
28	GLASS/THERMAL	35	21	BAMBOO	18	11		1.30
29	ARCH BLOCK	17	HEATING FUEL			12		1.35
ROOF STRUCTURE			01	NONE	0	13		1.40
01	FLAT	5	02	OIL/WOOD/COAL	0	14		1.45
02	SHED	6	03	GAS	1	15		1.50
03	GABLE	7	04	ELECTRIC	1	16		1.55
04	HIP	8	05	SOLAR	1	17		1.60
05	MANSARD	9	STRUCTURAL FRAME			18		1.65
06	GAMBREL	9	01	PREFAB	4	19		1.70
07	IRR CEIL	12	02	WOOD	5	20		1.75
08	WOOD TRUSS	7	03	MASONARY	16	21		1.80
09	RIGID FR W/BAR	9	04	REINFCDC CONC	15	22		1.85
10	STL FRM TRUSS	10	05	STEEL	9	23		1.90
11	BOWSTRING TRUSS	8	06	FIREPROOF STEEL	16	24		1.95
12	REFCD CONCRETE	10	07	SPECIAL	23	25		2.00
13	PRESTRESS CONC	11				QUALITY		
						01	MINIMUM	0.75
						02	FAIR	0.90
						03	AVERAGE	1.00
						04	ABOVE AVERAGE	1.10
						05	EXCELLENT	1.25
						06	SUPERIOR	1.50

MODEL 04 OFFICE CONSTRUCTION

SIZE FACTORS TO BE APPLIED TO TOTAL BUILDABLE AREA.

Auxiliary Areas need to calculate Buildable Areas on Appraisal Cards:

APT, BAS, SFB, FBM, CRH, LLF, MEZ, EOF, GOF, AOF, FEP, LAB, SPA, SDA, FUS, FOG, SWH, MHW, WWH, FUT

1 - 500	125%	3601 - 3900	107%
501 - 600	124%	3901 - 4200	106%
601 - 700	123%	4201 - 4500	105%
701 - 800	122%	4501 - 4800	104%
801 - 900	121%	4801 - 5200	103%
901 - 1000	120%	5201 - 5600	102%
1001 - 1100	119%	5601 - 6000	101%
1101 - 1200	118%	6001 - 8000	100%
1201 - 1400	117%	8001 - 10000	99%
1401 - 1600	116%	10001 - 12000	98%
1601 - 1800	115%	12001 - 14000	97%
1801 - 2000	114%	14001 - 16000	96%
2001 - 2200	113%	16001 - 20000	95%
2201 - 2400	112%	20001 - 25000	94%
2401 - 2700	111%	25001 - 30000	93%
2701 - 3000	110%	30001 - 40000	92%
3001 - 3300	109%	40001 - 50000	91%
3301 - 3600	108%	50001 - UP	90%

REST ROOM - PLUMBING POINT SCHEDULE

<u>AREA PER FIXTURE</u>	<u>POINTS</u>
0 - 99	14
100 - 149	13
150 - 189	12
190 - 229	11
230 - 269	10
270 - 309	9
310 - 349	8
350 - 449	7
450 - 559	6
560 - 759	5
760 - 869	4
870 - 1159	3
1160 - 1759	2
1760 - UP	1

MODEL 05			APARTMENTS			HOTEL/MOTEL		
FOUNDATION			ROOF COVER			HEATING TYPE		
	PTS			PTS		PTS		
01	PIERS	2	01	CORR-SHT MET	1	01	NONE	0
02	PIERS>8FT	3	02	ROLL COMP/MIN	1	02	BASEBOARD	2
03	PIERS>8FT W/CON	4	03	COMP SHINGLE	4	03	AIR NO DUCT	2
04	CON FTG/CRAWL	5	04	BLT UP TAR & GRAVEL	2	04	AIR DUCTED	4
05	SPREAD FOOTING	6	05	RUBBER	4	05	HOT WATER	5
06	SPECIAL FOOTING	10	06	ARCH SHINGLE	5	06	STEAM	5
07	NONE	0	07	FIBERGLASS TILE	9	07	RADIANT-ELEC	3
FLOOR SYSTEM			08	CLAY TILE	11	08	RADIANT WATER	8
01	NONE	0	09	ENAM. METAL SHINGLE	10	09	HEAT PUMP	4
02	SLAB ON GRADE	5	10	CEDAR SHINGLE	11	10	SPACE HEATERS	2
03	SLAB AB GRADE	10	11	SLATE/COPPER	14	AIR COND TYPE		
04	PLYWD/PTL BD	9	12	PREFIN METAL	5	01	NONE	0
05	WOOD	10	13	METAL STANDING SM	8	02	WALL UNIT	0
06	PLATFORM HGT	11	14	CONCRETE FORM	6	03	CENTRAL	6
07	STRUCT SLAB	15	INTERIOR WALL			04	PCKG ROOF	7
EXTERIOR WALLS			01	MASONRY/MIN	6	05	CHILLED WATER	4
01	SIDING MIN	4	02	WALL BRD/WOOD	10	CEILING & INSULATION		
02	CORR METAL	7	03	PLASTER	30	SUSPENDED		
03	COMP OR WLBD	12	04	PLYWOOD PANEL	20	01	CEILING INSLTD	4
04	SIDG NO SHTG	17	05	DRYWALL/SHEETROCK	25	03	WALL INSLTD	4
05	ASBSTS SHINGLE	18	06	CUSTOM INTERIOR	35	05	CEL&WALL INSLTD	5
06	BRD&BAT ON PLYW	19	07	>8 FT CEILING	30	07	NO INSULATION	3
07	CORR ASBSTS	25	INTERIOR FLOOR			NOT SUSPENDED		
08	MASONITE	25	01	NONE	0	02	CEILING INSLTD	3
09	WOOD ON SHTG	26	02	MIN PLYWOOD	3	04	WALL INSLTD	3
10	AL/VNL SIDING	26	03	CONCRETE FIN	2	06	CEL&WALL INSLTD	4
11	CONCRETE BLK	24	04	CONCRETE COATED	17	08	NO INSULATION	2
12	STUCCO/BLOCK	26	05	ASPH TILE	4	NO CEILING		
13	STUCCO/TL-WD	29	06	CORK	9	09	ROOF INSULATED	1
14	LOG	38	07	RUBBER	9	10	WALL INSLTD	1
15	BOARD/BAT 12"BRD	27	08	VINYL	9	11	ROOF&WALL INSLTD	2
16	WD/VNL SHINGLE	27	09	PINE/SOFT WOOD	7	12	NO INSULATION	0
17	CEDAR/REDWOOD	28	10	TERRAZZO	15	MARKET AND		
18	SIDING MAX	33	11	CERAMIC CLAY TILE	15	CONSTRUCTION FACTORS		
19	HARDI PLANK	26	12	HARDWOOD	14	01		0.80
20	FACE BLK/COM BRK	27	13	PARQUET	12	02		0.85
21	FACE BRICK	29	14	CARPET	12	03		0.90
22	STONE	47	15	HARD TILE	15	04		0.95
23	CORR METAL HEAVY	14	16	SEAMLESS	7	05		1.00
24	MODULAR METAL	18	17	PRECAST CONCRETE	1	06		1.05
25	REFCD CONCRETE	39	18	SLATE/COPPER	21	07		1.10
26	PRECAST PANEL	32	19	MARBLE	38	08		1.15
27	PREFIN METAL	50	20	LAMINATE	12	09		1.20
28	GLASS/THERMAL	60	21	BAMBOO	18	10		1.25
29	ARCH BLOCK	26	HEATING FUEL			11		1.30
ROOF STRUCTURE			01	NONE	0	12		1.35
01	FLAT	4	02	OIL/WOOD/COAL	0	13		1.40
02	SHED	6	03	GAS	1	14		1.45
03	GABLE	8	04	ELECTRIC	1	15		1.50
04	HIP	9	05	SOLAR	1	16		1.55
05	MANSARD	10	STRUCTURAL FRAME			17		1.60
06	GAMBREL	10	01	PREFAB	1	18		1.65
07	IRR CEIL	10	02	WOOD	3	19		1.70
08	WOOD TRUSS	8	03	MASONARY	4	20		1.75
09	BAR JOIST	10	04	REINFCDC CONC	8	21		1.80
10	STL FRM TRUSS	11	05	STEEL	5	22		1.85
11	BOWSTRING TRUSS	9	06	FIREPROOF STEEL	10	23		1.90
12	REFCD CONCRETE	13	07	SPECIAL	14	24		1.95
13	PRESTRESS CONC	14				25		2.00
						QUALITY		
						01	MINIMUM	0.75
						02	FAIR	0.90
						03	AVERAGE	1.00
						04	ABOVE AVERAGE	1.10
						05	EXCELLENT	1.25
						06	SUPERIOR	1.50

MODEL 05 MULTI FAMILY

USE CODES 60, 61, 62 & 63, 64 APARTMENTS

BATHROOM - POINTS SCHEDULE

Area per Fixture	Points
0 - 99	14
100 - 149	12
150 - 189	10
190 - 229	8
230 - 269	7
270 - 309	6
310 - 349	5
350 - 449	4
450 - UP	3

Enter total fixtures for entire building

Area per fixture = Total Heated Area
divided by Total Number of Fixtures

SIZE FACTOR INDEX

The average unit size = $\frac{\text{BUILDABLE AREA}}{\text{NUMBER OF UNITS}}$ = SIZE FACTOR

No. of Unit Per Card	Average Size Unit				
	0 to 599	600 to 799	800 to 999	1000 to 1199	1200 to MAX
2	120%	115%	110%	108%	106%
3	118%	113%	108%	106%	105%
4	116%	111%	106%	104%	103%
5	114%	109%	104%	102%	101%
6	111%	107%	102%	100%	99%
7	108%	105%	100%	98%	97%
8	105%	103%	98%	96%	95%
9	102%	100%	96%	94%	93%
10 & up	99%	97%	94%	92%	91%

MODEL 06			WAREHOUSE					
FOUNDATION			ROOF COVER			HEATING TYPE		
	PTS			PTS			PTS	
01	PIERS	3	01	CORR-SHT MET	3	01	NONE	0
02	PIERS>8FT	4	02	ROLL COMP/MIN	3	02	BASEBOARD	5
03	PIERS>8FT W/CON	5	03	COMP SHINGLE	4	03	AIR NO DUCT	3
04	CON FTG/CRAWL	6	04	BLT UP TAR & GRAVEL	5	04	AIR DUCTED	7
05	SPREAD FOOTING	8	05	RUBBER	11	05	HOT WATER	9
06	SPECIAL FOOTING	13	06	ARCH SHINGLE	5	06	STEAM	8
07	NONE	0	07	FIBERGLASS TILE	10	07	RADIANT-ELEC	5
FLOOR SYSTEM			08	CLAY TILE	15	08	RADIANT WATER	11
01	NONE	0	09	ENAM. METAL SHINGLE	16	09	HEAT PUMP	6
02	SLAB ON GRADE	8	10	CEDAR SHINGLE	15	10	SPACE HEATERS	3
03	SLAB AB GRADE	15	11	SLATE/COPPER	24	AIR COND TYPE		
04	PLYWD/PTL BD	14	12	PREFIN METAL	8	01	NONE	0
05	WOOD	17	13	METAL STANDING SM	14	02	WALL UNIT	3
06	PLATFORM HGT	22	14	CONCRETE FORM	11	03	CENTRAL	8
07	STRUCT SLAB	24	INTERIOR WALL			04	PCKG ROOF	8
EXTERIOR WALLS			01	MASONRY/MIN	5	05	CHILLED WATER	7
01	SIDING MIN	5	02	WALL BRD/WOOD	8	CEILING & INSULATION		
02	CORR METAL	7	03	PLASTER	17	SUSPENDE		
03	COMP OR WLBD	14	04	PLYWOOD PANEL	13	01	CEILING INSLTD	4
04	SIDG NO SHTG	20	05	DRYWALL/SHEETROCK	17	03	WALL INSLTD	4
05	ASBSTS SHINGLE	27	06	CUSTOM INTERIOR	27	05	CEL&WALL INSLTD	5
06	BRD&BAT ON PLYW	18	07	>8 FT CEILING	22	07	NO INSULATION	3
07	CORR ASBSTS	27	INTERIOR FLOOR			NOT SUSPENDE		
08	MASONITE	29	01	NONE	0	02	CEILING INSLTD	3
09	WOOD ON SHTG	30	02	MIN PLYWOOD	3	04	WALL INSLTD	3
10	AL/VNL SIDING	30	03	CONCRETE FIN	2	06	CEL&WALL INSLTD	4
11	CONCRETE BLK	29	04	CONCRETE COATED	4	08	NO INSULATION	2
12	STUCCO/BLOCK	31	05	ASPH TILE	4	NO CEILING		
13	STUCCO/TL-WD	35	06	CORK	5	09	ROOF INSULATED	1
14	LOG	33	07	RUBBER	5	10	WALL INSLTD	1
15	BOARD/BAT 12"BRD	31	08	VINYL	8	11	ROOF&WALL INSLTD	2
16	WD/VNL SHINGLE	31	09	PINE/SOFT WOOD	13	12	NO INSULATION	0
17	CEDAR/REDWOOD	33	10	TERRAZZO	24	MARKET AND		
18	SIDING MAX	40	11	CERAMIC CLAY TILE	24	CONSTRUCTION FACTORS		
19	HARDI PLANK	50	12	HARDWOOD	19	01		0.80
20	FACE BLK/COM BRK	36	13	PARQUET	19	02		0.85
21	FACE BRICK	38	14	CARPET	8	03		0.90
22	STONE	49	15	HARD TILE	24	04		0.95
23	CORR METAL HEAVY	16	16	SEAMLESS	11	05		1.00
24	MODULAR METAL	20	17	PRECAST CONCRETE	2	06		1.05
25	REFCD CONCRETE	38	18	SLATE/COPPER	31	07		1.10
26	PRECAST PANEL	30	19	MARBLE	59	08		1.15
27	PREFIN METAL	50	20	LAMINATE	13	09		1.20
28	GLASS/THERMAL	60	21	BAMBOO	18	10		1.25
29	ARCH BLOCK	32	HEATING FUEL			11		1.30
ROOF STRUCTURE			01	NONE	0	12		1.35
01	FLAT	7	02	OIL/WOOD/COAL	0	13		1.40
02	SHED	10	03	GAS	1	14		1.45
03	GABLE	14	04	ELECTRIC	1	15		1.50
04	HIP	15	05	SOLAR	1	16		1.55
05	MANSARD	17	STRUCTURAL FRAME			17		1.60
06	GAMBREL	17	01	PREFAB	8	18		1.65
07	IRR CEIL	21	02	WOOD	11	19		1.70
08	WOOD TRUSS	14	03	MASONARY	13	20		1.75
09	BAR JOIST	16	04	REINFCDC CONC	33	21		1.80
10	STL FRM TRUSS	18	05	STEEL	15	22		1.85
11	BOWSTRING TRUSS	15	06	FIREPROOF STEEL	36	23		1.90
12	REFCD CONCRETE	21	07	SPECIAL	45	24		1.95
13	PRESTRESS CONC	23				25		2.00
						QUALITY		
						01	MINIMUM	0.75
						02	FAIR	0.90
						03	AVERAGE	1.00
						04	ABOVE AVERAGE	1.10
						05	EXCELLENT	1.25
						06	SUPERIOR	1.50

MODEL 06 WAREHOUSE/INDUSTRIAL CONSTRUCTION

SIZE FACTORS: Auxiliary Areas need to calculate Buildable Areas on Appraisal Cards: AOF, APT, BAS, CRH, EOF, FBM, FEP, FOG, FUS, FUT, GOF, LAB, LLB, LLF, LLS, MEZ, MWH, SDA, SFB, SOL, SPA, SWH, WWH

AREA	FACTOR	AREA	FACTOR
1 - 1,000	130%	20,001 - 25,000	102%
1,001 - 1,500	128%	25,001 - 30,000	101%
1,501 - 2,000	125%	30,001 - 35,000	100%
2,001 - 3,000	121%	35,001 - 40,000	99%
3,001 - 4,000	119%	40,001 - 50,000	98%
4,001 - 5,000	116%	50,001 - 60,000	97%
5,001 - 6,000	115%	60,001 - 70,000	96%
6,001 - 7,000	114%	70,001 - 80,000	94%
7,001 - 8,000	112%	80,001 - 100,000	92%
8,001 - 10,000	110%	100,001 - 120,000	90%
10,001 - 12,000	109%	120,001 - 140,000	88%
12,001 - 14,000	107%	140,001 - 180,000	86%
14,001 - 16,000	105%	180,001 - 225,000	84%
16,001 - 18,000	104%	225,001 - 400,000	82%
18,001 - 20,000	103%	400,001 - UP	80%

REST ROOM - PLUMBING POINT SCHEDULE

AREA PER FIXTURE
0 - 1159
1160 - 2249
2250 - 3249
3250 - 4999
5000 - UP

POINTS

5
4
3
2
1

HEIGHT FACTOR

HEIGHT

FACTOR

8 - 9.99	89%
10 - 11.99	92%
12 - 13.99	96%
14 - 15.99	100%
16 - 17.99	104%
18 - 19.99	108%
20 - 21.99	113%
22 - 23.99	118%
24 - 25.99	123%
26 - 27.99	128%
28 - 29.99	133%
30 - 34.99	138%
35 - 39.99	151%
40 - 44.99	164%
45 - 49.99	177%
50 - 54.99	190%
55 - 59.99	203%
60 - 69.99	216%
70 - 79.99	242%
80 - 89.99	268%
90 - 99.99	284%

HEIGHT FACTOR X QUALITY FACTOR X SIZE FACTOR X MARKET FACTOR

MODEL 07			COMMERCIAL CONSTRUCTION					
FOUNDATION		PTS	ROOF COVER		PTS	HEATING TYPE	PTS	
01	PIERS	2	01	CORR-SHT MET	2	01	NONE	0
02	PIERS>8FT	3	02	ROLL COMP/MIN	2	02	BASEBOARD	5
03	PIERS>8FT W/CON	4	03	COMP SHINGLE	4	03	AIR NO DUCT	3
04	CON FTG/CRAWL	4	04	BLT UP TAR & GRAVEL	4	04	AIR DUCTED	6
05	SPREAD FOOTING	6	05	RUBBER	9	05	HOT WATER	10
06	SPECIAL FOOTING	10	06	ARCH SHINGLE	5	06	STEAM	7
07	NONE	0	07	FIBERGLASS TILE	10	07	RADIANT-ELEC	5
FLOOR SYSTEM			08	CLAY TILE	13	08	RADIANT WATER	11
01	NONE	0	09	ENAM. METAL SHINGLE	14	09	HEAT PUMP	6
02	SLAB ON GRADE	6	10	CEDAR SHINGLE	13	10	SPACE HEATERS	3
03	SLAB AB GRADE	12	11	SLATE/COPPER	12	AIR COND TYPE		
04	PLYWD/PTL BD	10	12	PREFIN METAL	7	01	NONE	0
05	WOOD	12	13	METAL STANDING SM	12	02	WALL UNIT	3
06	PLATFORM HGT	17	14	CONCRETE FORM	9	03	CENTRAL	6
07	STRUCT SLAB	17	INTERIOR WALL			04	PKG ROOF	6
EXTERIOR WALLS			01	MASONRY/MIN	2	05	CHILLED WATER	6
01	SIDING MIN	3	02	WALL BRD/WOOD	4	CEILING & INSULATION		
02	CORR METAL	5	03	PLASTER	8	SUSPENDED		
03	COMP OR WLBD	10	04	PLYWOOD PANEL	6	01	CEILING INSLTD	4
04	SIDG NO SHTG	14	05	DRYWALL/SHEETROCK	8	03	WALL INSLTD	4
05	ASBSTS SHINGLE	17	06	CUSTOM INTERIOR	16	05	CEL&WALL INSLTD	7
06	BRD&BAT ON PLYW	16	07	>8 FT CEILING	12	07	NO INSULATION	3
07	CORR ASBSTS	17	INTERIOR FLOOR			NOT SUSPENDED		
08	MASONITE	18	01	NONE	0	02	CEILING INSLTD	3
09	WOOD ON SHTG	19	02	MIN PLYWOOD	3	04	WALL INSLTD	3
10	AL/VNL SIDING	19	03	CONCRETE FIN	1	06	CEL&WALL INSLTD	4
11	CONCRETE BLK	20	04	CONCRETE COATED	3	08	NO INSULATION	2
12	STUCCO/BLOCK	22	05	ASPH TILE	3	NO CEILING		
13	STUCCO/TL-WD	24	06	CORK	8	09	ROOF INSULATED	1
14	LOG	23	07	RUBBER	8	10	WALL INSLTD	1
15	BOARD/BAT 12"BRD	18	08	VINYL	7	11	ROOF&WALL INSLTD	2
16	WD/VNL SHINGLE	18	09	PINE/SOFT WOOD	10	12	NO INSULATION	0
17	CEDAR/REDWOOD	22	10	TERRAZZO	18	MARKET AND CONSTRUCTION FACTORS		
18	SIDING MAX	28	11	CERAMIC CLAY TILE	18	01		0.80
19	HARDI PLANK	22	12	HARDWOOD	14	02		0.85
20	FACE BLK/COM BRK	23	13	PARQUET	14	03		0.90
21	FACE BRICK	25	14	CARPET	7	04		0.95
22	STONE	35	15	HARD TILE	18	05		1.00
23	CORR METAL HEAVY	10	16	SEAMLESS	8	06		1.05
24	MODULAR METAL	20	17	PRECAST CONCRETE	1	07		1.10
25	REFCD CONCRETE	27	18	SLATE/COPPER	24	08		1.15
26	PRECAST PANEL	22	19	MARBLE	45	09		1.20
27	PREFIN METAL	30	20	LAMINATE	10	10		1.25
28	GLASS/THERMAL	35	21	BAMBOO	15	11		1.30
29	ARCH BLOCK	32	HEATING FUEL			12		1.35
ROOF STRUCTURE			01	NONE	0	13		1.40
01	FLAT	6	02	OIL/WOOD/COAL	0	14		1.45
02	SHED	7	03	GAS	1	15		1.50
03	GABLE	8	04	ELECTRIC	1	16		1.55
04	HIP	9	05	SOLAR	1	17		1.60
05	MANSARD	11	STRUCTURAL FRAME			18		1.65
06	GAMBREL	11	01	PREFAB	7	19		1.70
07	IRR CEIL	14	02	WOOD	10	20		1.75
08	WOOD TRUSS	8	03	MASONARY	12	21		1.80
09	BAR JOIST	10	04	REINFCDC CONC	29	22		1.85
10	STL FRM TRUSS	11	05	STEEL	14	23		1.90
11	BOWSTRING TRUSS	9	06	FIREPROOF STEEL	31	24		1.95
12	REFCD CONCRETE	13	07	SPECIAL	35	25		2.00
13	PRESTRESS CONC	14				QUALITY		
						01	MINIMUM	0.75
						02	FAIR	0.90
						03	AVERAGE	1.00
						04	ABOVE AVERAGE	1.10
						05	EXCELLENT	1.25
						06	SUPERIOR	1.50

MODEL 07 COMMERCIAL CONSTRUCTION

REST ROOM - PLUMBING POINT SCHEDULE

AREA PER FIXTURE	POINTS
0 - 99	14
100 - 149	13
150 - 189	12
190 - 229	11
230 - 269	10
270 - 309	9
310 - 349	8
350 - 449	7
450 - 559	6
560 - 759	5
760 - 869	4
870 - 1159	3
1160 - 1759	2
1760 - UP	1

HEIGHT FACTOR

HEIGHT	FACTOR
8-9.9	96%
10-13.9	100%
14-15.9	102%
16-17.9	104%
18-19.9	108%
20-UP	110%

SIZE FACTORS TO BE APPLIED TO TOTAL BUILDABLE AREA.

Auxiliary Areas need to calculate Buildable Areas on Appraisal Cards: APT, BAS, SFB, CRH, CRU, FCP, UCP, FGD, UGD, LLU, LLF, MEZ, EOF, GOF, AOF, FEP, UEP, FOP, UOP, FSP, USP, LAB, SPA, SOL, SCC, SDA, FUS, FUT, UUT, SWH, MWH, WDD

1 - 500	115%	7,001 - 8,000	99%
501 - 700	114%	8,001 - 10,000	98%
701 - 900	113%	10,001 - 12,000	97%
901 - 1,200	112%	12,001 - 14,000	96%
1,201 - 1,600	111%	14,001 - 16,000	95%
1,601 - 2,000	110%	16,001 - 18,000	94%
2,001 - 2,500	109%	18,001 - 20,000	93%
2,501 - 3,000	108%	20,001 - 25,000	92%
3,001 - 3,500	107%	25,001 - 30,000	91%
3,501 - 4,000	106%	30,001 - 40,000	90%
4,001 - 4,500	105%	40,001 - 60,000	89%
4,501 - 5,000	104%	60,001 - 80,000	88%
5,001 - 5,500	103%	80,001 - 120,000	87%
5,501 - 6,000	102%	12,001 - 175,000	86%
6,001 - 6,500	101%	175,000 - UP	85%
6,501 - 7,000	100%		

AUXILIARY AREAS

DESCRIPTION	ABRV	SFR	MH	CONDO	OFFICE	MULTI	WHSE	COMM
		01	02	03	04	05	06	07
APARTMENT *&	APT	95	0	95	80	100	150	120
ATTIC UNFINISHED	UAT	10	10	10	10	10	10	10
BASE*&	BAS	100	100	100	100	100	100	100
BASE-SEMI FINISHED*&	SFB	80	80	80	80	85	85	85
BASEMENT, FINISHED*&	FBM	85	40	40	50	50	50	50
BASEMENT, UNFINISHED	UBM	20	20	20	30	30	30	20
COLD STORAGE	CST	100	100	140	140	100	300	100
CANOPY	CAN	15	20	20	15	30	40	20
CAROLINA ROOM HEATED*&	CRH	90	90	90	90	90	90	90
CAROLINA ROOM NO HEAT	CRU	75	75	75&	75	75	75	75
CARPORT FINISHED	FCP	25	30	25&	30	35	40	30
CARPORT UNFINISHED	UCP	20	20	20	20	20	60	15
CROW'S NEST	CRN	25	25	25	25	25	20	20
GARAGE FINISHED	FGD	50	60	50	50	55	105	70
GARAGE UNFINISHED	UGD	45	55	45	45	55	105	65
LOADING PLATFORM CVD	CLP	20	40	40	30	30	70	40
LOADING PLATFORM UCVD	ULP	10	20	15	10	15	30	15
LOWER LEVEL BEACH*&	LLB	45	45	45	45	50	50	45
LOWER LEVEL UNFINISHED	LLU	20	30	20	20	20	50	20
LOWER LEVEL SEMI*&	LLS	45	45	45	45	45	80	50
LOWER LEVEL FINISHED*&	LLF	85	90	85	90	90	90	90
MEZZANINE*&	MEZ	100	100	80	90	50	50	60
OFFICE EXCELLENT*&	EOF	120	130	120	130	130	250	140
OFFICE GOOD*&	GOF	110	120	110	120	120	200	130
OFFICE AVERAGE*&	AOF	100	120	100	110	110	150	115
PATIO	PTO	5	10	5	5	5	10	5
PATIO-RAISED	PTI	10	10	10	10	10	10	10
PORCH ENCLOSED HEATED*&	FEP	80	85	80	85	85	90	85
PORCH ENCLOSED UNHEATED	UEP	50	50	50	60	50	60	60
PORCH OPEN FINISHED	FOP	30	30	35	30	30	40	20
PORCH OPEN UNFINISHED	UOP	20	20	25	20	20	30	15
PORCH SCREEN FINISHED	FSP	35	35	40	35	35	45	25
PORCH SCREEN UNFINISHED	USP	25	25	30	25	25	35	20
SCIENTIFIC, LABORATORY*&	LAB	100	100	150	150	100	300	175
SERVICE PRODUCTION AREA*&	SPA	80	80	80	75	75	90	75
SOLARIUM*&	SOL	100	170	125	100	125	220	100
SHELTER, WOODEN POLE	WPS	15	15	15	15	30	40	30
SHELTER RIGID STEEL	RSS	15	15	15	15	30	40	30
STOOP	STP	20	20	30	30	30	90	20
STORAGE FINISHED	FST	45	60	45	50	50	90	60
STORAGE UNFINISHED	UST	40	55	40	40	40	80	50
STORAGE CLIMATE CONTROL*	SCC	50	50	50	75	50	120	75
STORE DISPLAY AREA*&	SDA	90	100	90	100	100	160	100
UPPER STORY FINISHED*&	FUS	90	90	90	80	90	80	80
UPPER STORY FIN OVER GAR*&	FOG	85	85	85	85	90	90	90
UPPER STORY UNFINISHED&	UUS	20	20	50	50	50	50	50
UTILITY FINISHED&	FUT	55	65	50	45	50	70	60
UTILITY UNFINISHED&	UUT	50	60	55	40	45	65	55
VERANDA	VER	20	20	20	0	0	0	0
WAREHOUSE RIGID STEEL&	SWH	0	0	50	35	40	100	50
WAREHOUSE MASONRY&	MWH	0	0	75	50&	55	100	65
WAREHOUSE WOOD FRAME&	WWH	0	0	70	40	40	100	55
WOOD DECK	WDD	20	20	20	15	20	70	60
WOOD DECK 2ND FLOOR	WD2	25	20	25	25	20	45	15

*= Heated area &= Size Factor

QUALITY

The appraiser will determine the QUALITY adjustment by reflecting the quality of workmanship and materials, the location or neighborhood of the structure and the overall desirability of the structure as a combination of all three factors or as a separate entity.

The range of this effect will fall between minimum - (75%) and superior + (150%) as shown in the table below.

Q - L - D	Code	Percent Adjustment
SUPERIOR	6	150%
EXCELLENT	5	125%
ABOVE AVERAGE	4	110%
AVERAGE	3	100%
FAIR	2	90%
MINIMUM	1	75%

PHYSICAL DEPRECIATION SCHEDULE

All physical depreciations are based on the effective age or effective year built of the structure to be depreciated. The appraiser will determine the effective age or effective year built by reflecting any modernization or refurbishing to the structure to the extend the useful life of the original structure beyond its normal life span.

PHYSICAL DEPRECIATION(%) SCHEDULE

EFFECTIVE AGE	TABLE NAME											
	A	B	70	60	55	50	45	40	35	30	25	20
1	1	1	0	0	0	1	1	1	1	2	2	3
2	2	1	0	1	1	2	1	2	2	3	5	7
3	3	2	0	1	1	3	2	3	4	4	7	10
4	4	2	1	2	2	4	3	4	5	7	10	14
5	5	3	1	2	3	5	4	5	6	9	13	18
6	6	4	1	3	3	6	4	7	8	11	16	22
7	7	5	1	3	4	7	5	9	10	14	19	26
8	8	6	1	4	5	8	6	11	11	16	22	30
9	9	7	2	4	5	9	7	13	13	18	25	35
10	10	8	2	5	6	10	8	15	15	21	29	40
11	11	9	2	5	7	11	9	17	17	24	32	45
12	12	10	2	6	8	12	10	19	19	26	36	50
13	13	11	2	6	9	13	12	21	22	29	40	55
14	14	12	3	7	10	14	13	23	24	32	44	58
15	15	13	3	7	11	15	14	25	26	35	48	60
16	16	14	3	8	12	16	16	27	28	39	52	62
17	17	15	4	8	13	17	18	29	31	42	54	64
18	18	16	4	9	14	18	19	31	34	46	56	66
19	19	17	4	9	16	19	21	33	36	49	58	68
20	20	18	5	10	17	20	23	35	39	50	60	70
21	21	19	5	11	18	21	25	37	42	52	62	
22	22	20	6	12	20	22	27	39	45	54	64	
23	23	21	6	13	21	23	29	41	48	56	66	
24	24	22	7	14	23	24	31	43	52	58	68	
25	25	23	7	15	25	25	33	45	55	60	70	
26	26	24	8	16	27	26	35	47	58	62		
27	27	25	9	17	28	27	37	49	61	64		
28	28	26	9	18	30	28	40	51	62	66		
29	29	27	10	19	32	29	42	53	63	68		
30	30	28	11	20	34	30	45	55	64	70		
31	31	29	12	21	36	31	47	57	65			
32	32	30	13	22	38	32	50	59	66			
33	33	31	14	23	39	33	52	61	67			
34	34	32	15	24	40	34	53	63	69			
35	35	33	16	25	41	36	54	65	70			
36	36	34	17	26	42	38	55	66				
37	37	35	18	27	44	40	56	67				
38	38	36	19	28	45	42	57	68				
39	39	37	20	29	46	44	59	69				
40	40	38	21	30	47	46	61	70				
41	41	39	23	31	48	48	63					
42	42	40	25	32	50	51	65					
43	43	41	26	33	52	54	67					
44	44	42	28	34	54	57	69					
45	45	43	29	35	56	60	70					
46	46	44	31	36	58	62						
47	47	45	32	37	60	64						
48	48	46	34	38	64	66						
49	49	47	36	39	66	68						
50	50	48	38	40	68	70						
51	51	49	40	41	68							
52	52	50	42	42	68							
53	53	51	44	43	69							
54	54	52	46	44	69							
55	55	53	48	45	70							
56	56	54	50	46								
57	57	55	52	47								
58	58	56	54	48								
59	59	57	56	49								
60	60	58	58	50								
61	61	59	59									
62	62	60	60									
63	63	61	61									
64	64	62	63									
65	65	63	65									
66	66	64	66									
67	67	65	67									
68	68	66	68									
69	69	67	69									
70	70	68	70									
71	70	69										
72	70	70										

OUTBUILDINGS AND EXTRA FEATURES

The following schedules have been compiled to serve as a replacement cost of applied structures with average quality materials and workmanship. However, cost adjustments may be made by the appraiser by using the grade quality factors if the structures are determined to be of superior or inferior quality.

The column headings are described as follows:

CODE	Independent number assigned to each OB/XF
DESCRIPTION	Describes type of OB/XF
M	Method of pricing: BU = bushels FL = floors GA = gallons HO = holes LF = linear feet SF = square feet SV = sound value UT = units
D	Annual depreciation rate per year of age
M	Minimum quality
F	Fair quality
A	Average quality
G	Above average quality
E	Excellent quality

There will be some buildings and sheds that will not logically fall in one category listed in this manual. Often, these improvements will have very little (if any) value. The appraiser must use his best judgement in affixing a value on these properties. Typically a sound value is assigned.

OUTBUILDINGS AND EXTRA FEATURES

Code	Description							
	Data Entry Code→			(M)	(F)	(A)	(G)	(E)
01	Asphalt Paving	SF	5%	2.25	2.50	3.00	3.50	4.00
02	Activity Building	SF	2%	17.00	21.00	25.00	27.00	29.00
03	Barn (Pole)	SF	5%	7.50	8.00	10.00	11.00	12.00
04	Barn (Stock/Feed)	SF	5%	10.00	12.00	14.00	15.00	16.00
05	Barn (Hay, w/Loft)	SF	5%	15.00	17.00	19.00	21.00	23.00
06	Barn (Milk, w/Loft)	SF	5%	15.00	18.00	19.00	21.00	23.00
07	Barn (Stick Tobacco)	SV	5%	100.00	200.00	300.00	400.00	500.00
08	Barn (Bulk Tobacco)	SF	5%	10.00	15.00	20.00	22.00	25.00
09	Bath House	SF	2%	35.00	37.00	40.00	45.00	70.00
10	Boat House/Shed	SF	3%	16.00	17.00	19.00	16.00	22.00
11	Boat Slip	LF	3%	400.00	700.00	1000.00	1300.00	1500.00
11B	Boat Slip (Bald Head Island)	LF		1,500.00	2,000.00	2,500.00	3,000.00	3,500.00
12	Bulk Head	LF	3%	100.00	150.00	240.00	275.00	325.00
13	Boat Lift	UT	3%	6,000.00	7,000.00	8,000.00	9,000.00	11,000.00
14	Canopy (Ser. Station)	SF	5%	17.00	20.00	25.00	29.00	30.00
15	Carport (Metal)	SF	5%	3.00	3.50	4.00	5.00	6.00
16	Carport (Frame/Pole)	SF	4%	11.00	12.00	14.00	15.00	16.00
17	Car Wash (Self Serve)	SF	3%	23.00	25.00	29.00	30.00	33.00
18	Car Wash (Drive Thru)	SF	2%	47.00	57.00	72.00	87.00	107.00
19	Cabin/Bunk House	SF	2%	26.00	30.00	40.00	45.00	50.00
20	Concession Stand	SF	2%	16.50	17.50	20.00	21.00	22.00
21	Yard Lights****	UT	3%	1900.00	2,200.00	2,700.00	3,200.00	3,700.00
22	Concrete Paving	SF	3%	3.00	4.00	4.50	5.00	6.00
23	Cold Storage	SF	2%	100.00	110.00	120.00	135.00	150.00
24	Amenities	SV		Amenity	Value	Divided by	Condo	Units
25	Dock (Floating)	SF	3%	20.00	25.00	30.00	35.00	40.00
26	Dwelling (Sound Val.)	SV	3%	X.XX	X.XX	X.XX	X.XX	X.XX
27	Deck (Wood)	SF	3%	20.50	22.50	24.00	27.00	29.00
28	Deck Covered	SF	3%	23.00	25.00	27.00	29.00	33.00
29	Elevator (Commercial)	UT	2%	20,000.00	30,000.0	40,000.00	50,000.00	60,000.00
30***	Elevator (Residential)	UT	2%	6,000.00	8,000.00	17,000.00	18,000.00	20,000.00
31***	Elevator (Freight)	UT	2%	6,000.00	12,000.00	22,000.00	24,000.00	26,000.00
32 **	Fencing	LF	3%	7.00	9.00	14.00	22.00	32.00
33	Garage (Metal)	SF	4%	15.00	18.00	20.00	21.00	23.00
34	Garage (Frame/CBL)	SF	2%	25.00	32.00	45.00	49.00	50.00
34B	Garage Bald Head	SF	2%	70.00	76.00	85.00	95.00	105.00
35	Garage (Brick/Stone)	SF	2%	28.00	36.00	48.00	53.00	58.00
36	Garage (With Attic)	SF	2%	38.00	45.00	60.00	61.00	63.00
37	Garage (Service)	SF	2%	24.00	31.00	44.00	48.00	54.00
38	Gazebo	SF	3%	17.00	24.00	30.00	32.00	37.00
39	Greenhouse (Residential)	SF	5%	1.50	2.00	2.50	3.00	3.50
40	Greenhouse (Commercial)	SF	5%	5.00	6.00	7.00	8.00	9.00
41	Grain Bin (Metal)	BU	5%	.75	1.00	1.00	1.00	1.25
42	Guard House	SF	2%	80.00	90.00	100.00	110.00	120.00
43	Golf Course (Reg)	HO		75000.00	100000.00	150000.00	200000.00	225000.00
44	Putt-Putt (Mini Golf)	HO		2,600.00	5,000.00	10,000.00	15,000.00	26,000.00
45 *	Fireplace Models 04/05/06/07	UT		2,500.00	4,200.00	5,500.00	8,500.00	15,000.00
46	Hog House (Parlor)	SF	5%	14.00	16.00	20.00	22.00	26.00
47	Hanger (Airplane)	SF	3%	16.00	17.00	20.00	21.00	23.00
48	Horticultural			X.XX	X.XX	X.XX	X.XX	X.XX
49	Animal Production			X.XX	X.XX	X.XX	X.XX	X.XX
50	Kiln	SF	3%	18.50	19.50	21.00	22.00	26.00
51	Golf Cart Garage (Commercial)	SF	2%	51.00	50.00	60.00	70.00	85.00
52	Lean-To	SF	5%	12.00	13.00	8.00	17.00	18.00
53	Camp Site	SP		500.00	1,000.00	1,500.00	2,000.00	2,300.00
54	Reserved for future use	X		X.XX	X.XX	X.XX	X.XX	X.XX
55	Mobile Home (PER/PRP)	X		X.XX	X.XX	X.XX	X.XX	X.XX
56	Mobile Home Site	SP		2,700.00	2,700.00	2,700.00	2,700.00	2,700.00
57	Mobile Home Park	SP		1,600.00	1,800.00	2,100.00	2,400.00	2,600.00
58	Mobile Home Addition	SF	2%	27.00	37.00	45.00	50.00	55.00

OUTBUILDINGS AND EXTRA FEATURES

Code	Description	M	D	(M)	(F)	(A)	(G)	(E)
	Data Entry Code→							
59	Mobile Home Deck	SF	3%	17.00	20.00	25.00	28.00	30.00
60	Mobile Home UO-Porch	SF	3%	19.00	24.00	27.00	30.00	33.00
61	Mobile Home FO-Porch	SF	3%	23.00	26.00	29.00	32.00	35.00
62	Mobile Home FS-Porch	SF	3%	27.00	28.00	31.00	34.00	37.00
63	Mobile Home FE-Porch	SF	3%	32.00	34.00	38.00	42.00	44.00
64	Mobile Home Canopy	SF	5%	6.00	7.00	8.00	9.00	10.00
65	Mobile Home Patio	SF	3%	5.00	6.00	7.00	9.00	11.00
66	Mobile Home Roof	SF	3%	14.00	16.00	20.00	21.00	22.00
67	Mobile Home (Storage)	SV	3%	X.XX	X.XX	X.XX	X.XX	X.XX
68	Office	SF	1%	70.00	75.00	85.00	90.00	100.00
69	Cemetery Plots	SV		X.XX	X.XX	X.XX	X.XX	X.XX
70	(Res. for future Use)			X.XX	X.XX	X.XX	X.XX	X.XX
71	Crypts	UT	4%	2000.00	3000.00	3500.00	4000.00	5000.00
72	Pier/Dock (Residential)	SF	2%	17.00	22.00	42.00	47.00	52.00
72C	PIER/DOCK COVERED (RESID)	SF	2%	25.00	28.00	50.00	55.00	60.00
73	Pier/Dock (Commercial)	SF	2%	27.00	32.00	52.00	57.00	62.00
74	Ramp (Pier/Dock)	SF	2%	14.50	18.00	26.00	32.00	40.00
75	Quonset/Rigid STL BD	SF	2%	13.50	14.00	18.00	20.00	22.00
76				X.XX	X.XX	X.XX	X.XX	X.XX
77	Railroad Spur	LF		58.00	70.00	80.00	88.00	95.00
78	Shed - Enclosed	SF	3%	16.00	17.00	22.00	24.00	26.00
79	Shed - Open	SF	5%	14.00	16.00	18.00	19.00	20.00
80	Shop (BR/FR/CBL)	SF	2%	20.00	22.50	28.00	30.00	32.00
81	Silo	BU	5%	3.00	3.50	4.00	4.50	5.00
82	Shed (Commercial)	SF	5%	16.00	18.00	20.00	21.00	22.00
83	Generator	UT	2%	3700.00	4700.00	5700.00	6700.00	7700.00
83C	Generator (Commercial)	UT	2%	16500.00	21000.00	32000.00	65000.00	85500.00
83D	Generator Diesel (Comm)	UT	2%	35600.00	76000.00	97500.00	153000.0	206000.00
84	Stable (Horse/Cow)	SF	3%	19.50	21.00	26.00	28.00	30.00
85	Storage/Utility	SF	3%	10.00	13.00	20.00	22.00	26.00
86	Pool (Res.)	SF	3%	31.00	43.00	65.00	83.00	105.00
87	Pool (Comm.)	SF	3%	50.00	65.00	77.00	101.00	125.00
88	Water Slide	LF	4%	300.00	340.00	375.00	410.00	515.00
89	Store (Retail)	SV	3%	X.XX	X.XX	X.XX	X.XX	X.XX
90	Sprinkler System	SF	2%	1.75	2.00	2.50	3.00	3.25
91	Ticket Office	SF	3%	45.00	47.00	51.00	53.00	66.00
92	Tennis Court	SF	4%	5.00	5.75	7.50	7.50	6.50
93	Warehouse (Mini/Stg)	SF	2%	11.00	13.00	16.00	17.00	20.00
94	Warehouse (Frm/Mtl)	SF	2%	11.00	12.00	16.00	18.00	20.00
95	Warehouse (Brick/CBL)	SF	2%	15.00	17.00	20.00	22.00	27.00
96	Warehouse (Rigid/Stl)	SF	2%	10.00	12.00	18.00	20.00	24.00
97	Water Tank (Elv. Stl.)	GA	3%	1.00	1.25	1.50	1.90	2.25
98	Water Tank (Std Pipe)	GA	3%	.50	.70	.80	.90	1.25
99	Miscellaneous Bldg	SV	3%	X.XX	X.XX	X.XX	X.XX	X.XX

NOTE: As it is impossible to obtain local construction cost for all buildings in this section, most values were taken from Marshall & Swift Pricing Service and factored to this area

* 45 NOTE: Prefab Fireplace \$800.00 in models 04, 05, 06, 07

** NOTE: Fencing Grades: M-Rail, F-Chain Link, A-Privacy, G-Stucco, E-Brick

*** 30 & 31 A = Ground to base, G = Ground to second Floor, E = Ground to third floor

**** 21 Yard light M-Pole +1 light, F=Pole +2 lights, A=Pole+3, G=Pole+4, E=Pole+>4 lights

NOTES CONCERNING OUTBUILDINGS AND EXTRA FEATURES

Code	Description	Notes
01	Asphalt Paving	Used for driveways, walkways, parking areas etc. M/F Light Weight, A-Medium Weight, G/E-Heavy Weight
02	Activity Building	Usually found at churches, schools, parks, etc.
03	Barn (Pole)	Open barns to house cattle or material
04	Barn (Stock/Feed)	Used as hay, material or machinery storage or livestock feeding or loafing shed, etc.
05	Barn (Hay, w/Loft)	Used to house cattle for feeding and has a loft area used for hay storage
06	Barn (Milk, w/Loft)	Used for cooling and short-term storage of milk. Loft area may be used for storage
07	Barn (Stick Tobacco)	Old type tobacco curing barns in most modern operations have been phased out
08	Barn (Bulk Tobacco)	Modern commercially built tobacco curing barns
09	Bath House	Used for changing and shower
10	Boat House/Shed	These structures are constructed over water for the housing of boats
11	Boat Slip	Pier or dock type structures used to park and tie off boats. Revenue generating
11B	Boat Slip (BHI)	
12	Bulk Head	A wall constructed to prevent land erosion. Also called a seawall
13	Boat Lift	Above average and excellent used for elevating boats
14	Canopy (Ser. Station)	Usually aluminum type structure found at service stations and convenience stores
15	Carport (Metal)	Pre-fabricated type structures
16	Carport (Frame/Pool)	Stick built type structures
17	Car Wash (Self Serve)	Small coin-operated washes, for user operation
18	Car Wash (Drive Thru)	Full service drive-thru or tunnel type washes
19	Cabin/Bunk House	Small and cheaply built structures usually found in camping areas
20	Concession Stand	Structures used to house drink and snack machines. May also have toilet facilities
21	Yard Lights	Security lights M=Pole +1 light, F= Pole +2 lights, A=Pole +3 lights, G=Pole +4 lights E=Pole +>4
22	Concrete Paving	Driveways, walkways, parking areas, etc.
23	Cold Storage	Freezer rooms usually found attached to fast food restaurants or super markets
24	Amenities	Condo amenity value is arrived at by dividing total complex amenity value such as pools, tennis courts, etc by total number of units. This value is then entered on the OB/XF section on each card
25	Dock (Floating)	Pier or dock built on floating devices designed to rise and lower with the tide
26	Dwelling (Sound Val.)	Dwellings with little or no remaining value. Appraiser must assign value
27	Deck (Wood)	Any wood decking not attached to a building
28	Deck Covered	Used for covered decks on piers
29	Elevator Commercial	Value is calculated by multiplying number of floors (units) by rate per floor
30	Elevator (Passenger)	Value is calculated by multiplying number of floors (Units) by rate per floor
31	Elevator (Freight)	Value is calculated by multiplying number of floors (Units) by rate per floor
32	Fencing	Appraiser must select price by type of fence and quality from the following: M-Rail (wooden) F-Chain link A-Privacy/Picket G-Stucco E-Brick
33	Garage (Metal)	Pre-fabricated type structures
34	Garage (Frame/CBL)	Stick built type structures
35	Garage (Brick/Stone)	Stick built type structures
36	Garage (With Attic)	Stick built type structures with 2 nd floor area usable for living area, game room or storage
37	Garage (Service)	Typical neighborhood garages used for mechanical service
38	Gazebo	A small pavilion or belvedere used as a sitting porch
39	Greenhouse (Res.)	A plastic or glass enclosed structure used to cultivate or store plants
40	Greenhouse (Comm.)	A plastic or glass enclosed structure used to cultivate or store plants
41	Grain Bin (Metal)	Value is calculated by multiplying number of bushels (Units) by rate per bushel (Excellent value is with concrete floor and dryer units)
42	Guard House	A small structure for guards usually found at the entrance of an industrial plant or private subdivision
43	Golf Course (Reg.)	
44	Putt-Putt (Mini Golf)	These are replacement cost for Putt-Putt course for each hole
45	Fireplace	Use for models 04, 05, 06 and 07. Prefab fireplace \$800.00
46	Hog House (Parlor)	All types of structures used for the housing of pigs or hogs
47	Hanger (Airplane)	These structures are specifically designed for the housing of airplanes
48	Fire Fee	Used as Horticultural fire fee
49	Fire Fee	Used as Animal production fire fee
50	Kiln	Structure used for the drying of bricks or lumber
51	Golf Cart Garage (Commercial)	Commercial only
52	Lean-To	A shed type structure attached to another building

NOTES CONCERNING OUTBUILDINGS AND EXTRA FEATURES

Code	Description	Notes
53	Camp Site	M=No services, F=Electric only, A=Water/Electric, G=Full Service,
54	Par 3	Par 3 Golf Course
55	Mobile Home (PER/PRP)	Used to note a mobile home or homes are located on property having no land value
56	Mobile Home Site	1 hook-up (A), 2 hook-ups (F) 3 hook-ups (M) 4 hook-ups (E) 5 hook-ups (G)
57	Mobile Home Park	4-20 hookups (E) 21-40 hookups (G) 41-60 hookups (A) 61-80 hookups (F) 81 & up (M)
58	Mobile Home Addition	Heated or living area attached to a mobile home
59	Mobile Home Deck	Wood or frame deck attached to a mobile home
60	Mobile Home UO-Porch	Unfinished open porch attached to a mobile home
61	Mobile Home FO-Porch	Finished open porch attached to a mobile home
62	Mobile Home FS-Porch	Finished screen porch attached to a mobile home
63	Mobile Home FE-Porch	Finished enclosed porch attached to a mobile home
64	Mobile Home Canopy	Metal or frame canopy attached to a mobile home
65	Mobile Home Patio	Concrete or brick patio attached to a mobile home
66	Mobile Home Roof	Replacement roof built over a mobile home
67	Mobile Home (Storage)	Mobile homes with little or no value, however, mobile home is being utilized as storage
68	Office	Any type of unattached office structure
69	Cemetery Plots	40 square feet to a plot
70	Reserved for future use	XXX
71	Crypts	Mausoleum
72	Pier/Dock (Res.)	All residential type piers
72C	Covered Dock	
73	Pier/Dock (Comm)	All commercial type piers
74	Ramp (pier/Dock)	Ramp from dock to pier
75	Quonset/Rigid STL BD	All types of Quonset or metal on rigid steel frame type structures for farm or commercial use
76	Reserved for future use	XXX
77	Railroad Spur	Side track or spur running from an industrial or commercial building to the main line
78	Shed - Enclosed	All types of fully enclosed farm sheds
79	Shed - Open	All types of open farm sheds
80	Shop (BR/FR/CBL)	Residential type work shop
81	Silo (Concrete)	Value per bushel (E) Porcelain/Glass (G) Brick (A) Conc/Stave (F) Conc block (M) Conc. Block
82	Shed commercial	Usually open sheds used at Lumber Yards either wood or steel
83	Generator	M=6-8KW F=9-11KW A=12-14KW G=15-17KW E=18KW or more
84	Stable (Horse/Cow)	Structure designed for the housing of horses or cows
85	Storage/Utility	All types of residential storage buildings
86	Pool (Residential.)	In ground residential pools only
87	Pool (Commercial)	In ground commercial pools only
88	Water Slide	Commercial water slides usually found at resort type areas. Price per linear foot of sliding surface includes site preparation supports, landing pond, pump and chlorine filtration system.
89	Store (Retail)	Old country retail stores with little or no value. The appraiser must assign a sound value.
90	Sprinkler System	Wet or dry sprinkler system usually found in commercial and industrial type buildings. Must enter building base area in unit section.
91	Ticket Office	Ticket office usually found at ballparks, fairgrounds etc.
92	Tennis Court	Price does not include fencing
93	Warehouse (Mini/Stg)	Warehouses designed for rental purposes. Price includes all doors and interior partitions.
94	Warehouse (Frm/Mtl)	Commercial, industrial type warehouses
95	Warehouse (Brick/CBL)	Commercial, industrial type warehouses
96	Warehouse (Rigid/Stl)	Commercial, industrial type warehouses
97	Water Tank (Elev. Stl.)	Value is calculated by multiplying number of gallons (units) by rate per gallon
98	Water Tank (Std Pipe)	Value is calculated by multiplying number of gallons (units) by rate per gallon
99	Miscellaneous Building	There will be a great number of buildings and sheds that will not logically fall in one category listed in this manual. Often, these improvements will have little (if any) value. The appraiser must use his best judgement in affixing a value on these improvements. It is acceptable for the appraiser to group these misc. out buildings together and assign a single value collectively.

LAND USE CODES

<u>CODE</u>	<u>DESCRIPTION</u>
0100	SINGLE FAMILY RESIDENTIAL
0101	SINGLE FAMILY RESIDENTIAL COMMON AREA
0102	SINGLE FAMILY RESIDENTIAL CANAL
0103	SINGLE FAMILY RESIDENTIAL RIVER OR CREEK
0104	SINGLE FAMILY RESIDENTIAL WATERWAY
0105	SINGLE FAMILY RESIDENTIAL 2 ND ROW
0106	SINGLE FAMILY RESIDENTIAL 3 RD ROW
0107	SINGLE FAMILY RESIDENTIAL OCEAN FRONT
0108	SINGLE FAMILY RESIDENTIAL MARSH
0109	SINGLE FAMILY RESIDENTIAL RIPARIAN RIGHTS
0110	RESIDENTIAL RURAL ACREAGE
0111	SINGLE FAMILY RESIDENTIAL ACREAGE LAKE
0112	SINGLE FAMILY RESIDENTIAL ACREAGE CANAL
0113	SINGLE FAMILY RESIDENTIAL ACREAGE RIVER
0114	SINGLE FAMILY RESIDENTIAL ACREAGE INLAND WATERWAY
0115	SINGLE FAMILY RESIDENTIAL IMPROVED CAMA
0116	SINGLE FAMILY RESIDENTIAL ESTATE LOTS
0117	SINGLE FAMILY RESIDENTIAL ACREAGE OCEAN FRONT
0118	SINGLE FAMILY RESIDENTIAL ACREAGE/MARSH/ESTATE
0120	SINGLE FAMILY RESIDENTIAL OCEAN VIEW
0121	SINGLE FAMILY RESIDENTIAL CONCRETE CANAL
0130	SINGLE FAMILY RESIDENTIAL WATER FRONTAGE
0131	SINGLE FAMILY RESIDENTIAL WATERFRONT ESTATE LOTS
0136	SINGLE FAMILY RESIDENTIAL MARINA LOT
0140	SINGLE FAMILY RESIDENTIAL GOLF COURSE FRONTAGE
0141	SINGLE FAMILY RESIDENTIAL GOLF COURSE ESTATE LOTS
0150	SINGLE FAMILY RESIDENTIAL WATER ACCESS
0156	SINGLE FAMILY RESIDENTIAL WATER VIEW
0158	SINGLE FAMILY RESIDENTIAL NATURE
0159	SINGLE FAMILY RESIDENTIAL SOUND
0160	SINGLE FAMILY RESIDENTIAL BEACH
0161	BALD HEAD ISLAND CROFTER
0181	PATIO HOME
0182	PATIO HOME COMMON AREA
0183	PATIO HOME CANAL
0184	PATIO HOME RIVER OR CREEK
0185	PATIO HOME INLAND WATERWAY
0186	PATIO HOME 2 ND ROW
0187	PATIO HOME 3 RD ROW
0188	PATIO HOME OCEAN FRONT
0189	PATIO HOME MARSH
0190	PATIO HOME RIPARIAN RIGHTS
0191	PATIO HOME RURAL ACREAGE
0192	PATIO HOME OCEAN VIEW
0193	PATIO HOME WATER FRONTAGE
0194	PATIO HOME GOLF COURSE FRONTAGE
0195	PATIO HOME WATER VIEW
0196	PATIO HOME NATURE
0197	PATIO HOME SOUND
0198	PATIO HOME BEACH
0199	PATIO HOME BAY
0200	MOBILE HOME SUBDIVISION
0201	MOBILE HOME COMMON AREA
0204	MOBILE HOME SUBDIVISION GOLF COURSE
0210	MANUFACTURED HOME PARK
0230	MOBILE HOME ACREAGE
0301	CONDOMINIUM COMMON AREA
0310	CONDOMINIUM RURAL ACREAGE
0321	CONDOMINIUM BEACH COMMON AREA
0330	CONDOMINIUM BEACH ACREAGE
0340	TOWNHOUSE
0341	TOWNHOUSE COMMON AREA
0342	TOWNHOUSE CANAL
0343	TOWNHOUSE RIVER OR CREEK
0344	TOWNHOUSE INLAND WATERWAY
0345	TOWNHOUSE 2 ND ROW
0346	TOWNHOUSE 3 RD ROW
0347	TOWNHOUSE OCEAN FRONT
0348	TOWNHOUSE MARSH
0349	TOWNHOUSE RIPARIAN RIGHTS
0350	TOWNHOUSE RURAL ACREAGE

*Land codes here are guidelines and are used at the discretion of the appraiser.

LAND USE CODES

<u>CODE</u>	<u>DESCRIPTION</u>
0351	TOWNHOUSE OCEAN VIEW
0352	TOWNHOUSE WATER FRONTAGE
0353	TOWNHOUSE GOLF COURSE FRONTAGE
0354	TOWNHOUSE WATER VIEW
0355	TOWNHOUSE NATURE
0356	TOWNHOUSE SOUND
0357	TOWNHOUSE BEACH
0358	TOWNHOUSE BAY
0417	OFFICE
0418	OFFICE-5 STORIES-HIGH RISE
0419	MEDICAL OFFICE BUILDING
0420	MEDICAL CONDOMINIUM
0421	OFFICE COMMON AREA
0423	BANK
0424	OFFICE CONDOMINIUM
0431	DAY CARE CENTER
0500	MULTI FAMILY
0501	MULTI FAMILY COMMON AREA
0502	MULTI FAMILY CANAL
0503	MULTI FAMILY RIVER OR CREEK
0504	MULTI FAMILY INLAND WATERWAY
0505	MULTI FAMILY 2 ND ROW
0506	MULTI FAMILY 3 RD ROW
0507	MULTI FAMILY OCEAN FRONT
0508	MULTI FAMILY MARSH
0509	MULTI FAMILY RIPARIAN RIGHTS
0510	MULTI FAMILY ACREAGE
0511	MULTI FAMILY OCEAN VIEW
0512	MULTI FAMILY WATER FRONTAGE
0515	MULTI FAMILY GOLF COURSE FRONTAGE
0516	MULTI FAMILY WATER VIEW
0517	MULTI FAMILY NATURE
0518	MULTI FAMILY SOUND
0519	MULTI FAMILY BEACH
0520	MULTI FAMILY BAY
0521	MULTI FAMILY LESS THAN 5 UNITS
0522	MULTI FAMILY RESORT
0523	MULTI FAMILY LESS THAN 5 UNITS RESORT
0524	MULTI FAMILY LESS THAN 5 UNITS RESORT COMMON AREA
0525	MULTI FAMILY LESS THAN 5 UNITS RESORT CANAL
0526	MULTI FAMILY LESS THAN 5 UNITS RESORT RIVER OR CREEK
0527	MULTI FAMILY LESS THAN 5 UNITS RESORT INLAND WATERWAY
0528	MULTI FAMILY LESS THAN 5 UNITS RESORT 2 ND ROW
0529	MULTI FAMILY LESS THAN 5 UNITS RESORT 3 RD ROW
0530	MULTI FAMILY LESS THAN 5 UNITS RESORT OCEAN FRONT
0531	MULTI FAMILY LESS THAN 5 UNITS RESORT MARSH
0532	MULTI FAMILY LESS THAN 5 UNITS RESORT RIPARIAN RIGHTS
0533	MULTI FAMILY LESS THAN 5 UNITS RESORT RURAL ACREAGE
0534	MULTI FAMILY LESS THAN 5 UNITS RESORT OCEAN VIEW
0535	MULTI FAMILY LESS THAN 5 UNITS RESORT WATER FRONT
0536	MULTI FAMILY LESS THAN 5 UNITS RESORT GOLF COURSE FRONTAGE
0537	HOTEL MOTELS- 3 FLOORS OR MORE
0538	MULTI FAMILY LESS THAN 5 UNITS RESORT NATURE
0539	HOTEL MOTEL LESS THAN 3 FLOORS
0540	MULTI FAMILY LESS THAN 5 UNITS RESORT BEACH
0541	MULTI FAMILY LESS THAN 5 UNITS BAY
0629	MINI WAREHOUSE
0640	INDUSTRIAL-LIGHT & HEAVY MANUFACTURING, LUMBER YARDS
0641	LIGHT MANUFACTURING
0642	HEAVY MANUFACTURING
0643	FERTILIZER PLANT
0644	PACKING
0645	BOTTLER
0646	SWINE OPEN OR PRODUCTION
0647	MINERAL PRODUCTION
0648	WAREHOUSE
0649	OPEN STORAGE
0650	SEAFOOD PRODUCTION
0651	BOAT STORAGE

*Land codes here are guidelines and are used at the discretion of the appraiser.

LAND USE CODES

<u>CODE</u>	<u>DESCRIPTION</u>
0700	COMMERCIAL
0701	COMMERCIAL COMMON AREA
0702	COMMERCIAL CONDO
0703	COMMERCIAL OCEAN FRONT
0704	COMMERCIAL WATER FRONTAGE
0705	COMMERCIAL INLAND WATERWAY
0711	CONVENIENCE STORE
0712	CAR WASH
0713	STRIP COMMERCIAL
0714	BIG BOX (STAND ALONE)
0715	SHOPPING CENTER (Mall)
0716	SHOPPING CENTER (Strip)
0721	RESTAURANT AND CAFETERIA
0722	FAST FOOD
0724	LAUNDROMAT/DRY CLEANER
0725	ELECTRIC REPAIR
0726	SERVICE STATION
0727	AUTO SALES, REPAIR & STORAGE, FARM MACHINERY SALES/SERVICE
0728	PARKING
0730	LABORATORY
0732	THEATER
0733	LOUNGE, NIGHT CLUB, BAR
0734	BOWLING ALLEY, SKATING RINK, ARENA
0735	TOURIST ATTRACTIONS, PERMANENT EXHIBITS
0736	CAMPS
0738	FURNITURE STORE
0757	DRUG STORE
0781	MARINA LAND
3602	FISHING PIERS
3603	WET SLIP
3604	DRY STACK COVERED
3605	DRY STACK UNCOVERED
3606	BOAT LANDING COMMUNITY
3607	BOAT LANDING PUBLIC
5001	BUILDING SITE
5003	BUILDING SITE RIVER
5004	BUILDING SITE WATERWAY
5007	BUILDING SITE COMMERCIAL
5008	BUILDING SITE LAKE/MARSH
6300	MARSH ACRES
6400	MARSH LOTS
6610	SPOIL FILL AREA
6620	BROWNFIELD
6700	POULTRY, BEES, TROPICAL FISH
6800	DAIRY, FEED LOT
6900	TOBACCO
6910	PEANUTS
7001	NON-PROFIT WATER AND SEWAGE COMPANY
7100	CHURCH
7101	ASSEMBLY, RETREAT, ETC.
7200	SCHOOLS, COLLEGES (Private)
7300	HOSPITAL (Private)
7400	HOME FOR AGED
7401	YMCA
7402	DISABLED VETERANS HOUSING
7403	LOW INCOME HOUSING
7500	ORPHANAGES
7600	CEMETERY
7700	CLUB, LODGE, UNION HALL, CIVIC COMMUNITY ORGANIZATION
7705	PROPERTY OWNERS' ASSOCIATION CLUBHOUSE
7710	YACHT CLUB
7720	RETREATS
7800	PRIVATE GOLF COURSE
7801	PAR'3' GOLF COURSE
7802	MINIATURE GOLF COURSE
7803	PUBLIC GOLF COURSE-REGULATION
7804	SEMI-PRIVATE GOLF COURSE
8000	PUBLIC SCHOOL, PUBLIC COLLEGE, PUBLIC HOSPITAL, OTHER

*Land codes here are guidelines and are used at the discretion of the appraiser.

LAND USE CODES

<u>CODE</u>	<u>DESCRIPTION</u>
9000	LEASEHOLD INTEREST
9010	NO LAND INTEREST
9100	UTILITY (GAS, ELECTRIC, TELEPHONE, TELEGRAPH, RAILROAD)
9110	CELL TOWER
9111	BILL BOARDS
9200	MINING
9300	PETROLEUM & GAS
9400	RIGHT OF WAY
9410	CONSERVATION EASEMENTS/LAND
9500	LAKE/POND
9501	ISLAND
9502	ISLAND MARSH
9507	ISLAND OCEAN
9600	WASTELAND, GULLY, FLOOD PLAIN, ROCK OUTCROP, NON-BUILDABLE LOT
9601	NO PERK LOT RESIDENTIAL
9602	NO PERK LOT MOBILE HOME
9603	NO PERK ACREAGE
9604	OCEAN FRONT EROSION CAMA
9605	UNDERWATER LOT
9700	MINERAL RIGHTS
9800	VACANT LAND
9999	NEW ADD

*Land codes here are guidelines and are used at the discretion of the appraiser.

GOLF COURSES

Assessors consider three methods to estimate a property's fair market value: the sales comparison (market), income, and cost approaches. See Section 3, "Approaches to Value", for more information. In applying the three approaches to a golf course facility, the appraiser must investigate and identify factors that establish or influence value. In all three approaches, the appraiser should establish the true market value of the real property only as set out in the Machinery Act and take into consideration the value of personal property (tangible or intangible), if any, see definitions N.C.G.S. 105-273.

Courses are grouped into price classifications with a limited description of what the price includes. Courses may fit into one class by sheer length (1,000 to 7,000 yards) and another by gross area covered (80 to 750 acres) or by overall quality, in which case, interpolations may be made. Generally, simpler courses will require little clearing or grading, encompass minimal acreage, has easy playing holes, and/or minimal irrigation, while good courses may include extensive site work and/or irrigation over large acreage with well-designed holes. Price includes normal grading, sprinkler systems, service roads and cart paths and architect fees.

(E)	Excellent-Championship:	\$225,000 per hole
(G)	Good:	\$200,000 per hole
(A)	Average:	\$150,000 per hole
(F)	Fair:	\$100,000 per hole
(M)	Minimum	\$75,000 per hole

To derive a market value estimate of the golf course using the cost approach, depreciation is deducted from the replacement or reproduction cost of the improvements. The depreciation attributable to a golf course may be physical, functional, or external and result from a variety of conditions.

INCOME VALUATION OF A GOLF COURSE

STEP	1 - Estimated annual rounds played		_____
	2 - Multiply by estimated rate per round	X	\$ _____
	3 - Gross income attributed to green fees and cart	=	\$ _____
	4 - Remaining gross income	+	_____
	5 - Estimated total gross income	=	\$ _____
	6 - Subtract normal annual operating expense	-	_____
	7 - Estimated net operating income	=	\$ _____
	8 - Capitalized at the rate of	÷	Market rate (estimated 10%-14%)
	9 - Indicated value by income approach	=	\$ _____

The preceding formula and capitalization rate will be used to determine value by the income approach of a golf course before consideration of the value of personal property (tangible and intangible), if any. Estimated annual rounds played, rate per round, estimated income and expense will be used when actual figures are not feasible or unattainable. Estimates are derived from market data.

SALES COMPARISON

When recent golf course sales data is available, the appraiser should analyze each transaction in the market area and make appropriate adjustments to arrive at true market value of the subject golf course. Sales for the golf course developments in distant locations may be considered if the market dynamics are similar and they can be adjusted without applying unreasonable assumptions.

LAND VALUATION

The following pages contain Base Price Ranges for all areas of Brunswick County by Township. Neighborhoods, within these Townships, were arrived at by the land appraisal department, and are an attempt to group properties with other properties which have similar locations and market influences. These Base Price Ranges are very broad and represent only the extreme high and low values which could possibly occur in each area. The actual land values assigned to each parcel vary greatly between the ranges and can only be determined by looking at the market.

LAND VALUE SCHEDULES

The effects of neighborhood delineation, land use and zoning are applied to all base values to arrive at a value reflective of the market as of January 1, 2023.

The township land tables for Brunswick County, North Carolina are displayed on the following pages.

LAND VALUE SCHEDULE BY TOWNSHIP

TOWNSHIP 1
NORTHWEST

LOW

HIGH

BASE ACREAGE	\$100	\$350,000
BASE FRONT FEET	\$200	\$6,500
BASE SQUARE FOOT	\$2.50	\$17.00
BASE LOT	\$100	\$275,000
BASE UNIT	\$0	\$125,000

Including but not limited to

Navassa
Leland
Northwest
Sandy Creek

TOWNSHIP 2
TOWN CREEK

LOW

HIGH

BASE ACREAGE	\$100	\$500,000
BASE FRONT FEET	\$200	\$6,500
BASE SQUARE FOOT	\$2.50	\$20.00
BASE LOT	\$100	\$250,000
BASE UNIT	\$0	\$125,000

Including but not limited to

Leland
Boiling Spring Lakes
Bolivia
Bellville

LAND VALUE SCHEDULE BY TOWNSHIP

TOWNSHIP 3&4
SMITHVILLE

LOW

HIGH

BASE ACREAGE	\$100	\$1,200,000
BASE FRONT FEET	\$200	\$15,000
BASE SQUARE FOOT	\$2.25	\$35.00
BASE LOT	\$100	\$1,500,000
BASE UNIT	\$0	\$450,000

Including but not limited to

Oak Island
St. James Plantation
Southport
Caswell Beach
Bald Head Island

TOWNSHIP 5
LOCKWOOD FOLLY

LOW

HIGH

BASE ACREAGE	\$100	\$800,000
BASE FRONT FEET	\$100	\$5,000
BASE SQUARE FOOT	\$1.50	\$40.00
BASE LOT	\$100	\$900,000
BASE UNIT	\$0	\$175,000

Including but not limited to
Holden Beach
Varnamtown

LAND VALUE SCHEDULE BY TOWNSHIP

<u>TOWNSHIP 6</u> <u>SHALLOTTE</u>	<u>LOW</u>	<u>HIGH</u>
BASE ACREAGE	\$100	\$1,200,000
BASE FRONT FEET	\$150	\$6,000
BASE SQUARE FOOT	\$1.50	\$35.00
BASE LOT	\$100	\$1,400,000
BASE UNIT	\$0	\$150,000

Including but not limited to

Calabash
Sunset Beach
Ocean Isle Beach
Shallotte

<u>TOWNSHIP 7</u> <u>WACCAMAW</u>	<u>LOW</u>	<u>HIGH</u>
BASE ACREAGE	\$100	\$150,000
BASE FRONT FEET	\$200	\$5,000
BASE SQUARE FOOT	\$1.50	\$15.00
BASE LOT	\$100	\$75,000
BASE UNIT	\$0	\$125,000

Including but not limited to

Ash
Exum

LAND MODELS*

Currently there are Six different land models in use with the Appraisal System most of which when properly used should give reliable results.

Models 1, 2 and 3 are depth tables modeled after the Somers curve and standard depths:

Model 0	Unit/Lot/Acreage/Square Feet/Front Feet Values
Model 1	100 Feet Standard Depth
Model 2	150 Feet Standard Depth
Model 3	200 Feet Standard Depth
Model 4	Rural/Residential Acreage
Model 5	Present Use

**Model used is the independent judgment of the appraiser.*

LAND MODEL 0 - UNIT/LOT/ACREAGE/SQUARE FEET/FRONT FEET VALUES

Lots or acreage within a neighborhood are assigned a base value. Adjustments can then be made to each individual parcel for factors such as: access, topography, wetlands, location, shape, easements, right of ways, percolation, or any other factor that may positively or negatively influence the value of the parcel.

Pricing Guidelines for valuing excess Land of Residential Lots when using land model 0:

Excess Land on Residential Lots:

The value of excess land in residential lots varies from area to area depending on what the buyer is looking for. In many new subdivision small lots with small yards is desirable and in such subdivisions excessive size may yield no additional value. In subdivisions that appeal to buyers that are looking for large lots that provide more privacy and room for outdoor activities, excess land is desirable and should be reflected in the appraised value.

The appraiser when appraising a neighborhood must decide how to appraise excess land. Some suggested guidelines are:

- 1) Make no adjustment
- 2) Use the percentage rule. Decide what the average lot size is and set the base lot price. Adjust lots that are larger or smaller by valuing the difference at a percentage of value based on market data. This approach is especially useful when converting older subdivisions from front footage to lot pricing but can also be used in modern subdivision.
 - Example 1: Typical lot size is 75 feet and the subject lot is 90 feet. $90/75 = 120\%$ or the subject is 20% larger. $20\% \times 50\% = +10\%$ Size Adjustment.
 - Example 2: Typical lot size is 75 feet and subject lot is 60 feet. $60/75 = 80\%$ or the subject is 20% smaller. $-20\% \times 50\% = -10\%$ Size Adjustment.
 - Example 3: Typical lot size is .75 acres and the subject lot is 1.25 acres. $1.25/.75 = 1.67\%$ or the subject is 67% larger. $+67\% \times 50\% = +33\%$ say +35 Size Adjustment.

If it is determined that the lot is unbuildable due to the zoning requirements multiply the result of the calculation by an adjustment factor that reflects market conditions.

For parcels that do not have access to a sewer system, consideration must be given if the parcel has had a site evaluation or preliminary evaluation performed by the Health Department or a Licensed Soil Scientist which resulted in it being deemed unsuitable. Before determining the amount of adjustment to be made information must be received to determine what restriction have been place on the lot.

Adjustments will be based on Comparable sales and Appraised at Fair Market Value.

The adjustment factor should be netted against any existing condition factor. Once public sewer is available this adjustment is to be removed.

Example: The lot as a base price of \$80,000 and a 110% condition for size yielding a total land value of \$88,000 and it is determined that the lot is unsuitable for any type of septic system and the Perk adjustment is -80% or 20% good, total adjustment for the parcel is $20\% \times 110\% = 22\%$ rounded to 20% PERK/SIZE. Note the amount of Perk adjustment in the land line note field.

*Model used is the independent judgment of the appraiser.

**LAND MODEL #1
DEPTH FACTOR TABLE
100 FEET STANDARD DEPTH**

Depth	Depth Factor
10-12	.26
13-16	.33
17-20	.40
21-24	.45
25-28	.50
29-32	.55
33-36	.59
37-40	.63
41-44	.67
45-48	.70
49-52	.72
53-55	.75
56-59	.78
60-63	.81
64-67	.83
68-71	.85
72-75	.87
76-79	.89
80-83	.91
84-87	.93
88-91	.95
92-95	.97
96-98	.98
99-101	1.00
102-103	1.02
104-106	1.03
107-110	1.04
111-114	1.05
115-118	1.06
119-122	1.07
123-128	1.09
129-134	1.11
135-140	1.12
141-146	1.14
147-152	1.15
153-158	1.16
159-164	1.17
165-169	1.18
170-175	1.19
176-181	1.20
182-187	1.20
188-193	1.21
194-199	1.22
200-UP	1.22

Model used is the independent judgment of the appraiser.

**LAND MODEL #2
DEPTH FACTOR TABLE
150 FEET STANDARD DEPTH**

Depth	Depth Factor
10-12	.18
13-17	.25
18-22	.29
23-27	.36
28-32	.41
33-37	.46
38-42	.51
43-47	.55
48-52	.59
53-57	.62
58-62	.65
63-67	.69
68-72	.72
73-77	.74
78-82	.77
83-87	.79
88-92	.81
93-97	.83
98-102	.85
103-107	.87
108-112	.89
113-117	.91
118-122	.93
123-127	.94
128-132	.96
133-137	.97
138-142	.98
143-147	.99
148-152	1.00
153-157	1.01
158-162	1.03
163-167	1.03
168-172	1.04
173-182	1.05
183-187	1.06
188-205	1.07
206-215	1.08
216-225	1.09
226-245	1.10
246-255	1.11
256-275	1.12
276-295	1.13
295-310	1.14
311-330	1.15
331-370	1.16
371-410	1.17
411-470	1.18
471-510	1.19
511-550	1.20
551-590	1.21
591-UP	1.22

**Model used is the independent judgment of the appraiser.*

**LAND MODEL #3
DEPTH FACTOR TABLE
200 FEET STANDARD DEPTH**

Depth	Depth Factor
10-12	.14
13-17	.19
18-22	.25
23-27	.30
28-32	.34
33-37	.37
38-42	.41
43-47	.45
48-52	.49
53-57	.52
58-62	.55
63-67	.58
68-72	.60
73-77	.63
78-82	.65
83-87	.68
88-92	.70
93-97	.72
98-102	.74
103-107	.76
108-112	.78
113-117	.80
118-122	.82
123-127	.83
128-132	.85
133-137	.86
138-142	.88
143-147	.89
148-152	.90
153-157	.92
158-162	.93
163-167	.94
168-172	.95
173-177	.96
178-182	.97
183-187	.97
188-192	.98
193-197	.99
198-202	1.00
203-207	1.01
208-222	1.02
223-232	1.03
233-242	1.04
243-252	1.05
253-267	1.06
268-277	1.07
278-297	1.08
298-315	1.09
316-335	1.10
336-355	1.11
356-375	1.12
376-395	1.13
396-430	1.14
431-450	1.15
451-530	1.16
531-UP	1.17

**Model used is the independent judgment of the appraiser.*

LAND MODEL #4

The main factor which influences values in this method is the amount of land when used at its highest and best use to provide an adequate return on investment. This land is referred to as usable land and appraised in accordance to prices which are assigned to geographic areas within the county. (This price is to be referred to as the Base Price). The base price area is determined by using sales information to group properties of similar market value into well defined boundaries. Once the Base Price Method is applied to a given parcel, condition factors may be used to adjust the value when compared to comparable parcels which have recently sold.

Many factors must be considered before a true market analysis can be obtained. These factors are location, size, shape, road frontage, type of access and topography. The following is a description of how these factors affect each parcel of rural acreage:

A. Location:

Location is the key factor in the determination of market value in the county. Depending on market demand and sales prices, locational areas (Base Price Areas) were established for the entire county. Within each base price area, locational factors may be applied to adjust a given parcel. The concept of neighborhood homogeneity may cause values to fluctuate as the parcel comes more under the influence of the neighborhood and less under the influence of the total base area. The market demands higher prices for property in or near active market areas. Desirable subdivisions, availability of water and sewer, proximity to shopping areas, high base price areas and the existence of amenities are factors which tend to increase market demand. The inverse may be true for parcels near declining or undesirable areas. These influences must be determined and adjusted on an individual basis by the appraiser.

B. Size

The size of a parcel plays a major role in determining the per acre price at which a parcel of land will sell. The total price asked for a parcel of land has an indirect correlation with the number of potential buyers in the market. This situation stimulates more price negotiation and longer turnover periods for large tracts. Consequently, the actual cash value per acre decreases as the size of the parcel increases.

The value of small lots containing less than one acre depend greatly on zoning and health department restrictions. Therefore, these lots may be priced by the lot or by front footage. Tracts one acre or greater are to be priced using the base price in conjunction with the following size factor chart:

SIZE ADJUSTMENTS FOR RURAL ACREAGE

0.01-0.49 Acres	280%	5.11-5.20 Acres	141%	80.01-90.00 Acres	93%
0.50-0.70	260%	5.21-5.30	139	90.01-100.00	92
0.71-0.80	250	5.31-5.40	137	100.01-110.00	91
0.81-1.10	240	5.41-5.60	135	110.01-115.00	90
1.11-1.20	235	5.61-5.80	133	115.01-120.00	89
1.21-1.30	230	5.81-6.00	132	120.01-125.00	88
1.31-1.40	225	6.01-6.20	131	125.01-130.00	87
1.41-1.50	222	6.21-6.40	130	130.01-135.00	86
1.51-1.60	219	6.41-6.60	129	135.01-140.00	85
1.61-1.70	216	6.61-6.80	128	140.01-145.00	84
1.71-1.80	212	6.81-7.00	127	145.01-150.00	83
1.81-1.90	209	7.01-7.30	126	150.01-155.00	82
1.91-2.00	206	7.31-7.60	125	155.01-160.00	81
2.01-2.10	204	7.61-7.90	124	160.01-165.00	80
2.11-2.20	202	7.91-8.20	123	165.01-170.00	79
2.21-2.30	200	8.21-8.50	122	170.01-175.00	78
2.31-2.40	198	8.51-8.80	121	175.01-180.00	77
2.41-2.50	196	8.81-9.10	120	180.01-185.00	76
2.51-2.60	194	9.11-9.40	119	185.01-190.00	75
2.61-2.70	192	9.41-9.70	118	190.01-195.00	74
2.71-2.80	190	9.71-10.00	117	195.01-200.00	73
2.81-2.90	188	10.01-10.50	116	200.01-205.00	72
2.91-3.00	186	10.51-11.00	115	205.01-210.00	71
3.01-3.10	184	11.01-11.50	114	210.01-215.00	69
3.11-3.20	182	11.51-12.00	113	215.01-220.00	68
3.21-3.30	180	12.01-12.50	112	220.01-225.00	67
3.31-3.40	178	12.51-13.00	111	225.01-230.00	66
3.41-3.50	176	13.01-13.50	110	230.01-235.00	65
3.51-3.60	174	13.51-14.00	109	235.01-240.00	64
3.61-3.70	172	14.01-14.50	108	240.01-245.00	63
3.71-3.80	170	14.51-15.00	107	245.01-250.00	62
3.81-3.90	168	15.01-15.50	106	250.01-255.00	61
3.91-4.00	165	15.51-16.00	105	255.01-260.00	60
4.01-4.10	163	16.01-17.00	104	260.01-265.00	59
4.11-4.20	161	17.01-18.00	103	265.01-270.00	58
4.21-4.30	159	18.01-19.00	102	270.01-275.00	57
4.31-4.40	157	19.01-20.00	101	275.01-280.00	56
4.41-4.50	155	20.01-25.00	100	280.01 and up	55
4.51-4.60	153	25.01-30.00	99		
4.61-4.70	151	30.01-40.00	98		
4.71-4.80	149	40.01-50.00	97		
4.81-4.90	147	50.01-60.00	96		
4.91-5.00	145	60.01-70.00	95		
5.01-5.10	143	70.01-80.00	94		

NOTE: Predetermined table within system

C. Road Frontage:

The market tends to recognize parcels containing 10 acres or less as residential home sites. Tracts of this size are more desirable if they have at least 26% - 30% road frontage. Sales of large tracts, which have the potential for development, tend to reflect the amount of road frontage in relation to total parcel size. Parcels containing more than ten acres are considered to have adequate frontage if 10% of the total acres is in road frontage. Dividing the number of acres of road frontage (1 Acre = 208' X 208') by the total acreage, yields the percent of frontage to total acreage. This percent when applied to the following chart produces a plus or minus factor to be applied to each parcel.

Percent Frontage To Total Acreage	0 - 10 Acres	10.01 Acres and Up
.1 - .9	-22%	-18%
1 - 1.9	-21%	-16%
2 - 2.9	-20%	-14%
3 - 3.9	-19%	-12%
4 - 4.9	-18%	-10%
5 - 5.9	-16%	-8%
6 - 6.9	-14%	-6%
7 - 7.9	-12%	-4%
8 - 8.9	-10%	-2%
9 - 11.9	-8%	0%
12 - 15.9	-6%	+2%
16 - 20.9	-4%	+4%
21 - 25.9	-2%	+6%
26 - 30.9	-00%	+8%
31 - 35.9	+2%	+11%
36 - 40.9	+4%	+14%
41 - 50.9	+7%	+17%
51 - 60.9	+10%	+20%
61 - 70.9	+15%	+23%
71 - 80.9	+20%	+26%
81 - 100.9	+30%	+30%

NOTE: Predetermined table within system

NOTE: Parcels that front on intersections or corners will be adjusted so that usable frontage will be considered only once

D. Access:

1. Paved – This is considered to be the norm and no adjustment is needed.
2. Dirt – Parcels located on dirt roads are reduced 15% for access.
3. No State Maintained Access – Parcels having no access are useful mainly as add on property for adjoining owners which have access. Residential use is limited on these parcels, therefore, small tracts do not show the dramatic increase in per acre price.
4. No Public Access – Private Drive. These parcels have an established access to the property but no state maintained frontage.

The following factors are to be applied to parcels having no access in order to reduce both the base price and size factor influence.

NX - NON EXISTENT		PD - PRIVATE DRIVE	
0.01 - 1.5 Acres	-60%	0.01 - 1.5 Acres	-30%
1.51 - 3.0 Acres	-57%	1.51 - 3.0 Acres	-27%
3.01 - 4.0 Acres	-54%	3.01 - 4.0 Acres	-25%
4.01 - 5.0 Acres	-52%	4.01 - 5.0 Acres	-24%
5.01 - 6.0 Acres	-51%	5.01 - 6.0 Acres	-23%
6.01 - 7.0 Acres	-50%	6.01 - 7.0 Acres	-23%
7.01 - 8.0 Acres	-49%	7.01 - 8.0 Acres	-22%
8.01 - 9.0 Acres	-48%	8.01 - 9.0 Acres	-22%
9.01 - 10.0 Acres	-47%	9.01 - 10.0 Acres	-22%
10.01 - 15.0 Acres	-46%	10.01 - 15.0 Acres	-21%
15.01 - 30.0 Acres	-45%	15.01 - 30.0 Acres	-21%
30.01 - 50.0 Acres	-44%	30.01 - 50.0 Acres	-21%
50.01 - 70.0 Acres	-43%	50.01 - 70.0 Acres	-20%
70.01 - 100.0 Acres	-42%	70.01 - 100.0 Acres	-20%
100.01 - 150.0 Acres	-41%	100.01 - 150.0 Acres	-20%
150.01 and Up	-40%	150.01 and Up	-20%

NOTE: Predetermined table within system

E. Topography:

Land considered to be usable but suffering from rough topography may need further adjustment in order to achieve market value. Rough topography increases the development and building cost required to gain the optimum use from a parcel of land. The usable land on each parcel must be looked at as a whole and adjustments applied as indicated by comparable sales.

Certain tracts of land in the County have problems with percolation. Adjustments for this condition will be made only when a rejection certificate from the Health Department or a Licensed Soil Scientist accompanies the property owner's request. The following is an example of factor that may be applied to such parcels in order to reduce appraised values proportionate to market value analysis.

Small Tracts: No Perk
-80%

Large Tracts: Will be adjusted thru topography

F. Shape:

The utility of a specific parcel may be affected by its shape. The appraiser will determine the amount of land that is unusable and the extent that it affects the value of the total parcel.

G. Right of Ways:

Land falling within a state road right-of-way or surface assessment may be coded 9400. These right-of-ways add little to no value to the property and will be appraised accordingly.

Surface easements governing power and petroleum right-of-ways may have varying effects on each parcel. The extent of their influence is based mainly on their location within the parcel. Therefore, these easements are priced according to the base price and conditioned back at the discretion of the appraiser.

Copy of property card

PUBLIC, JOHN Q Parcel ID: **123AB456** SPLIT FROM ID

Reval Year: 2019 Tax Year: 2019 PLAT: / UNEQ ID 64276
 Appraised By S3 on 05/01/2018 509E ID NO: 201709056367

NN: 59 - 2019 REEVALUATION FINAL CARD NO. 1 of 1
 BRUNSWICK COUNTY (100), CIVIETOWN FIRE (100) 2,000 LT
TW-05 CT-08 FR-05

CONSTRUCTION DETAIL	MARKET VALUE										DEPRECIATION		EX-	SRC-	AT-	LAST ACTION 20180628					
	USE	MOD	Eff. Area	QUAL	BASE RATE	RCN	EYB	AYB	% GOOD	NORM	0.13000	CORRELATION OF VALUE									
Foundation	4																				
Con Fta/Crawl	5.00	01	01	1,118	121	106.48	120844	2003	2003												
Sub Floor System	4																				
Plywd/Pti bcd	8.00																				
Exterior Walls	08																				
Masonite on Sheathing	29.00																				
Roofing Structure	03																				
Gable	7.00																				
Roofing Cover	03																				
Composition Shingle	3.00																				
Interior Wall Construction	9																				
Cywall/Sheetrock	21.00																				
Interior Floor Cover	12																				
Hardwood	10.00																				
Interior Floor Cover	14																				
Carpet	0.00																				
Heating Fuel	04																				
Electric	1.00																				
Heating Type	04																				
Forced Air - Ducted	4.00																				
Air Conditioning Type	03																				
Central	4.00																				
Bedrooms/Bathrooms/Half-Bathrooms	12.000																				
3/2/0																					
Bedrooms																					
BAS - 3 FUS - 0 LL - 0																					
Bathrooms																					
BAS - 2 FUS - 0 LL - 0																					
Half-Bathrooms																					
BAS - 0 FUS - 0 LL - 0																					
Office																					
BAS - 0 FUS - 0 LL - 0																					
TOTAL POINT VALUE																					
104,000																					
BUILDING ADJUSTMENTS																					
Market/Design	07		.10	1.10																	
Quality	3			1.00																	
Size	Size	Size		1.00																	
Construction																					
Factor	05	1.00	1.00																		
TOTAL ADJUSTMENT FACTOR				1.160																	
TOTAL QUALITY INDEX				121																	
SUBAREA																					
TYPE	GS AREA	PCT	RPL CS	CODE	QUALITY	DESCRIPTION	COUNT	LTH	WTH	UNITS	UNIT PRICE	ORIG % COND	BLDG #	SIZE FACT	AYB	EYB	DEP SCH	OVR	% COND	OB/XF DEPR. VALUE	
BAS	1,080	100	114998	34	G	GARAGE (FRAME/CRL)		24	22	528	44.00	0	1	0.00	1997	1997	S2		56	13010	
FOP	128	030	4046	27	A	DECK		14	10	140	14.00	0	1	0.00	2005	2005	S3		58	1137	
TOTALS	1,208		1,806			TOTAL OB/XF VALUE															14147
FIREPLACE 7 - Prefab																					
TOTALS	1,208		120,844																		
BLDG DIMENSIONS																					
BAS=W45S24E9E36N24Area:1080;FOP=S8E16N8W16Area:128;TotalArea:1208																					
LAND INFORMATION																					
HIGHEST AND BEST USE	USE CODE	LOCAL ZONING	FRONTAGE	DEPTH	DEPTH / SIZE	LND MOD	COND FACT	OTHER ADJ/NOTES RF AC LC TO OT	ROAD TYPE	LAND UNIT PRICE	TOTAL LAND UNITS	UNIT TYPE	TOTAL ADJUST	ADJUSTED UNIT PRICE	LAND VALUE	OVERRIDE VALUE	LAND NOTES				
MH SUBDIV	0200	R75	0	0	1,0000	0	0.7500		NW	15,000.00	2.000	LT	0.750	11,250.00	22500	0					
TOTAL MARKET LAND DATA															22500						
TOTAL PRESENT USE DATA																					

CREDENCE TO		CORRELATION OF VALUE	
DEPR. BUILDING VALUE - CARD	105,130		
DEPR. OB/XF VALUE - CARD	14,130		
MARKET LAND VALUE - CARD	22,500		
TOTAL MARKET VALUE - CARD	141,760		
TOTAL APPRAISED VALUE - CARD	141,780		
TOTAL APPRAISED VALUE - PARCEL	141,780		
TOTAL PRESENT USE VALUE - LAND	0		
TOTAL VALUE DEFERRED - PARCEL	0		
TOTAL TAXABLE VALUE - PARCEL \$	141,780		
PRIOR APPRAISAL		PERMIT	
BUILDING VALUE	75,110	CODE	DATE NO.
OBXF VALUE	17,343		
LAND VALUE	22,500		
PRESENT USE VALUE	0		
DEFERRED VALUE	0	ROUT: WTRSHD:	
TOTAL VALUE	114,953		
SALES DATA			
OFF. RECORD BOOK	DATE MO	DEED YR	INDICATE SALES PRICE
	4	2002	WD 0 1 94,000
	7	1996	WD 0 V 12,000
HEATED AREA 1,080			
NOTES			

Example:

STEP 1 AREA CALCULATIONS

- A. Determine the square footage of the areas involved in the valuation. As shown on the sample card, the parcel has two sub areas:

BAS = 1080 square feet
FOP = 128 square feet

- B. Multiply each gross area by the percentages assigned to it (this percentage is located in the TABLE OF SUB AREA found in the APPENDIX).

BAS 1080 sq. ft. X 100% = 1080
FOP 128 sq. ft. X 30% = 38
TOTAL EFFECTIVE AREA 1118

STEP 2 DETERMINE QUALITY INDEX (POINTS)

The determination of the quality index is a most important operation. It reflects the effect of local conditions in the market and is expressed as an index number which when applied to a general county wide rate for a given type of improvement, will yield an adjusted base rate. This adjusted base rate represents the rate per square foot which the market would most probably yield if the property sold.

- A. Select the appropriate valuation mode. In the sample parcel, the model is "01", the model for residential building.
- B. Determine the points associated with the structural element data:
- | | |
|---|-----------|
| FOUNDATION -- Continuous footing/Crawl | 5 Points |
| SUB FLOOR SYSTEM—Plywood/Particle Board | 8 Points |
| EXTERIOR WALLS - Masonite | 29 Points |
| ROOFING STRUCTURE - Gable | 7 Points |
| ROOF COVER -Comp. Shingle | 4 Points |
| INTERIOR WALL CONSTRUCTION - Drywall | 21 Points |
| INTERIOR FLOORING - Hardwood and Carpet | 12 Points |

If the subject had 2 components such as hardwood and carpet the points for each are added together and averaged then rounded to the nearest whole number.

HEAT FUEL - Electric	
HEAT TYPE - Forced Air Ducted	5 Points
Heating points are added together	
AIR CONDITIONING TYPE - Central	4 Points
BEDROOMS - Three (3) "See Table"	
BATHROOMS - Two (2) "See Table"	12 Points

From the preceding figures we have obtained the following:

FOUNDATION	5 Points
SUB FLOOR SYSTEM	8 Points
EXTERIOR WALL CONSTRUCTION	29 Points
ROOFING STRUCTURE	7 Points
ROOFING COVER	4 Points
INTERIOR WALL CONSTRUCTION	21 Points
INTERIOR FLOORING	12 Points
HEAT TYPE	5 Points
AIR CONDITIONING TYPE	4 Points
BEDROOMS AND BATHS	12 Points
TOTAL POINTS	107 Points

*Quality - Market and Construction factors

The QUALITY INDEX = Market x Quality x Size x Construction total x total Points

Therefore 1.10 (market) x 1.00 (Quali) X 1.05% (size) = 1.16 X 1.07 = 1.24

STEP 3 DETERMINE EFFECTIVE BASE RATE

- A. The base rate for a particular model is given. In this instance, it is \$120.00 per square foot.
- B. Multiply the base rate times the quality index:
 $\$120.00 \times 1.24 = \148.80
\$148.80 is the effective base rate.

STEP 4 CALCULATE REPLACEMENT COST NEW

- A. Replacement cost new is the product of the effective base rate times the total adjusted area calculated earlier. In the sample parcel we have:

$$148.80 \times 1,118 \text{ sq. ft.} = 166,358 + \\ 1,800 \text{ prefab fireplace} \\ 168,158 \text{ RCN}$$

STEP 5 DETERMINE DEPRECIATION AND PERCENT CONDITION OF THE SUBJECT

- A. See tables for depreciation.
- B. The sample parcel is an improvement type 01 with an effective age of 16 years and is depreciated 14%.

STEP 6 CALCULATE THE DEPRECIATED BUILDING VALUE

- A. The DEPRECIATED BUILDING VALUE is the Replacement Cost New X the Percent Condition in the sample parcel $\$168,158 \times .86 = \$144,616$

STEP 7 CALCULATE TOTAL COST - MARKET VALUE

- A. To the Depreciated Building Value is added the total Depreciated OB/XF Value and Land Value.

B. In the sample this is as follows:

Depreciated Building Value		\$144,616
	Total Depreciated OB/XF Value	14,150
	Land Value	22,500
	Total	\$181,266

Condo Model

A condominium is one of a group of housing units where each homeowner owns their individual unit space, and all the dwellings share ownership of areas of common use. The individual units normally share walls, but that isn't a requirement. The main difference in condos and other properties is that there is no individual ownership of a plot of land. All the land in the condominium project is owned in common by all the homeowners and / or developers.

Brunswick County has developed Condo Model to assist in the Mass Appraisal process. Condo Model will allow the appraiser to adjust values based on # of floors, location, amenities, and position of each condo unit.

This process is described in detail below.

Refer to picture 4b "Building" This is where the structural elements are entered. Enter all information as needed. The Market Design field represents the corner with view, corner no view, interior with view, and interior no view in the residential condo properties.

Refer to picture 4c "Building" Continue to enter information as needed. In the Building Market Location field enter the data that best describes (property location or view). In the Unique location code enter UT representing condo "unit" or PH representing "penthouse" unit as needed. These are only descriptions as to the type of unit but both are still units.

If the condo unit justifies an adjustment per floor enter the appropriate code to reach the value needed.

Sample Floor Value Chart

00 = No Value this is the default value that is always available.

10 = \$1,000

20 = \$2,000

30 = \$5,000

40 = \$8,000

50 = \$10,000

60 = \$15,000

EXAMPLE These values are determined by the first digit i.e. 50, the 5 drives the 10,000 value per floor. In our example our unit is located on the 2nd floor and our Bas Floor is 01, this gives us a 01 as our factor giving us a \$10,000 value adjustment for the floor location. If the same units on the 3rd floor were selling for only \$2,000 more than these, you would list their Bas floor as 02, then the second digit in the floor value code adds that value to your total so if you keyed 52 your increase would be \$12,000. This example allows an adjustment if needed. (The second digit adds the chart number to the value of the first digit totals.) The Bas Floor can NOT be more than the "TOTAL FLOORS".

The Floor number represents the floor number that the unit is located on.

The Number of Floors represents the number of floors in the building.

The "Bldg Market Location Value", also referred to as "BML", is the value before adjustments.

The Unique location factor is used to make adjustments that are unique to that unit. These adjustments can vary and can be used to reach market value in conjunction with other fields, etc. if the Floor value chart is not reaching the floor value to meet the market. The Condition factor is used to make adjustments to that unit, these adjustments can vary and can be used to reach market value. These adjustments help to determine a total "Bldg Mrkt Loc Adj" value.

Picture 4b Building

Building Items		Use
Use	<input type="text" value="04"/>	CONDOMINIUM
Model	<input type="text" value="03"/>	MFR CONSTRUCTION
Foundation	<input type="text" value="5"/>	Spread Footing
Sub Floor	<input type="text" value="7"/>	Structural Slab
Ext Wall1	<input type="text" value="16"/>	Wood/Vinyl Shingle
Ext Wall2	<input type="text"/>	
Roofing Structure	<input type="text" value="08"/>	Wood Truss
Roofing Cover	<input type="text" value="03"/>	Composition Shingle
Int Wall1	<input type="text" value="5"/>	Drywall/Sheetrock
Int Wall2	<input type="text"/>	
Interior Floor1	<input type="text" value="11"/>	Ceramic Clay Tile
Interior Floor2	<input type="text" value="14"/>	Carpet
Heat Fuel	<input type="text" value="04"/>	Electric
Heat Type	<input type="text" value="09"/>	Heat Pump Only
AC	<input type="text" value="03"/>	Central
		Next
		01 -- SINGLE FAMILY RESIDENTIAL
		02 -- DOUBLE WIDE
		03 -- SINGLE WIDE AS REAL
		04 -- CONDOMINIUM
		05 -- PATIO HOME
		06 -- CONDOMINIUM, RESORT
		07 -- SFR RESORT
		08 -- MODULAR HOME
		09 -- TOWNHOME (COMMON WALL)
		10 -- COMMERCIAL RETAIL
		11 -- CONVENIENCE STORE
		12 -- CARWASH
		13 -- STRIP RETAIL NO ANCHOR
		14 -- BIG BOX
		15 -- SHOPPING CENTER-MALL
		16 -- SHOPPING CENTER/STRIP
		17 -- OFFICE
		18 -- HIGH RISE>4 FLOORS
		19 -- MEDICAL OFFICE
		20 -- MEDICAL OFFICE CONDO
		21 -- RESTAURANT/CAFETERIA
		22 -- FAST FOOD FRANCHISE
		23 -- BANK
		24 -- COM/OFF CONDO

Residential Bedrooms				
	Base	Finished	Upper	Lower Level
Bedrooms	<input type="text" value="3"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Full Baths	<input type="text" value="2"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Half Baths	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Office	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

Next		
Previous		
<input type="text" value="7"/>	<input type="text" value="8"/>	<input type="text" value="9"/>
<input type="text" value="4"/>	<input type="text" value="5"/>	<input type="text" value="6"/>
<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>
<input type="text" value="0"/>	<input type="text" value="."/>	

Building Items		Market Design
Style	<input type="text" value="1"/>	1.0 Story
Fire	<input type="text" value="1"/>	None
Market/Design	<input type="text" value="04"/>	INT VIEW
Quality	<input type="text" value="3"/>	Average
Actual Year Built	<input type="text" value="2007"/>	
Effective Year Built	<input type="text" value="2007"/>	
Ec Obs	<input type="text"/>	
Fu Obs	<input type="text"/>	
Sp Cond	<input type="text"/>	
%Cond	<input type="text"/>	
Construction Factor	<input type="text"/>	
		Next
		Previous
		01 -- cnr no view
		02 -- corner view
		03 -- Int no view
		04 -- INT VIEW

Picture 4c Building

Condo/Apartment/Commercial Items	
Commercial Heat & Air	<input type="text"/>
Floor Number	<input type="text" value="6"/>
Location	<input type="text" value="IV"/> Interior w/View
Unit Count	<input type="text" value="54"/>
Condo Land Type	<input type="text"/>
Common Owned %	<input type="text"/>
Structural Frame	<input type="text" value="04"/> Reinforced Concrete
Ceiling & Insulation	<input type="text" value="06"/> Not Suspended - Ceiling & Walls Insulated
Avg Rooms Per Floor	<input type="text"/>
Common Wall %	<input type="text"/>
NonStandard Wall Height	<input type="text"/>

Condo View Value	Building Market Location
Building Market Location	<input type="text" value="04"/> Next
Unique Location Code	<input type="text" value="UT"/> 00 -- CONDO
Floor Value Code	<input type="text" value="65"/> 03 -- CONDO RIVR
Base Floor Number	<input type="text" value="1"/> 04 -- CONDO ICM
Floor Number	<input type="text" value="6"/> 12 -- CONDO W FT
Number of Floors	<input type="text"/>
Floor Value	<input type="text" value="15000"/> 13 -- CONDO GOLF
Unique Location Factor	<input type="text" value="1.0000"/> 14 -- CONDO WTVW
Condition Factor	<input type="text" value="1.0000"/> 20 -- CONDORESOT
Adjusted Floor Value	<input type="text" value="85000"/> 22 -- CNDO R CAN
Bldg Market Location Value	<input type="text" value="90000.00"/> 23 -- COND RERVR
Unique and Condition Adjustment	<input type="text" value="0.00"/> 24 -- COND REICW
Bldg Mkt Loc Adj	<input type="text" value="175000.00"/> 25 -- CONDO 2ROW
	26 -- CONDO 3ROW
	27 -- CNDO RE OF
	28 -- CNDO RE MA
	31 -- COND R OVW
	32 -- COND RE WF
	33 -- COND RW GF

*Cosmetic changes may occur on the screen shots due to changes in name, address, etc., in order to maintain system accuracy. No schedule of value changes will result from these changes.

CONDO BUILDING MARKET LOCATION

<u>CODE</u>	<u>DESCRIPTION</u>
00	CONDOMINIUM
02	CONDOMINIUM CANAL
03	CONDOMINIUM RIVER OR CREEK
04	CONDOMINIUM INLAND WATERWAY
08	CONDOMINIUM MARSH
11	CONDOMINIUM OCEAN VIEW
12	CONDOMINIUM WATER FRONTAGE
13	CONDOMINIUM GOLF COURSE FRONTAGE
14	CONDOMINIUM WATER VIEW
15	CONDOMINIUM NATURE
20	CONDOMINIUM BEACH
22	CONDOMINIUM BEACH CANAL
23	CONDOMINIUM BEACH RIVER OR CREEK
24	CONDOMINIUM BEACH INLAND WATERWAY
25	CONDOMINIUM BEACH 2ND ROW
26	CONDOMINIUM BEACH 3 RD ROW
27	CONDOMINIUM BEACH OCEAN FRONT
28	CONDOMINIUM BEACH MARSH
31	CONDOMINIUM BEACH OCEAN VIEW
32	CONDOMINIUM BEACH WATER FRONTAGE
33	CONDOMINIUM BEACH GOLF COURSE FRONTAGE
34	CONDOMINIUM BEACH WATER VIEW
35	CONDOMINIUM BEACH NATURE
36	CONDOMINIUM BEACH SOUND
40	COMMERCIAL CONDOMINIUM
41	MEDICAL CONDOMINIUM
42	OFFICE CONDOMINIUM

ADOPTED

INCOME PROPERTY VALUATION

PREFACE

It should be noted that this chapter is not designed to be a comprehensive text on the valuation of income producing properties. In fact, it is a summary and outline of the income approaches to value available through the Appraisal System. This capability enables an appraiser to apply mass appraisal techniques to all affected properties in an efficient manner. Furthermore, we would recommend further study utilizing the text written by the Appraisal Institute to familiarize the property appraiser with some of the more subtle but important points of income property valuation.

ADOPTED

INCOME PROPERTY VALUATION

BASIC STEPS IN THE INCOME APPROACH TO VALUE

- Step 1. Estimate Gross Annual Income
- Determine the type of unit used for the appraisal (i.e. apartment unit, square foot, etc.)
 - Calculate other income (i.e. parking fees etc.).
 - Identify vacancy and collection loss.
- Step 2. Identify Operating Expenses
- Fixed expenses (taxes and insurance etc.).
 - Variable expenses.
 - Repairs and replacements.
 - Other sources of operating expense data.
- Step 3. Net Operating Income
- Step 4. Determine the Income Projection Period
- Remaining useful life.
 - Holding period of the investment.
- Step 5. Determine the Capitalization Rate / Method of Rate Estimation
- Band of Investment.
 - Built up.
- Step 6. Identify the Method of Capitalization
- Land residual
 - Building residual
 - Property residual
 - Gross Income Multiplier

ESTIMATED GROSS ANNUAL INCOME

The primary measure of an income producing property's worth is the amount of income which a property can earn or command in the local market. Therefore, it is important to derive an understanding of the rental income that the space would command on the open market.

The question that needs to be answered is "What is the current market rent of the subject properties"? The gross income is what the property will produce over a period of one year or the term of the lease. It is defined as the total amount of revenue a property is capable of producing prior to the deduction for expenses.

ESTIMATED GROSS ANNUAL MARKET RENTS BY MODEL TYPE

Model 05 Apartments - The market rent for an apartment complex is determined by its monthly rent on a square foot basis. The total square feet of a unit divided into the monthly rent yields a monthly square foot rate. As part of the revaluation, a typical monthly rent for apartments will be established. To determine the annual rent of the entire complex, you add the yearly rents of each unit type.

IDENTIFY VACANCY AND COLLECTION LOSS

The amount of income which can be produced is determined by the size of the property and the degree to which the property is utilized. Commonly, most properties experience a certain degree of vacancy throughout the year along with collection losses. This amount is usually expressed as a percentage of the estimated gross annual income.

These measures of loss from vacancy and collections are particularly applicable to multi - tenant properties. There are three sources of information pertaining to these situations; past experience of the subject property, market experience of similar properties, and published studies i.e. the Institute of Real Estate Management's Income/Expense Analysis (published yearly) and others.

IDENTIFY OPERATING EXPENSES

In order to estimate net annual income, it is necessary to calculate the amount that the purchaser/investor will realize after deduction for the actual operations of the property. These deductions are termed operating expenses and do not include mortgage payments or depreciation. There are three basic categories of operating expenses.

FIXED EXPENSES

These are expenditures which vary little, if at all, with occupancy from year to year and must be paid whether the property is occupied or vacant. Property taxes and insurance are two major items in this category. These expenses will need to be deducted as an expense incurred by the owner.

VARIABLE EXPENSES

Items included in this category are management, payroll and personnel, supplies and materials, utilities and ground care. These will vary with the percentage of occupancy, the type of property, climate and the landlord - tenant relationship.

REPAIRS AND REPLACEMENTS

For valuation purposes, it is often necessary to spread the cost of certain major repairs or replacements over their expected useful life. This will yield an annual payment to cover the replacement. Typical items considered in this category are air conditioners, heating systems and roof covers.

SOURCES OF OPERATING EXPENSE DATA

The Institute of Real Estate Management has an annual report, Apartment Building Experience Exchange, which details expense estimates for apartments. For operating expense data and comparative performance statistics of hotels and motels, informative reports are published by the Appraisal Institute and IAAO.

Office building operations are analyzed by the National Association of Building Owners and Managers, Skyscraper Management and the National Real Estate Investor. Shopping centers and retail stores operating data can be found in periodic publications by the Urban Land Institute.

Industrial park and industrial property operations are occasionally reviewed by the Society of Industrial Realtors.

NET OPERATING INCOME

Net operating income (NOI) is the annual dollar amount that a property is capable of producing under typical conditions and is equal to the gross income less vacancy and collection losses and operating expenses.

Example: Gross Income (20 apts. @ \$12,000/ year)	\$240,000
Less 5 % vacancy & collection	<u>12,000</u>
	\$228,000
Less 35% operating Expenses	<u>79,800</u>
Net Operating Income (NOI)	\$148,200

The net operating income takes into consideration the lease agreement presently in force to determine the dollar amount (income) to the investor. The net operating income should cover, at least, both a return of investment and a proportional annual return of the invested capital which must be totally recovered by the end of the income projection period.

DETERMINE THE INCOME PROJECTION PERIOD

So far, the emphasis has been on computing the net annual income for an income producing property. However, what must not be overlooked is that this income is assumed to generate over a period of years during which the investor earns interest on his or her capital and receives a proportionate return on their investment. In order to determine the duration of the income stream and/or the amount of time the investor has to recover their capital, two things must be considered. These are the remaining economic life of the property and the typical holding period for investment and the terms of the lease.

REMAINING ECONOMIC LIFE

In order to apply any of the residual income techniques, it is necessary to estimate the remaining economic life of the improvements. By definition, the economic life of improvements is the time period over which the improvements will be able to produce an income at a competitive rate of return on the portion of the investment represented by the improvements. Another term frequently used is capital recovery period. At the end of this time period, the improvements will be depreciated to the point that they will no longer make any contribution to the total property value over and above the contribution made by the site.

Remaining economic life is directly related to the effective age of a given property. This is the difference between the total economic life and the remaining economic life. Remaining economic life and effective age are dependent on tastes, standards and customs, the effect of competition and the observed condition of the improvements.

Elsewhere in the discussion on depreciation, we have shown some typical building lives for various commercial improvement types. Reference to this table will give some indication of the expected useful life new of the improvements. However, the appraiser should review properties that no longer produce income. The age of these buildings will give an indication of the economic life of buildings in the market.

INVESTMENT HOLDING PERIOD

Changes in tax laws will directly affect the holding period of all properties

DETERMINE DISCOUNT RATE: SELECT METHOD OF RATE ESTIMATION

The discount rate is the basic building block in five of the income approaches and is also called the rate of return on investment. It is determined by the forces of supply and demand for investment funds. A rate of return on an investment or discount rate is paid or offered in order to attract investment capital. This rate must compensate the investor for the following:

1. Overcoming time preferences.
2. Giving up liquidity
3. Assuming investment management burdens.
4. Assuming the risks of investment and ownership.

BAND OF INVESTMENT

The Band of Investment method recognizes the discount rate as the weighted average of mortgage interest rates based on typical financing and the equity yield rate derived from market data. It is based on the premise that investments in income producing properties are usually financed with a mortgage at the best available terms. The weighting factor is the percentage of the total investment represented by each of the contributing component factors. The procedure involved in the band of investment method is illustrated as follows:

Assume a property is financed with an 80% mortgage at 8.50 % interest with a term of 20 years. Equity investors are seeking a return of 13% on this type of investment.

The indicated discount rate would be developed as follows:

Band of Investment Method for calculating the discount rate			
	Rate	Weight	Weighted Rate
<u>Example:</u> First Mortgage:	.1041	X .80	= .0833
Equity Investment:	.1300	X .20	= <u>.0260</u>
Indicated discount rate			= .1093 or (10.93%)

BUILT-UP METHOD

The Built-Up Method involves the building of a discount rate. The discount rate is "built" by taking the current safe rate or non risk of ownership, the illiquidity of investment, and the burden of management.

The **safe rate** is the rate of return which can be earned annually on a risk free, highly liquid investment requiring virtually no rate which can be earned on a savings account or negotiable one year certificate of deposit to the prime lending rate corresponding to the size of the investment.

Risk arises from the probability that the best income forecast will not be realized and refers to the investments continued ability to earn income caused by uncertainties and instabilities in the marketplace.

The **allowance for illiquidity** refers to the marketability or ease with which the investment can be converted into cash. This allowance can be considerable in large or valuable properties because substantial negotiations may be required and the number of potential local investors may be significantly reduced.

The **management allowance** refers to the time and effort required to manage the investment, not the property. The cost of managing the property is an operating expense which is reflected in the net income statement.

For assessment purposes, real estate taxes are removed from expenses and the applicable county millage rates are added to the discount rate to arrive at the discount rate applicable to the subject property.

Built UP Method of Discount Rates

<u>Example:</u>	Safe Rate	6.50%
	Risk	2.00%
	Illiquidity	1.50%
	Management	0.50%
	Ad Valorem Taxes	<u>1.50%</u>
Total Discount Rate		12.00%

The idea of the built-up method is to load the safe rate with rates which reflect the quality of the income stream. The higher the quality of the income stream - the lower the rate needs to be to attract investors. Conversely, the lower the quality of the income stream - the higher the rate will need to be to attract investors. In essence, the proper rate is that rate necessary to attract sufficient capital to the investment.

IDENTIFY THE METHOD OF DEPRECIATION

The wearing out or obsolescence of the improvements to a property which is reflected in the projected holding period or in the remaining economic life enables the investor to recoup or recapture his initial capital investment while also receiving a return on his capital.

Every method of providing for capital recovery can be expressed in the form of a sinking fund. A sinking fund illustrates how a specific sum is to be recovered over a specified period of time. Periodic annual payments are made as part of Net Operating Income to accumulate to the full amount of capital to be recovered by the end of the capital recovery period.

There are two standard methods that provide for capital recovery with specific assumptions as to risk, timing and stability of the income stream. They are the straight line method and the level annuity method of capital recovery.

STRAIGHT LINE CAPITAL RECOVERY

This method consists of recovery by equal payments to a sinking fund which accumulate at zero compound interest. Each successive payment reduces the amount of investment remaining with declining successive income payments occurring in future periods. A declining dollar return from investment is therefore forecast. Capital recovery payments are the largest under this method.

The rate is determined by dividing the amount of capital to be recovered by the number of years of remaining economic life.

Example:

Remaining Economic life of improvement = 25 years
 $100\%/25=1.00/25=.04\%$
Value of improvements = \$100,000
Annual portion of NOI required for capital recovery $\$100,000 \times .04 = \$4,000$

The forecast loss of 100% of the improvements is fully recovered over the remaining economic life of the improvements. Hence, straight line capital recovery always results in a lower estimate of present worth or value than does any other method. Straight line capital recovery is widely held applicable to nearly all income flows that are not based on a long-term lease with a highly rated tenant.

LEVEL ANNUITY CAPITAL RECOVERY

This method can be described as equal annual payments to a sinking fund which are reinvested by the investor to accumulate at compound interest at the Discount Rate. The amount of capital recovery payments is relatively small compared to the straight-line method. As a result, the portion of NOI available each year as a return on the investment is larger.

Annuity Capital Recovery can be applied to those properties that have a relatively stable income producing capability. A Capitalization Rate can be derived arithmetically by adding together the discount rate and the capital recovery rate. It must be remembered that the central objective is the valuation of a finite income stream with the "infinite" value of the site.

IDENTIFY THE METHOD OF CAPITALIZATION TO USE

Capitalization is a process whereby an income stream of future payments is discounted to a figure which represents the present worth of the right to receive the income. The relationship between the income and value is expressed as follows:

$$\text{Value} = \text{Net Operating income} / \text{capitalization rate}$$

There are seven methods which employ these capitalization techniques to derive the value of an income stream for an income producing property. All seven share a common theory that a right to receive a future benefit be determined by discounted cash flow analysis which reflects the relationship between inflows and outflows of income.

METHODS OF CAPITALIZATION

LAND RESIDUAL TECHNIQUE

When the building is new, free of obsolescence and the replacement cost of the structure accurately determined, a land residual technique may be used to estimate the value.

LAND RESIDUAL STRAIGHT LINE

If economic rent is applicable, i.e. short term lease or rental or less than first class tenants, the land residual - straight line technique should be used as follows:

Given: Building value (replacement cost new) \$100,000
Net Operating Income \$15,000
Discount rate 10%
Remaining Economic Life 50 yrs.
Straight line Recovery Rate $1 / 50 =$ 2 %

Example: Net Operating Income \$15,000
Less annual income
attributable to the building
($100,000 \times .12$) -12,000
Income allocated to land \$ 3,000

Present value of the land = annual income allocated to the land capitalized by the discount rate.

\$3,000 / .10 \$ 30,000
Building value 100,000
Value - straight line
Residual technique \$130,000

BUILDING RESIDUAL TECHNIQUE

When the land value can be accurately estimated using the market and the improvements are older buildings or structures used at less than their highest and best use, a building residual technique is relevant.

BUILDING RESIDUAL - STRAIGHT LINE

Given: Land value (market or sales comparison method)	\$30,000
Net Operating Income	\$15,000
Discount rate	10 %
Remaining economic life	50 yrs.
Straight line capital recovery 1/50	2 %

Straight line capital recovery assumes a declining income stream and may be appropriate when short term leases or economic rent figures are utilized.

Net Operating Income	\$15,000
Less annual income allocated to the land (\$30,000 x .10) capitalized at the discount rate plus capital recovery rate (\$12,000 / 12) (\$12,000 / .12)	\$100,000
Land value	<u>30,000</u>
Value Straight line Building Residual Technique	\$130,000

GROSS INCOME MULTIPLIER

The Gross Income Multiplier has been developed to provide an effective mass appraisal tool in response to the time required in the capitalization of income techniques to determine Net Operating Income.

Since sales data is required to develop a gross income multiplier, care must be taken to use only qualified sales of comparable properties. The key to uniform, consistent values using the Gross Income Multiplier is accurate data.

To apply the Gross Income Multiplier, the appraiser must assemble recent, qualified sales and income data to determine the price at which comparable properties to the subject property are being appraised. Once this is accomplished, the multiplier can be applied to the rent received or reasonably expected from the subject property to produce an estimate of value.

MONTHLY GROSS RENT MULTIPLIER APPLICATION

Typical sale price for properties comparable to the subject.	\$150,000
Typical gross monthly income for properties comparable to the subject.	\$200
Gross Income Multiplier (GIM) (Sale / Income)	\$750
Subject gross monthly income	\$225
Estimate of value (GIM x Income)	\$168,750

ANNUAL GROSS INCOME MULTIPLIER

Typical comparable sale price	\$150,000
Typical comparable gross annual income	\$2,400
Gross Income Multiplier	62.50
Subject property gross annual income	\$2,700
Estimate of value	\$168,750

Care must be exercised in the use of the Gross Income Multiplier. This method is only applicable where there is a high degree of comparability of properties sold in the market compared to the subject property. Furthermore, there must be a sufficient number of qualified sales of comparable properties to achieve any reasonable degree of reliability.

OVERALL RATE

The Overall Rate is the ratio of NOI to present worth of the property. Overall rates are expressed as an annual percentage rate and are most effective when derived directly from market sales.

Given - Gross Annual Income	=	\$30,000
Vacancy/Rent Loss	=	5%
Expenses	=	30%
OVERALL RATE FROM MARKET	=	10%

Gross Annual Income	\$30,000
Less Vacancy/Rent Loss	- 1,500
Less Expenses	- <u>8,550</u>

Net Annual Income	\$19,950
Divided by Overall Rate	<u>.10</u>

Total Present Value	\$199,500
---------------------	-----------

INCOME APPLICATION TABLE

APPLICATION REQUIRED DESCRIPTION	CODE	DATA	APPLICABILITY
1. Land Residual Straight Line	LRST	1-Net Annual Income 2-Current bldg. Value 3-Remaining Economic Life 4-Discout Rate	Short term lease New or nearly buildings w/known bldg.value.
2. Land Residual	LRLA	1-Net Annual Income 2-Current bldg. Value 3-Remaining Economic Life 4-Discout Rate	Long term lease New or nearly buildings w/known bldg. value
3. Building Residual Straight Line	BRST	1-Net Annual Income 2-Current bldg. Value 3-Remaining Economic Life 4-Discout Rate	Short term lease Rental properties Known land value
4. Building Residual Present Value	BRLA	1-Net Annual Income 2-Current bldg. Value 3-Remaining Economic Life 4-Discout Rate	Long term lease comp. properties Known land value
5. Property Residual w/land reversion	PRLA	1-Net Annual Income 2-Current bldg. Value 3-Remaining Economic Life 4-Discout Rate	Long term lease Overall rate from comparable sales
6. Gross Income/Rent Multiplier	AGIM	1-Net Annual Income 2-Current bldg. Value 3-Remaining Economic Life 4-Discout Rate	Sufficient sales w/high degree of comparability to establish reliable annual Gross Income

GLOSSARY

AD VALOREM TAX - A tax levied in proportion to the value of the property being taxed exclusive of exemptions and use-value assessment laws

ANTICIPATION - The principle that value depends on the expectation of benefits to be derived in the future. The appraisal principle of anticipation follows directly from the role of consumer expectation in generating demand. Buyer and seller expectations about real estate market conditions and future benefits of ownership are directly related to current property values, so the principle of anticipation is important in the valuing of property.

APPRAISAL DATE - The date as of which the assessments for a tax year are made and finalized. For example, January 1 is North Carolina's assessment date and a lot is vacant on that date, the property is appraised and assessed as vacant land even though a building is completed on it in April of the following year and the assessment roll may not be final and made public at a later date.

APPRAISED VALUE - The appraised value is an estimate of the value of a property before application of any fractional assessment ratio, partial exemption or other adjustments.

ASSESSED VALUE - The monetary amount at which ad valorem taxes are calculated. Market value and assessed value are the same except for parcels with exempt or deferred values. placed on the assessment roll or scroll. Assessed values can differ from the assessor's estimate of market value for three major reasons: fractional assessment laws, partial exemptions and decisions by assessing officials to override market value estimates.

BALANCE - The principle that markets tend to move toward equilibrium after a change in one of the determinants of supply or demand.

BUILDING MARKET LOCATION-(BML) - An appraiser's opinion of contributory value used to achieve market value in the evaluation of condominiums.

BUNDLE OF RIGHTS (THEORY) - There are six basic rights associated with the private ownership of property: 1) the right to use, 2) the right to sell, 3) the right to lease or rent, 4) the right to enter or leave, 5) the right to give away and 6) the right to refuse to do any of these. These rights are known as the **Bundle of Rights**, which is the ownership of all legal rights obtained with fee simple title.

CENTRAL TENDENCY - The tendency of most kinds of data to cluster around some typical or central value, such as the mean or median.

COEFFICIENT OF DISPERSION (COD) - The average deviation of a group of ratios from the median expressed as a percentage of the median.

COEFFICIENT OF VARIATION - The standard deviation expressed as a percentage of the mean times 100.

CONFORMITY - The principle that the value of a property depends in part on its relationship to its surroundings.

CONTRIBUTION - The principle that the value of a particular feature is measured by its contribution to the value as a whole property, rather than by its cost.

CORRELATION - A statistical phenomenon whereby knowledge of one fact about a property implies some knowledge of a second fact about that property. For example, since the volume and weight of water are correlated, knowing that a quantity of water is one gallon tells you that its weight is 8 1/3 pounds. Linear correlation, the kind most often encountered, means that an increase in one factor in some proportion changes the other in the same proportion. The coefficient of correlation gives the strength of the linear relationship between the two variables.

CURABLE DEPRECIATION - That part of depreciation that can be reversed by correcting deferred maintenance and remodeling to relieve functional obsolescence.

DEFERRED MAINTENANCE - Repairs and similar improvements that normally would have been made to a property but were not made to the property in question, thus increasing the amount of its depreciation.

DEPRECIATION - Loss in value from all sources, relative to its replacement cost, reproductive cost or original cost. 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 or radically diminished demand for the property).

ECONOMIC OBSOLESCENCE - Loss in value of a property (relative to the cost of replacing it with a property of similar utility) that stems from factors external to the property.

EFFECTIVE AGE - The typical age of a structure that should reflect any modernization or refurbishing done to extend the useful life of the original structure beyond its normal life span.

EFFECTIVE TAX RATE - The tax rate expressed as a percentage of market value; this will be different from the nominal tax rate when the assessment ratio is not equal to 100%.

EQUALIZATION - The process by which an appropriate governmental body attempts to ensure that property under its jurisdiction is appraised equitably at market value.

EQUITY - The degree to which assessments bear a consistent relationship to market value. Measures include the coefficient of dispersion and the coefficient of variation.

FUNCTIONAL OBSOLESCENCE - Loss in value of a property resulting from changes in tastes, preferences, technical innovations or market standards.

HIGHEST AND BEST USE - A concept in appraisal and in assessment law requiring that each property be appraised as though it were put to its most profitable use, given probable legal, physical and financing constraints. The highest and best use of a property depends on the potential utility rather than utility in current use. The concept is most commonly discussed in connection with underutilized land.

LOCATIONAL OBSOLESCENCE - A component of economic obsolescence: loss in value due to suboptimal siting of an improvement.

MARKET & DESIGN - The Market and Design factor is used to help adjust building cost within a market area beyond typical construction cost and depreciation.

MARKET VALUE - The most probable price of a property in terms of money in a competitive and open market, assuming that the buyer and seller are acting prudently and knowledgeably, allowing sufficient time for the sale, and assuming that the transaction is not affected by undue pressure.

MASS APPRAISAL - The process of valuing a group of properties as of a given date, using standard methods, and allowing for statistical testing.

MEAN - The result of adding all the values of a variable and dividing by the number of variables.

MEDIAN - The midpoint or middle value when a set of values is ranked in order of magnitude.

MEDIAN ABSOLUTE DEVIATION - The median of the absolute deviations from the median.

MODE - The value most often assumed by the variable.

NEIGHBORHOOD - The environment of a subject property that has a direct and immediate effect on value. A geographic area which defines a particular market.

REAPPRAISAL - The mass appraisal of all property within an assessment jurisdiction accomplished within or at the beginning of a reappraisal cycle.

REAPPRAISAL CYCLE - The period of time necessary for a jurisdiction to have a complete reappraisal.

REPLACEMENT COST - The cost, including material, labor, and overhead, that would be incurred in constructing an improvement having the same utility to its owner as the improvement in question, without necessarily reproducing exactly any particular characteristic of the property.

REPRODUCTION COST - The cost, including material, labor and overhead that would be incurred in constructing an improvement having exactly the same characteristics as the improvement in question.

SUBSTITUTION - The principle stating that a property's value tends to be set by the cost of acquiring an equally desirable substitute. In accordance with the principle of substitution, the value of a property will not exceed that of its replacement. A prudent buyer will pay no more for a property than the purchase price of a similar and equally desirable one. This principle is basic to the approaches to valuation of property.

APPRAISAL CARD DEFINITIONS

FOUNDATION

PIERS - Concrete footings poured under pier locations only.

PIERS >8 FT - Concrete footings poured under >8 foot pier locations only.

PIERS >8 FT WITH CONCRETE - Concrete poured under >8 ft piers.

CONTINUOUS FOOTING/CRAWL - A concrete footing poured continuously around the perimeter foundation of a building. Used on buildings that have a crawl space or basement.

SPREAD FOOTING - Commercial type footing used with a concrete slab floor system.

SPECIAL FOOTING - Any expensive foundation not described in the other choices; commonly used mostly on high rise buildings.

SUB FLOOR SYSTEM

NONE - No floor system. Used on buildings with dirt or gravel floors.

SLAB ON GRADE - Concrete slab poured on surface at ground level.

SLAB ABOVE GRADE - Concrete slab poured on a built-up surface above ground level.

PLYWOOD/PARTICLE BOARD - Wood joist and plywood sheathing floor system.

WOOD - Wood joist and wood sheathing floor system.

PLATFORM HEIGHT - A pre-cast deck with pre-cast or steel joist elevated to a loading dock height.

STRUCTURAL SLAB - Reinforced slab made to support a high-rise building.

EXTERIOR WALLS

SIDING MINIMUM - Used to describe infrequent or unusual combinations of exterior materials reflecting lower quality construction.

CORRUGATED METAL (LIGHT) - Typically this is an inexpensive steel or galvanized siding with minimum thickness. This is usually manufactured in sheets which can be fastened to wood or metal framing.

COMPOSITION OR WALL BOARD - Refers to composition siding which comes in varied thicknesses and rolls and is usually fastened over wood framing with nails. Composition board can be any of the various man-made materials on wood or wood products. These must be treated or painted to withstand the weather.

SINGLE SIDING WITH WOOD FRAMING (NO SHEATHING) - Denotes inexpensive wood framing without sheathing.

ASBESTOS SHINGLE SIDING - Refers to asbestos shingle laid over wood frame with sheathing, the principle composition of these shingles is asbestos which is a mineral fiber occurring in long and delicate fibers or fibrous masses. It is incombustible, non - conducting and chemically resistant. Typically, these shingles are hard and brittle in nature with noticeable grain and texture.

BOARD AND BATTEN ON PLYWOOD WITH STRIPS - Sheathing placed on walls in a vertical position with joints covered by narrow wooden strips called battens.

CORRUGATED ASBESTOS SIDING - Sometimes called by the trade name "transite", this type of siding is composed of asbestos manufactured in corrugated sheets which can be fastened to wood or metal framing.

MASONITE - Treated hardboard siding 6 to 12 inches wide used in average to below average construction.

WOOD ON SHEATHING OR PLYWOOD - Wood is either lapped or in panels. This type of siding can be horizontal which is normally lapped or a wood panel nailed to sheathing.

ALUMINUM/VINYL SIDING - Flat or corrugated aluminum vinyl sheets fastened to a wood or metal frame as a direct replacement or cover for horizontal wood siding.

CONCRETE OR CINDER BLOCK - The standard concrete or cinder block which can range in size from 8 to 26 inches.

STUCCO ON CONCRETE BLOCK - A wall of concrete block with cement stucco applied to the exterior with a textured surface.

STUCCO ON TILE/WOOD FRAME - A wall of tile or wood with cement stucco applied to the exterior with a textured surface.

LOG - A wall of whole logs.

BOARD AND BATTEN 12" BOARDS - This type of construction is illustrated by the use of 12" boards nailed to sheathing in a vertical position with the joints covered by battens and is commonly used on structures containing limited living area.

****WOOD SHINGLE** - These are usually irregular cedar or redwood shingles used in custom construction.

CEDAR OR REDWOOD SIDING - Horizontal cedar or redwood lap siding or panel siding, normally unfinished or naturally stained, which is desirable because of its color and maintenance free characteristics. Usually, this type of lap siding is used in above average to excellent construction.

SIDING MAXIMUM - This is typically a mixture of expensive siding materials possessing superior quality and typically used in custom home construction.

HARDI PLANK - Is a fiber cement siding. This is because it is composed of the cellulose fibers found in wood and materials found in cement.

COMMON BRICK - Brick commonly used for construction purposes, primarily for building and not specifically treated for color. They are made from clay or a clay mixture, molded into blocks and hardened in the sun or kiln dried.

FACE BRICK - the better quality of brick such as that used on exposed portions of a building and usually color treated and finished.

STONE - Refers to various stone or stone veneers, usually found over masonry.

CORRUGATED METAL (HEAVY) - Typically more expensive than the light quality, this galvanized siding is generally used for commercial applications.

MODULAR METAL - Galvanized curved panels used in commercial construction.

REINFORCED CONCRETE - References the structural frame of concrete which has been reinforced with steel bars.

PRECAST PANEL - A modular construction material usually with a washed, pebbled finish. Panels are pre-cast and brought to the site to be erected. Normally used as the major exterior wall finish, it is often seen in commercial construction.

PREFINISHED METAL - This refers to the enameled or anodized metal commonly used on older service stations and other metal commercial buildings.

GLASS / THERMOPANE - A glass sandwich panel designed for use on exterior applications. Typically, this type of construction is present on large commercial projects.

ARCHITECTURAL BLOCK- Concrete masonry blocks.

ROOFING STRUCTURE

FLAT ROOF - A flat roof refers to a structural material which spans a horizontal or nearly horizontal position from wall to wall or beam to beam.

SHED TYPE ROOF - Similar to a flat roof except that it has a noticeable slope in one direction.

GABLE ROOF - A gable roof is pitched or sloped in two directions.

HIP ROOF - The hip roof is characterized by a slope in four directions.

MANSARD ROOF - A roof with two slopes on all four sides, the lower slope is very steep and the upper slope is nearly flat. This type of roof is often seen in French provincial architecture.

GAMBREL ROOF- A type of roof which has its slope broken by an obtuse angle so that the lower slope is steeper than the upper slope, a roof with two pitches such as is common on a barn.

IRREGULAR ROOF - Any of a variety of unusual slopes which do not have the same rise per foot of run.

WOOD TRUSS - This type of roof is composed of various sizes of lumber or timbers usually arranged in a triangular shape. They can be flat, shed or pitched with the width of the span limited by the strength of the material used. These are commonly used in commercial applications with limited spans.

RIGID FRAME WITH BAR JOIST - Bar joists are fabricated steel trusses that have been set close together and serve as roof beams or ceiling joists. The span of these is limited due to their lightness and depth. Bar joists limit roof shape to flat or shed types and are typically used on commercial buildings with medium spans.

STEEL FRAME OR TRUSS - A truss composed of various shapes of steel members that are either bolted or welded together which can be multiple types and cover extremely large spans. These roof types are commonly used in commercial construction.

BOWSTRING TRUSS - A large curved truss commonly used in airplane hangars and Quonset construction.

REINFORCED CONCRETE ROOF - Roof framing where concrete is formed and poured in place incorporating a system of steel rods or mesh for tensile strength and raised to proper position.

PRESTRESSED CONCRETE - Roofs which are composed of concrete, assembled and pre - stressed off site and erected with cranes.

ROOF COVER

MINIMUM ROOFING, CORRUGATED OR SHEET METAL - With this type of roofing, sheet metal is flat, corrugated or V-crimp metal of aluminum or steel fastened over wood sheathing.

ROLLED OR BUILT UP COMPOSITION - A roof consisting of asbestos felt saturated with asphalt and assembled with asphalt cement. Typically, this type of roofing comes in rolls and is nailed to wood sheathing.

ASPHALT OR COMPOSITION SHINGLES - Refers to shingles made from asbestos felt saturated with asphalt. These are pliable roofing materials fastened by nails or staples to sheathing.

BUILT UP TAR AND GRAVEL - Gravel imbedded in tar is hot mopped over various types of composition roofing, concrete, metal or gypsum roofing. This product requires a low pitched or flat roof shape. Built up refers to the accumulating of waterproof layers of asphalt to seal the roof.

RUBBER - All of the lines of rubber, composition or plastic roofing materials used on flat roof surfaces.

ARCHITECTURAL SHINGLE- Are also known as laminated or dimensional shingles.

FIBERGLASS TILE- Sheets or panels made of synthetically produced fine glass fibers

CLAY TILE - Clay tile is usually a half - round clay product which has been kiln fired to a specific hardness which gives a wearing surface that requires no additional finish.

ENAMELED METAL SHINGLE - This refers to metal shingles with an enamel coating. This type of shingle is predrilled and nailed over sheathing.

CEDAR SHAKES - Individual roof material which comes in random widths and lengths and is extremely expensive to apply. This type of roof cover is used predominately in custom home construction.

SLATE/COPPER -Shingles made of slate or copper fastened down to sheathing or strips.

PRE-FINISHED METAL- Metal panels that are placed vertically from the ridge of the roof downward.

METAL STANDING SEAM -Is made up of many interlocking metal panels that are placed vertically from the ridge of the roof downwards.

CONCRETE FORM- Concrete pumped into forms.

INTERIOR WALL CONSTRUCTION

MASONRY WALL - Normally, exterior walls which serve as an interior wall face usually of brick or block materials which are usually unfinished.

WALLBOARD OR WOOD WALL - Wallboards are known by many trade names. All are made of composition materials and are typically found in four by eight sheets

PLASTERED - This type of interior finish refers to all plaster on lath interior walls.

PLYWOOD PANEL - These are mostly inexpensive 4 foot by eight foot plywood panels which are decorative in nature and characteristically a veneer.

DRYWALL - A sandwich of plaster or paper surfaces normally available in four foot by eight foot sheets which are cut to fit. It is fastened to studding or furring strips and requires a seal where joints occur with paint as a finish. It has become the prevalent choice for home construction.

CUSTOM - This type of interior wall construction is composed of high grade wood veneers or solid hardwoods. Very high grade wall papers or very high-grade moldings, trims, doors, or any combination which created an expensive interior finish

GREATER THAN 8 FT CEILING - This refers to modern construction that differs from the standard.

INTERIOR FLOORING

PLYWOOD OR LINOLEUM - A single layer of light wood laid on floor joists or a composition material known as linoleum which comes in sheets or tiles used as a floor covering.

CONCRETE FINISHED - A floor finish where the concrete is troweled with hardener and often color added to complete the finished look.

CONCRETE COATED - A floor finish where the concrete is coated usually with epoxy.

ASPHALT TILE - Composition tile laid over wood or concrete.

CORK- All types of cork tile.

RUBBER - Flooring made from rubber.

VINYL - A smooth, seamless floor covering manufactured with a resilient backing usually applied to either concrete or wood sub flooring. Vinyl tiles used in commercial buildings.

PINE OR SOFTWOODS - Floor finish of pine or other softwoods.

TERRAZZO- A tile made by exposing marble chips on the surface of concrete and then polishing until smooth.

CERAMIC TILE - Refers to ceramic tile set in mortar or concrete.

HARDWOOD - A layer of hardwood either solid wood or a veneer over sub flooring.

PARQUET - Refers to a wearing surface composed of small hardwood pieces set in patterns or designs over sub flooring.

CARPET - Carpet is the most common floor finish in residential and commercial construction. It acts as the finish for the base material.

HARD TILE-Refers to tiles which are machine made and unglazed.

SEAMLESS-A floor with no seams cracks or joints also known as a poured floor.

PRECAST CONCRETE - Applies in this case to either pre - stressed or poured concrete floors which are suspended in multi story commercial construction.

SLATE- Refers to cut or randomly broken slate set in mortar over concrete.

MARBLE - Expensive, durable stone set in mortar or concrete.

LAMINATE - Is a multi-layer synthetic flooring product, fused together with a lamination process.

BAMBOO- Makers use one of the hardest species of Chinese bamboo, cut it into strips before drying and laminating it under pressure.

HEATING FUEL

OIL, WOOD, COAL- Oil, wood or coal fired.

GAS - Natural or manufactured gas.

ELECTRIC - Electrical.

SOLAR - Use of sun's radiation to heat.

HEATING TYPE

BASEBOARD-Electric heat which radiates from baseboard heating units mounted in each room and usually controlled in each room.

FORCED AIR - NOT DUCTED - A heating element and fan and/or blower enclosed in a common housing for circulating the heated air but no ducted distribution system.

FORCED AIR - DUCTED - A central type heating system that provides for the distribution of the air through ducts or conduits to the various parts of the building.

HOT WATER - A system of heating a building, usually commercial, by means of hot water.

DIRECT STEAM HEAT - This heating system uses radiators in the rooms to be heated, the steam or vapor being delivered from boiler to radiators through one of several arrangements of piping. The one-pipe gravity system is widely used for smaller installations. The two-pipe steam or vapor system is used for larger installations.

RADIANT ELECTRIC - A heating system which heats a room only by use of the floor, ceiling or walls as heating panels. Most contemporary radiant-heating systems have extensive pipe coils in the floor structure or in the walls and ceilings which are to be used as heating panels.

RADIANT WATER - Same as radiant electric only the fuel or radiant source is from heated water as opposed to electric current.

HEAT PUMP - A heat pump is a reverse cycle refrigeration unit which can be used for heating or cooling.

SPACE HEATER-Designed to be used for industrial spaces and large open rooms.

AIR CONDITIONING

WINDOW UNIT (WALL UNIT) - A unit air conditioning system self-contained, usually placed in a window although sometimes placed in an exterior wall.

CENTRAL - Refers to a central cooling system with duct work, thermostats and forced cold air.

PACKAGED ROOF TOP - Usually found in commercial buildings. The air conditioning unit is located on the roof of the property.

CHILLED WATER - This type of system is usually associated with a commercial air conditioning system utilizing a cooling tower as a heat exchanger and associated compressors with ducting.

BATH OR RESTROOMS

NUMBER OF BATHROOMS - The total number of bathrooms in the building. A full bath consists of bath or shower, bowl and basin. A half bath is any lesser combination of having a bowl and one other feature.

NUMBER OF BEDROOMS - Check the appropriate number of bedrooms for single family homes.

COMMERCIAL PLUMBING- Number of restrooms and total number of fixtures.

APARTMENT BUILDINGS - Total number of fixtures.

NUMBER OF SINGLE FAMILY RESIDENTIAL STORIES - Check the appropriate number of stories for single family homes.

FIREPLACES

- 1 - None
- 2 - One story single stack with one outlet
- 3 - Two story single stack or a double fireplace outlet with a single story stack
- 4 - Two or more fireplaces
- 5 - Massive. A large hearth and stack with stone or brick usually wider than six (6) feet.
- 6 - More than 2 massive
- 7 - Prefab
- 8 - 2 or more Prefab

DEPRECIATION

ACTUAL YEAR BUILT - The last two digits of the Actual Year Built. To be used if the actual year built can be determined and the same as the Effective Year if the Actual Year built cannot be determined. Zero filled if built before 1900.

EFFECTIVE YEAR BUILT - To be used to adjust the age of an improvement when extensive refinishing has taken place or to estimate the age when the actual age cannot be determined. The last two digits of the Effective Year Built are to be entered in the same manner as the Actual Year built.

ECONOMIC OBSOLESCENCE - A percentage adjustment added to the normal depreciation to account for increased depreciation due to the impairment of desirability or useful life of the property from an external factor such as changes in the neighborhood.

FUNCTIONAL OBSOLESCENCE - A percentage to be added to the normal depreciation to account for increased depreciation due to the impairment of desirability or usefulness brought about by changes in design, art or construction techniques and including zoning over present use.

SPECIAL CONDITION CODE - UC - Under construction
PD - Physically damaged
AP - Abnormal Physical Depreciation

PERCENT CONDITION - The actual total percent condition remaining of the improvement after the depreciation reflected by one of the Special Condition Codes. **NOTE:** to use the Percent Condition one of the Special Condition Codes must be used. Also, care must be taken in the use of these codes as they will override the depreciation developed from the normal depreciation, economic obsolescence and functional obsolescence.

STRUCTURAL FRAME

WOOD FRAME - Wooden structural frame supporting the floors, walls roof and partitions of a building.

MASONRY - Structural frame of stone, brick, cement and concrete that is not reinforced.

REINFORCED CONCRETE - Structural frame of concrete that has been reinforced with steel bars.

STEEL - Structural frame of steel.

FIREPROOF STEEL - A steel structural frame that has been encased in fire resistant material.

SPECIAL - Used where the structural frame is costlier due to complicated combinations or uses of any of the structural framing.

CEILING AND INSULATION QUALITY

SUSPENDED

- 1 Ceiling Insulated
- 3 Wall insulated
- 5 Ceiling and Wall Insulated
- 7 No Insulation

NOT SUSPENDED:

- 2 Ceiling Insulated
- 4 Wall insulated
- 6 Ceiling and Wall Insulated
- 8 No Insulation

NO CEILING:

- 9 Ceiling Insulated
- 10 Wall insulated
- 11 Ceiling and Wall Insulated
- 12 No Insulation

AVERAGE NUMBER OF ROOMS PER FLOOR - For commercial buildings, the appraiser must determine the average number of rooms per floor and enter as 01, 02 etc. A room is defined as any area having three or more sides in the form of walls reaching to the ceiling of the room.

NON STANDARD WALL HEIGHT - Record the height in feet of all non single family residential walls in excess of 10 feet within the base area of the structure.

2023 USE-VALUE MANUAL
FOR AGRICULTURAL, HORTICULTURAL
AND
FOREST LAND



April 2022

North Carolina Use-Value Advisory Board
North Carolina Department of Revenue
Raleigh, North Carolina

Table of Contents

Foreword.....1

Use-Value Advisory Board Members.....3

Use-Value Advisory Board Subcommittee Members.....4

Use-Value Advisory Board Manual.....5

North Carolina Major Land Resource Areas (MLRA Map).....9

Agricultural Schedule.....10

Horticultural Schedule.....11

Forestry Schedule.....12

Cash Rents Survey.....13

Christmas Tree Guidelines.....20

Procedure for Forestry Schedules.....23

Forestry Net Present Values Table.....28

MLRA 130 Soil Survey.....30

MLRA 133A Soil Survey.....40

MLRA 136 Soil Survey.....45

MLRA 137 Soil Survey.....64

MLRA 153A Soil Survey.....66

MLRA 153B Soil Survey.....70

Foreword

When originally enacted in 1973, the objective of the present-use value program was to keep “the family farm in the hands of the farming family.” By the early 1970’s, North Carolina had become a prime site for industrial and commercial companies to relocate because of its plentiful and reliable work force. With this growth came other improvements to the State’s infrastructure to accommodate this growth, such as new and larger road systems, more residential subdivisions, and new industrial and commercial developments. The land on which to build these improvements came primarily from one source: farmland. As the demand for this land skyrocketed, so did its price as well as its assessed value, as counties changed from a fractional assessment to a market value system. Farmers who owned land near these sites soon could not afford the increase in property values and sought relief from the General Assembly.

In response, the General Assembly passed legislation known as the Present-Use Value program. As originally enacted, the basic tenets of this program were that only individuals who lived on the land for which they were applying could immediately qualify and that the land had to have a highest and best use as agriculture, horticulture or forest land. Land might also have qualified if the farmer owned it for seven years. Passage of this law eased the financial burden of most farmers and eliminated to some degree the “sticker shock” of the new property tax values. From that time until the mid-1980’s, the present-use value schedules were based on farmer-to-farmer sales, and quite often the market value schedules were very similar to the present use schedules, especially in the more rural areas.

Virtually every session of the General Assembly has seen new changes to the law, causing a constant rethinking as to how the law is to be administered. The mid-1980's saw several court cases that aided in this transformation. Among the legislative changes that resulted from these cases were the use of soil productivity to determine value, the use of a 9% capitalization rate, and the utilization of the "unit concept" to bring smaller tracts under the present use value guidelines.

Through the years the General Assembly has expanded the present-use value program to include new types of ownership such as business entities, tenants in common, trusts, and testamentary trusts. Legislation also expanded the definition of a relative. More recent legislation has established cash rents as the basis for determining present-use value for agricultural and horticultural land, while retaining the net income basis for determining present-use value for forestland.

This Use-Value Advisory Board Manual is published yearly to communicate the UVAB recommended present-use value rates and to explain the methodology used in establishing the recommended rates.

NORTH CAROLINA USE-VALUE ADVISORY BOARD

Chairman

Dr. A. Richard Bonanno

Associate Dean & Director
North Carolina Cooperative Extension Service
North Carolina State University
NCSU Box 7602
Raleigh, NC 27695-7602
919.515.1372 (T)
919.515.3135 (F)
abonann@ncsu.edu

(Representing the NC Cooperative Extension Service at NCSU)

Members

Mr. Sean M. Brogan

Forest Management & Forest Development
NC Forest Service
Archdale Building-10th Fl
Raleigh, NC 27699-1616
Telephone: 919.857.4818
Fax: 919.857.4805
Email: Sean.Brogan@ncagr.gov
(Representing NC Forest Service, NC Department of Agricultural and Consumer Services)

Ms. Tina Hlabse

General Counsel
NC Dept. of Agriculture & Consumer Services
Mail Service Center 1001
Raleigh, NC 27699
Telephone: 919.707.3013
Fax: 919.716.0090
Email: tina.hlabse@ncagr.gov
(Representing Dept. of Agriculture & Consumer Services)

Mr. Sam Croom

Pitt County Assessor
PO Box 43
Greenville, NC 27835
Telephone: 252.902.3400
Fax: 252.830.0753
Email: sam.croom@pittcountync.gov
(Representing NC Assn. Of Assessing Officers)

Mr. David Allen

Randolph County Commissioner
Randolph County Office Building
725 McDowell Rd, 2nd Floor
Asheboro, NC 27205
Telephone: 336.318.6301
Email: david.allen@randolphcountync.gov
(Representing NC Assn. Of County Commissioners)

Dr. Barbara Board

Associate Dean & Extension Administrator
NC Cooperative Extension Program
NC A&T State University
PO Box 21928
Greensboro, NC 27420-1928
Telephone: 336.285.4953
Email: baboard@ncat.edu
(Representing the NC Cooperative Extension Program at NC A&T State University)

Mr. Steve Woodson

Associate General Counsel
North Carolina Farm Bureau
PO Box 27766
Raleigh, NC 27611
Telephone: 919.788.1018
Fax: 919.783.3593
Email: steve.woodson@ncfb.org
(Representing NC Farm Bureau Federation, Inc.)

Mr. Tony Simpson

Director, Local Government Division
NC Department of Revenue
PO Box 871
Raleigh, NC 27602
Telephone: 919.814.1129
Fax: 919.715.3107
Email: john.simpson@ncdor.gov
(Representing NC Dept. of Revenue)

Mr. John Hatcher

Executive VP, NC Forestry Association
1600 Glenwood Avenue
Raleigh, NC 27608
Telephone: 919.834.3943 (press 5)
Fax: 919.832.6188
Email: jhatcher@ncforestry.org
(Representing NC Forestry Association)

USE-VALUE ADVISORY BOARD SUBCOMMITTEES

Administration and Implementation

Tony Simpson, NCDOR
Steve Woodson, Farm Bureau
Dee Webb, NCDA&CS
David Baker, NCACC
Sam Croom, Pitt County
Daniel J. Whittle, Environmental Defense
Robert Horton, NRCS

Soils

Rafeal Vega, NRCS
Milton Cortes, NRCS
Doug Huffman, NCDOR
Chris Green, Cleveland County
Godfrey Gayle, NC A&T State University
Vacant, Soil Science, NCSU

Cash Rents

Doug Huffman, NCDOR
Tony Simpson, NCDOR
Sam Croom, Pitt County
Steve Woodson, Farm Bureau
Vacant, Crop Science, NCSU

Forestry

Robert Bardon, Forestry, NCSU
Tony Simpson, NCDOR
Doug Huffman, NCDOR
Steve Whitfield, NC Forest Landowners Assn.
John Hatcher, NC Forestry Association
Robert Ross, Utilization Forester, NCFS

USE-VALUE ADVISORY BOARD MANUAL

Following are explanations of the major components of this manual.

I. Cash Rents

Beginning in 1985, the basis for determining present-use value for agricultural land was based on the soil productivity for growing corn and soybeans. At that time, corn and soybeans were considered the predominant crops in the state. Over time, fewer and fewer acres went into the production of corn and soybeans and the land used for these crops tended to be lower quality. As a result, both the productivity and value of these crops plummeted, thus resulting in lower present-use values. A viable alternative was sought to replace corn and soybeans as the basis for present-use value. Following a 1998 study by North Carolina State University, cash rents for agricultural and horticultural land were determined to be the preferred alternative. Cash rents are a very good indicator of net income, which can be converted into a value using an appropriate capitalization rate.

The General Assembly passed legislation that established cash rents as the required method for determining the recommended present-use values for agricultural and horticultural land. The cash rents data from the NCSU study served as the basis for determining present-use value for the 2004-2007 UVAB manuals. However, starting in 2006, funding became available for the North Carolina Department of Agriculture to perform an extensive statewide cash rents survey on a yearly basis. The 2006 survey became the basis for the 2008 UVAB recommended values, and this process will

continue forward until changes dictate otherwise (i.e. the 2007 survey is used to establish the 2009 UVAB values, etc.).

Forestland does not lend itself well to cash rents analysis and continues to be valued using the net income from actual production.

II. Soil Types and Soil Classification

The 1985 legislation divided the state using the six Major Land Resource Areas (MLRAs). Five different classes of productive soils and one non-productive soil class for each MLRA were determined. Each class was identified by its net income according to type: agriculture, horticulture and forestry. The net income was then divided by a 9% capitalization rate to determine the present-use value. For 2004 and forward, the following change has taken place. For agricultural and horticultural classifications, the five different soil classes have been reduced to three soil classes and one non-productive soil class. Forestland present-use value has kept the five soil classes and one non-productive soil class. The use of the six MLRAs has been retained.

The six MLRAs are as follows:

MLRA 130	Mountains
MLRA 133A	Upper Coastal Plain
MLRA 136	Piedmont
MLRA 137	Sandhills
MLRA 153A	Lower Coastal Plains
MLRA 153B	Tidewater

The soils are listed in this manual according to the MLRA in which they occur. They are then further broken down into their productivity for each of the three types of use: agriculture, horticulture and forestry. Every soil listed in each of the MLRAs is ranked by its productivity into four classes (with the exception of forestry which retained its previous six classes). The classes for agricultural and horticultural land are as follows:

CLASS I	Best Soils
CLASS II	Average Soils
CLASS III	Fair Soils
CLASS IV	Non-Productive Soils

It should be noted that, in some soil types, all the various slopes of that soil have the same productivity class for each of the usages, and therefore for the sake of brevity, the word “ALL” is listed to combine these soils. Each of the classes set up by the UVAB soils subcommittee corresponds to a cash rent income established by the most recent cash rents survey conducted by the North Carolina Department of Agriculture. This rent income is then capitalized by a rate established each year by the UVAB (see below). The criteria for establishing present-use value for forestry have remained basically unchanged from previous years due to the quantity and quality of information already available.

III. Capitalization Rate

The capitalization rate mandated by the 1985 legislation for all types of present-use value land was 9%. The 1998 study by NCSU strongly indicated that a lower capitalization rate for agricultural and horticultural land was more in line with current sales and rental information. The 2002 legislation mandated a rate between 6%-7% for agricultural and horticultural land.

For the year 2004 and the subsequent years, the UVAB has set the capitalization rate at 6.5% for agricultural and horticultural land.

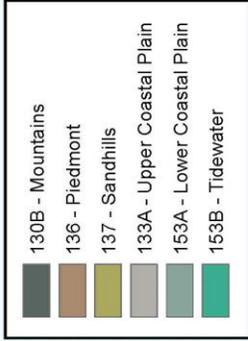
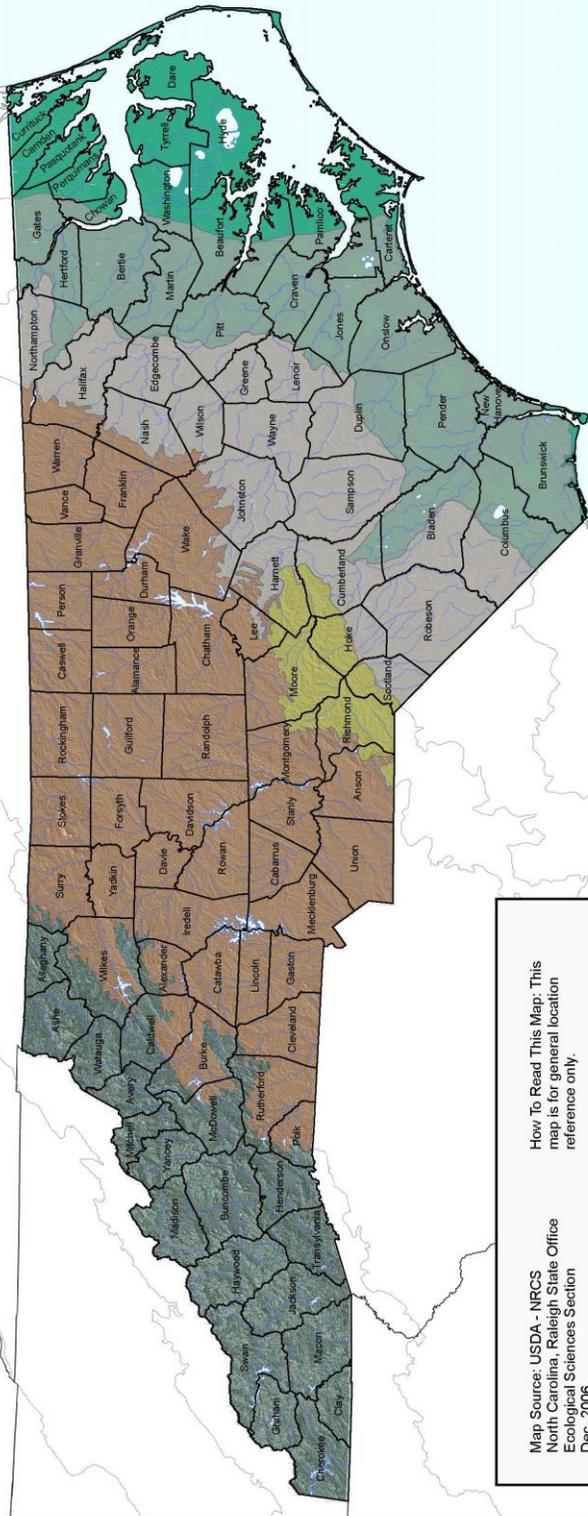
The capitalization rate for forestland continues to be fixed at 9% as mandated by the statutes.

IV. Other Issues

The value for the best agricultural land can be no higher than \$1,200 an acre for any MLRA.



Major Land Resource Areas North Carolina



Map Source: USDA - NRCS
North Carolina, Raleigh State Office
Ecological Sciences Section
Dec. 2006

Data Source: USDA - NRCS, NCDOT,
and USGS base map layers.

Map Location:
[h:\geodat\workspace\maps](http://geodat/workspace/maps)

How To Read This Map: This map is for general location reference only.

Purpose: This map displays the Major Land Resource Areas of the USDA - NRCS

0 25 50 100 Miles
1:3,200,000
Map Projection: Albers Equal Area
Datum: NAD27

PRESENT-USE VALUE SCHEDULES

AGRICULTURAL RENTS

MLRA	BEST	AVERAGE	FAIR
130	90.30	54.30	35.50
133A	82.15	58.30	43.65
136	61.80	42.10	27.35
137	67.50	47.30	32.20
153A	77.10	56.10	42.20
153B	103.95	70.70	53.00

AGRICULTURAL SCHEDULE

MLRA	CLASS I	CLASS II	CLASS III
130	\$1,200*	\$835	\$545
133A	\$1,200*	\$895	\$670
136	\$950	\$645	\$420
137	\$1,035	\$725	\$495
153A	\$1,185	\$860	\$645
153B	\$1,200*	\$1,085	\$815

--NOTE: All Class 4 or Non-Productive Land will be appraised at \$40.00 per acre.

--In 2019 cash rents were increased by 10%, then capitalized at a rate of 6.5% to produce the Agricultural Schedule.

* As required by statute, agricultural values cannot exceed \$1,200.

HORTICULTURAL SCHEDULE

All horticultural crops requiring more than one growing season between planting or setting out and harvest, such as Christmas trees, ornamental shrubs and nursery stock, apple and peach orchards, grapes, blueberries, strawberries, sod and other similar horticultural crops should be classified as horticulture regardless of location in the state.

HORTICULTURAL RENTS

MLRA	BEST	AVERAGE	FAIR
130	161.70	111.10	72.90
133A	99.10	68.40	52.25
136	89.20	58.05	40.15
137	84.35	56.85	37.70
153A	93.80	58.15	44.40
153B	122.40	92.80	84.35

HORTICULTURAL SCHEDULE

MLRA	CLASS I	CLASS II	CLASS III
130	\$2,485	\$1,705	\$1,120
133A	\$1,520	\$1,050	\$800
136	\$1,370	\$890	\$615
137	\$1,295	\$870	\$580
153A	\$1,440	\$890	\$680
153B	\$1,880	\$1,425	\$1,295

--NOTE: All Class 4 or Non-Productive Land will be appraised at \$40.00 per acre.

--Cash rents were capitalized at a rate of 6.5% to produce the Horticultural Schedule.

FORESTLAND NET PRESENT VALUES

MLRA	Class I	Class II	Class III	Class IV	Class V
130	\$34.49	\$21.53	\$8.48	\$4.38	\$4.25
133A	\$33.20	\$21.59	\$21.56	\$8.37	\$5.70
136	\$37.08	\$25.22	\$22.36	\$16.08	\$11.87
137	\$40.22	\$26.56	\$22.36	\$8.74	\$3.48
153A	\$33.20	\$21.59	\$21.56	\$8.37	\$5.70
153B	\$27.90	\$21.59	\$16.90	\$8.37	\$5.70

FORESTLAND SCHEDULE

MLRA	Class I	Class II	Class III	Class IV	Class V
130	\$380	\$240	\$95	\$50	\$50
133A	\$365	\$240	\$240	\$95	\$65
136	\$410	\$280	\$250	\$180	\$135
137	\$445	\$295	\$250	\$95	\$40
153A	\$365	\$240	\$240	\$95	\$65
153B	\$310	\$240	\$190	\$95	\$65

--NOTE: All Class VI or Non-Productive Land will be appraised at \$40.00/Acre. Exception: For MLRA 130 use 80 % of the lowest valued productive land.

--Net Present Values were divided by a capitalization rate of 9.00% to produce the Forestland Schedule.

2009 Cash Rent Study

INTRODUCTION

The National Agricultural Statistics Service in cooperation with the North Carolina Department of Agricultural and Consumer Services collected cash rents data on the 2009 County Estimates Survey. North Carolina farmers were surveyed to obtain cash rent values per acre for three land types: Agricultural, horticultural, and Christmas tree land. Supporting funds for this project were provided by the North Carolina Legislature. Appreciation is expressed to all survey participants who provided the data on which this report is based.

THE SURVEY

The survey was conducted by mail with telephone follow-up during September through February. Values relate to the data collection time period when the respondent completed the survey.

THE DATA

This report includes the most current number of responses and average rental rate per acre. Producers were asked to provide their best estimate of cash rent values in their county by land quality. The data published here are simple averages of the best estimate of the cash rent value per acre. These averages are not official estimates of actual sales.

Reported data that did not represent agricultural usage were removed in order to give a more accurate reflection of agricultural rents and values. To ensure respondent confidentiality and provide more statistical reliability, counties and districts with fewer than 10 reports are not published individually, but are included in aggregate totals. Published values in this report should never be used as the only factor to establish rental arrangements.

Data were collected for three land types: Agricultural, horticultural, and Christmas tree land. Agricultural land includes land used to produce row crops such as soybeans, corn, peanuts, and small grains, pasture land, and hay. Agricultural land also includes any land on which livestock are grown. Horticultural land includes commercial production or growing of fruits or vegetables or nursery or floral products such as apple orchards, blueberries, cucumbers, tomatoes, potted plants, flowers, shrubs, sod, and turf grass. Christmas tree land includes any land to produce Christmas trees, including cut and balled Christmas trees.

2009 Average Cash Rents for Resource Area = 130 Mountains

County	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
ALLEGHANY	22	89.80	21	55.50	21	33.30												
ASHE	17	76.50	15	43.50	15	28.30							12	162.50				
AVERY																		
BUNCOMBE	37	100.70	31	53.90	27	33.80												
BURKE	25	55.20	22	33.20	10	26.60												
CALDWELL	13	35.40	11	23.20	10	16.70												
CHEROKEE	16	88.10	11	48.60	10	29.50												
CLAY	15	68.70	14	39.10	13	25.20												
GRAHAM																		
HAYWOOD	41	117.90	28	73.80	29	43.50												
HENDERSON	24	83.50	18	57.60	18	36.90												
JACKSON																		
MACDOWELL																		
MACON	11	73.20	12	43.30														
MADISON	26	116.50	22	63.20	23	40.50												
MITCHELL																		
POLK																		
SWAIN																		
TRANSYLVANIA	14	93.60																
WATAUGA	27	79.10	18	49.70	14	32.50							11	181.36				
WILKES	79	57.30	71	39.30	59	27.00												
YANCEY	17	117.90	13	72.30	13	48.85												
AREA TOTAL	422	82.10	349	49.40	317	32.30	78	147.00	47	101.10	41	66.30	69	153.60	47	93.60	38	61.30

2009 Average Cash Rents for Resource Area = 133A Upper Coastal Plain

County	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
BLADEN	36	63.10	32	49.20	25	33.80												
COLUMBUS	77	60.80	58	45.80	51	34.60												
CUMBERLAND	36	66.40	29	44.70	25	30.40												
DUPLIN	142	69.30	113	50.80	90	39.70												
EDGECOMBE	36	77.10	29	57.20	22	43.60												
GREENE	61	79.70	40	55.00	36	41.30												
HALIFAX	28	83.30	18	64.20	14	42.10												
HARNETT	58	74.50	52	51.70	39	36.40												
JOHNSTON	103	71.90	84	49.90	63	33.40	13	93.90	10	53.00								
LENOIR	60	81.60	45	58.70	33	42.10												
NASH	51	77.80	39	52.70	31	43.10												
NORTHAMPTON	23	102.60	17	73.80	13	57.30												
ROBESON	53	49.60	52	38.90	28	32.40												
SAMPSON	128	81.60	109	56.40	87	41.80	10	95.00										
SCOTLAND	10	44.50																
WAYNE	96	89.70	64	62.30	65	47.00												
WILSON	40	82.80	30	61.50	27	48.20												
AREA TOTAL	1038	74.70	819	53.00	655	39.70	61	90.10	46	62.20	35	47.50						

2009 Average Cash Rents for Resource Area = 136 Piedmont

County	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
ALAMANCE	63	52.30	51	32.90	50	20.70												
ALEXANDER	35	49.10	28	33.40	29	20.00												
ANSON	35	50.10	31	41.30	25	28.40												
BURKE	25	55.20	22	33.20	19	26.60												
CABARRUS	20	42.20	16	37.80	13	23.90												
CALDWELL	13	35.40	11	23.50	10	16.70												
CASWELL	54	49.90	41	30.90	44	19.20												
CATAWBA	32	39.20	29	28.60	31	19.20												
CHATHAM	47	48.80	48	34.70	37	23.10												
CLEVELAND	44	36.50	39	29.20	34	21.20												
DAVIDSON	50	45.60	43	32.90	40	21.40												
DAVIE	38	60.70	27	39.30	24	21.30												
DURHAM	15	36.50	12	27.50	13	21.50												
FORSYTH	26	63.60	16	48.60	18	23.30												
FRANKLIN	41	59.20	38	37.10	35	21.90												
GASTON	17	33.50	15	27.30	15	18.80												
GRANVILLE	58	53.00	45	31.60	43	17.80												
GUILFORD	46	41.20	39	27.00	34	17.60												
HALIFAX	28	83.30	18	64.20	14	42.10												
IREDELL	52	53.90	49	43.40	43	27.90												
JOHNSTON	103	71.90	84	49.90	63	33.40	13	93.90	10	53.00								
LEE	25	72.40	20	45.40	16	33.10												
LINCOLN	16	35.60	14	21.80	12	15.60												
MECKLENBURG	11	61.40																
MONTGOMERY	16	41.60	16	39.10	14	20.00												
MOORE	37	56.50	33	37.30	25	23.90												
NASH	51	77.80	39	52.70	31	43.10												
ORANGE	31	37.60	26	31.80	25	19.40												
PERSON	38	60.70	26	40.60	22	23.30												
POLK																		
RANDOLPH	96	48.20	81	33.80	73	21.90												
RICHMOND	21	32.60	15	23.30	18	19.30												
ROCKINGHAM	55	55.10	41	30.30	40	16.60												
ROWAN	47	48.80	36	34.70	33	23.50												
RUTHERFORD	21	37.40	16	27.60	14	19.30												
STANLY	34	52.50	30	40.30	29	27.90												
STOKES	54	74.20	39	47.10	34	28.10												
SURRY	73	83.00	57	53.90	53	35.30												
UNION	55	66.30	50	47.80	40	40.30												
VANCE	32	55.00	22	29.30	23	17.20												
WAKE	55	61.20	46	36.20	39	26.20												
WARREN	24	40.90	15	25.30	20	17.80												
WILKES	79	57.30	71	39.30	59	27.00												
YADKIN	79	67.00	60	47.80	58	31.50												
AREA TOTAL	1798	56.20	1468	38.30	1324	24.90	125	81.10	101	52.80	89	36.50	46	77.90	43	52.90	41	35.00

2009 Average Cash Rents for Resource Area = 137 Sandhills

County	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
HARNETT	58	74.50	52	51.70	39	36.40												
HOKE	17	56.50	11	45.00	11	29.10												
LEE	25	72.40	20	45.40	16	33.10												
MOORE	37	56.50	33	37.30	25	23.90												
RICHMOND	21	32.60	16	23.30	8	18.30												
SCOTLAND	10	44.50																
AREA TOTAL	168	61.40	139	43.00	115	29.30	*	76.70	*	51.70	*	34.30						

An * indicates the data is published even though there are less than 10 reports.

2009 Average Cash Rents for Resource Area = 153A Lower Coastal Plain

	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
County	30	83.70	23	52.00	21	37.10												
BEAUFORT																		
BERTIE	41	75.00	23	60.10	21	44.50												
BLADEN	36	63.10	32	49.20	25	33.80												
BRUNSWICK	23	44.40	16	38.00	13	30.00												
CARTERET																		
CHOWAN	20	87.00	13	58.90	12	51.70												
COLUMBUS	77	60.80	58	45.80	51	34.60												
CRAVEN	32	60.60	29	47.80	21	35.20												
DUPLIN	142	69.30	113	50.80	90	39.70												
EDGECOMBE	36	77.10	29	57.20	22	43.60												
GATES	13	81.20	11	62.30														
HERTFORD	15	73.00	11	49.60														
JONES	25	64.40	22	49.80	20	41.30												
MARTIN	46	80.70	33	53.20	29	40.50												
NEW HANOVER																		
ON SLOW	34	55.40	24	42.80	23	34.80												
PAMLICO	13	70.40	13	51.20	13	36.50												
PENDER	24	67.10	21	45.50	19	33.70												
PITT	45	73.70	39	56.20	33	40.50												
WASHINGTON	12	128.80	10	61.00														
AREA TOTAL	672	70.10	525	51.00	442	38.40	30	85.30	19	52.90	13	40.40						

2009 Average Cash Rents for Resource Area = 153B Tidewater

County	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
BEAUFORT	30	83.70	23	52.00	21	37.10												
CAMDEN																		
CARTERET																		
CHOWAN	20	87.00	13	58.40	12	51.70												
CURRITUCK	10	88.00																
DARE																		
HYDE																		
PAMLICO	13	70.40	13	51.20	13	36.50												
PASQUOTANK	19	105.30	11	73.20	10	60.00												
PERQUIMANS	24	101.90	21	78.10	18	58.90												
TYRRELL	10	109.50																
WASHINGTON	12	128.80	10	61.00														
AREA TOTAL	163	94.50	117	64.30	111	48.20	12	111.30	*	84.40	*	76.70						

An * indicates the data is published even though there are less than 10 reports.

2009 Average Cash Rents - State Total

County	Agricultural High Productivity		Agricultural Medium Productivity		Agricultural Low Productivity		Horticultural High Productivity		Horticultural Medium Productivity		Horticultural Low Productivity		Christmas Trees High Productivity		Christmas Trees Medium Productivity		Christmas Trees Low Productivity	
	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average	No. of reports	Average
STATE TOTAL	3431	66.90	2743	45.60	2414	31.50	254	103.20	184	67.70	155	46.90	114	121.50	93	75.30	80	49.40

Christmas Tree Guidelines

This information replaces a previous memorandum issued by our office dated December 12, 1989. The 1989 General Assembly enacted an “in-lieu of income” provision allowing land previously qualified as horticulture to continue to receive benefits of the present-use value program when the crop being produced changed from any horticultural product to Christmas trees. It also directed the Department of Revenue to establish a separate gross income requirement different from the \$1,000 gross income requirement for horticultural land, when the crop being grown was evergreens intended for use as Christmas trees. N.C.G.S. 105-289(a)(6) directs the Department of Revenue:

“To establish requirements for horticultural land, used to produce evergreens intended for use as Christmas trees, in lieu of a gross income requirement until evergreens are harvested from the land, and to establish a gross income requirement for this type of horticultural land, that differs from the income requirement for other horticultural land, when evergreens are harvested from the land.”

It should be noted that horticultural land used to produce evergreens intended for use as Christmas trees is the only use allowed benefit of the present-use value program without first having met a gross income requirement. The trade-off for this exception is a different gross income requirement in recognition of the potential for greater income than would normally be associated with other horticultural or agricultural commodities.

While the majority of Christmas tree production occurs in the western mountain counties (MLRA 130), surveys as far back as 1996 indicate that there are approximately 135 Christmas tree operations in non-mountain counties (MLRAs 136, 137, 133A, 153A & 153B). They include such counties in the piedmont and coastal plain as Craven, Halifax, Robeson, Wake, and Warren. For this reason we have prepared separate in-lieu of income requirements and gross income requirements for these two areas of the State. The different requirements recognize the difference in species, growing practices, markets, and resulting gross income potential.

After consulting with cooperative extension agents, the regional Christmas tree/horticultural specialist at the Western North Carolina Experimental Research Station, and various landowners/growers, we have determined the standards in the following attachments to be reasonable guidelines for compliance with G.S. 105-289(a)(6). Please note these requirements are subject to the whims of weather and other conditions that can have a significant impact. The combined effect of recent hurricanes, spring freezes, and ice storms across some parts of the State should be taken into consideration when appropriate within each county. As with other aspects of the present-use value program, owners of Christmas tree land should not be held accountable for conditions such as adverse weather or disease outbreak beyond their control.

We encourage every county to contact their local Cooperative Extension Service Office to obtain the appropriate local data and expertise to support particular situations in each county.

I. Gross Income Requirement for Christmas Trees

For MLRA 130, the gross income requirement for horticultural land used to grow evergreens intended for use as Christmas trees is \$2,000 per acre.

For all other MLRAs, the gross income requirement for horticultural land used to grow evergreens intended for use as Christmas trees is \$1,500 per acre.

II. In-Lieu of Income Requirement

MLRA 130 – Mountains

The in-lieu of income requirement is for acreage in production but not yet undergoing harvest, and will be determined by sound management practices, best evidenced by the following:

1. Sites prepared by controlling problem weeds and saplings, taking soil samples, and applying fertilizer and/or lime as appropriate.
2. Generally, a 5' x 5' spacing producing approximately 1,750 potential trees per acre. Spacing must allow for adequate air movement around the trees. (There is very little 4' x 4' or 4.5' x 4.5' spacing. Some experimentation has occurred with 5' x 6' spacing, primarily aimed at producing a 6' tree in 5 years. All of the preceding examples should be acceptable.)
3. A program for insect and weed control.
4. Generally, an eight-to-ten year setting to harvest cycle. (Most leases are for 10 years, which allows for a replanting of non-established or dying seedlings up through the second year.)

The gross income requirement for acres undergoing Christmas tree harvest in the mountain region of North Carolina (MLRA 130) is \$2,000 per acre. Once Christmas trees are harvested from specific acreage, the requirement for those harvested acres will revert to the in-lieu of income requirement.

As an example, if the total amount of acres devoted to Christmas tree production is six acres, three of which are undergoing harvest and three of which have yet to reach maturity, the gross income requirement would be \$6,000.

**MLRA 136 – Piedmont, MLRA 137 – Sandhills, MLRA 133A – Upper Coastal Plain,
MLRA 153A – Lower Coastal Plain, and MLRA 153B – Tidewater.**

The in-lieu of income requirement is for acreage in production but not yet undergoing harvest, and will be determined by sound management practices, best evidenced by the following:

1. Sites prepared by controlling problem weeds and saplings, taking soil samples, and applying fertilizer and/or lime as appropriate.
2. Generally, a 7' x 7' spacing producing approximately 900 potential trees per acre. Spacing must allow for adequate air movement around the trees. (There may be variations in the spacing dependent on the species being grown, most likely Virginia Pine, White Pine, Eastern Red Cedar, and Leyland Cypress. All reasonable spacing practices should be acceptable.)
3. A program for insect and weed control.
4. Generally a five-to-six year setting to harvest cycle. (Due to the species being grown, soil conditions and growing practices, most operations are capable of producing trees for market in the five-to-six year range. However, the combined effect of adverse weather and disease outbreak may force greater replanting of damaged trees thereby lengthening the current cycle beyond that considered typical.)

The gross income requirement for acres undergoing Christmas tree harvest in the non-mountain regions of North Carolina (MLRAs 136, 137, 133A, 153A, and 153B) is \$1,500 per acre. Once Christmas trees are harvested from specific acreage, the requirement for those harvested acres will revert to the in-lieu of income requirement.

As an example, if the total amount of acres devoted to Christmas tree production is six acres, three of which are undergoing harvest and three of which have yet to reach maturity, the gross income requirement would be \$4,500.

Procedure for Forestry Schedules

The charge to the Forestry Group is to develop five net income per-acre ranges for each MLRA based on the ability of the soils to produce timber income. The task is confounded by variable species and stand type; management level, costs and opportunities; markets and stumpage prices; topographies; and landowner objectives across North Carolina.

In an attempt to develop realistic net income per acre in each MLRA, the Forestry Group considered the following items by area:

1. Soil productivity and indicator tree species (or stand type);
2. Average stand establishment and annual management costs;
3. Average rotation length and timber yield; and
4. Average timber stumpage prices.

Having selected the appropriate combinations above, the harvest value (gross income) from a managed rotation on a given soil productivity level can be calculated, netted of costs and amortized to arrive at the net income per acre per year soil expectation value. The ensuing discussion introduces users of this manual to the procedure, literature and software citations and decisions leading to the five forest land classes for each MLRA. Column numbers beside sub-headings refer to columns in the Forestry Net Present Values Table.

Soil Productivity/Indicator Species Selection (Col. 1). Soil productivity in forestry is measured by site index (SI). Site index is the height to which trees of a given species will grow on a given soil/site over a designed period of time (usually 50 or 25 years, depending on species, site or age

of site table). The Forestry Group identified key indicator species (or stand types) for each MLRA and then assigned site index ranges for the indicator species that captured the management opportunities for that region. The site index ranges became the productivity class basis for further calculations of timber yield and generally can be correlated to Natural Resource Conservation Service (NRCS) cubic foot per acre productivity classes for most stand types. By MLRA, the following site index ranges and species/stand types cover the overwhelming majority of soils/sites and management opportunities.

MLRA 153A, 153B, 137, 136, 133A:

<u>Species/Stand Type</u>	<u>SI Range</u> (50 yr. basis)
Loblolly pine	86-104
Loblolly pine	66-85
Loblolly pine	60-65
Mixed hardwoods	Mixed species and site indices on coves, river bottoms, bottomlands
Pond and/or longleaf pine	50-55
Upland hardwoods (MLRA 136)	40-68 (Upland oak)

MLRA 130:

<u>Species/Stand Type</u>	<u>SI Range</u> (50 yr. basis)
White pine	70-89
White pine	55-69
Shortleaf/mixed hardwoods	Mixed species/sites (SI 42-58 shortleaf)
Bottomland/cove hardwoods	Mixed species/site indices on coves and bottoms
Upland oak ridges	40-68

The site index ranges above, in most cases, can be correlated to individual soil series (and series' phases) according to NRCS cubic foot per acre productivity classes. An exception will be the cove, bottomland, river bottom, and other hardwood sites where topographic position must also be

considered. The Soils Group is responsible for assigning soil series to the appropriate class for agriculture, horticulture and forestry.

Stand Establishment and Annual Management Costs (Columns 2 and 3). Stand establishment costs include site preparation and tree planting costs. Costs vary from \$0 to over \$200 per acre depending on soils, species, and management objectives. No cost would be incurred for natural regeneration (as practiced for hardwoods) with costs increasing as pine plantations are intensively managed on highly productive sites. The second column in the Forestry Net Present Values Table contains average establishment costs for the past five years as reported by the N.C. Forest Service for site classes in each MLRA.

Annual management may include costs of pine release, timber stand improvement activities, prescribed burning, boundary line maintenance, consultant fees and other contractual services. Cost may vary from \$0 on typical floodplain or bottomland stands to as high as \$6 per acre per year on intensively managed pine plantations. Annual management costs in Forestry Net Present Values Table are the best estimates under average stand management regimes by site class.

Rotation Length and Timber Yields (Columns 4, 5, 6). Saw timber rotations are recommended on all sites in North Carolina. This decision is based on the market situation throughout the state, particularly the scarce markets for low quality and small-diameter pine and hardwood, which normally would be used for pulpwood. Timber thinnings are not available to most woodlot managers and, therefore, rotations are assumed to proceed unthinned until the optimum economic product mix is achieved.

Timber yields are based on the most current yield models developed at the N.C. State University College of Natural Resources for loblolly pine. (Hafley, Smith, and Buford, 1982) and natural hardwood stands (Gardner et al. 1982). White pine yields, mountain mixed stand yields, and upland oak yields are derived from U.S. Forest Service yield models developed by Vimmerstedt (1962) and McClure and Knight. Longleaf and pond pine yields are from Schumacher and Coile (1960).

Timber Stumpage Prices (Columns 7 and 8). Cost of forestry operations are derived from the past five-year regional data (provided by the NC Forest Service). For timber, stumpage prices (prices paid for standing timber to landowners) are derived over the same 5-year period from regional timber price data obtained from Timber Mart-South, Inc, or similar timber price reporting system.

Harvest Values (Column 9). Multiplication of timber yields (columns 5 and 6) times the respective timber stumpage prices (columns 7 and 8) gives the gross harvest value of one rotation.

Annualized Net Present Value (NPV) (Column 10). Harvest values (column 9) are discounted to present value at a 4 percent discount rate, which is consistent with rates used and documented by the U.S. Forest Service, forestry industry and forestry economists. This rate approximates the long-term measures of the opportunity cost of capital in the private sector of the U. S. economy (Row et al. 1981; Gunter and Haney, 1984). The respective establishment costs and the present value of annual management costs are subtracted from the present value of the income to obtain the net

present value of the timber stand. This is then amortized over the life of the rotation to arrive at the annualized net present value (or annual net income) figure

Forestry Net Present Value

Indicator Species or Stand Types, Lengths of Rotation, Costs, Yields, Price and Annualized Net Present Value per Acre of Land by Site Index Ranges in Each Major Land Resource Area, North Carolina.

(1) Species/Stand Type	(2) Est. Cost	(3) Mgmt. Cost	(4) Rot. Lgth.	(5) Yield	(6) Yield	(7) Price /mbf	(8) Price /cd	(9) Present Value of Harvest	(10) Annualized NPV
MLRAs 153A and 133A									
UP LCP	(\$)	(\$)	(yrs)	(MBF)	(cds)	(\$)	(\$)	(\$)	(\$)
Mixed hardwoods	0.00	0	50.00	11.50	44.0	231.8	14.24	463.25	21.56
Loblolly pine (86-104)	367.40	51.8761	30.00	12.00	14.4	228.2	33.58	993.29	33.20
Loblolly pine (66-85)	258.40	34.58407	30.00	7.00	16.8	228.2	33.58	666.38	21.59
Loblolly pine (60-65)	131.40	19.79277	40.00	4.80	12.7	228.2	33.58	316.95	8.37
Pond pine (50-55)	48.00	10.74109	50.00	2.70	20.0	228.2	33.58	181.19	5.70
Longleaf pine	48.00	10.74109	50.00	3.20	8.0	228.2	33.58	140.54	4.75
MLRA 153B									
TIDEWATER									
Mixed hardwoods	0.00	0	50.00	8.43	44.0	231.8	14.24	363.12	16.90
Loblolly pine (86-104)	458.90	51.8761	30.00	12.00	14.4	228.2	33.58	993.29	27.90
Loblolly pine (66-85)	258.40	34.58407	30.00	7.00	16.8	228.2	33.58	666.38	21.59
Loblolly pine (60-65)	131.40	19.79277	40.00	4.80	12.7	228.2	33.58	316.95	8.37
Pond pine	48.00	10.74109	50.00	2.70	20.0	228.2	33.58	181.19	5.70

Forestry Net Present Value

Indicator Species or Stand Types, Lengths of Rotation, Costs, Yields, Price and Annualized Net Present Value per Acre of Land by Site
Index Ranges in Each Major Land Resource Area, North Carolina.

(1) Species/Stand Type	(2) Est. Cost	(3) Mgmt. Cost	(4) Rot. Lgth.	(5) Yield	(6) Yield	(7) Price /mbf	(8) Price /cd	(9) Present Value of Harvest	(10) Annualized NPV
MLRA 137	(\$)	(\$)	(yrs)	(MBF)	(cds)	(\$)	(\$)	(\$)	(\$)
SANDHILLS									
Mixed hardwoods	0.00	0	50.00	11.90	46.0	231.8	14.24	480.30	22.36
Loblolly pine (86-104)	258.40	51.88	30.00	12.00	15.6	228.2	33.58	1005.71	40.22
Loblolly pine (66-85)	131.40	34.58	30.00	6.40	16.9	228.2	33.58	625.21	26.56
Loblolly pine (60-65)	55.00	21.48	50.00	7.20	7.0	228.2	33.58	264.25	8.74
Longleaf pine (50-55)	55.00	10.74	50.00	3.20	8.0	228.2	33.58	140.54	3.48
MLRA 136									
PIED									
Mixed hardwoods	0.00	0	50.00	11.90	46.0	231.8	14.24	480.30	22.36
Loblolly pine (86-104)	277.50	51.88	30.00	11.50	15.6	228.2	33.58	970.54	37.08
Loblolly pine (66-85)	154.50	34.58	30.00	6.40	16.9	228.2	33.58	625.21	25.22
Loblolly pine (60-65)	55.00	9.896	40.00	4.10	15.0	228.2	33.58	299.77	11.87
Upland hardwoods	0.00	0	50.00	6.05	32.0	228.2	33.58	345.44	16.08
MLRA 130									
WESTERN									
Mixed hardwoods	0.00	0	50.00	10.95	0.0	300.1	16.59	462.42	21.53
White pine (70-89)	281.00	34.58	30.00	17.80	0.0	166.2	21.16	912.06	34.49
White pine (55-69)	181.00	18.66	35.00	8.50	0.0	166.2	21.16	357.98	8.48
Shortleaf/mixed hwd.	0.00	0	60.00	6.00	0.0	168.6	21.16	96.15	4.25
Upland oak ridge (40-68)	0.00	0	70.00	5.32	0.0	300.1	16.59	102.53	4.38

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Alluvial land, wet	IV	II	IV
Arents, loamy	IV	II	IV
Arkaqua loam, 0 to 2 percent slopes, frequently flooded	IV	II	IV
Arkaqua loam, 0 to 2 percent slopes, occasionally flooded	II	III	II
Arkaqua loam, 0 to 2 percent slopes, rarely flooded	II	III	II
Ashe and Edneyville soils, 6 to 15 percent slopes	IV	I	III
Ashe and Edneyville soils, 15 to 25 percent slopes	IV	I	III
Ashe and Edneyville soils, 25 to 45 percent slopes	IV	I	IV
Ashe fine sandy loam, 6 to 15 percent slopes	IV	III	III
Ashe fine sandy loam, 10 to 25 percent slopes	IV	III	III
Ashe fine sandy loam, 15 to 25 percent slopes	IV	III	III
Ashe fine sandy loam, 25 to 45 percent slopes	IV	III	IV
Ashe gravelly fine sandy loam, 25 to 65 percent slopes	IV	III	IV
Ashe stony fine sandy loam, ALL	IV	III	IV
Ashe stony sandy loam, ALL	IV	III	IV
Ashe-Chestnut-Buladean complex, very stony, ALL	IV	III	IV
Ashe-Cleveland complex, stony, ALL	IV	IV	IV
Ashe-Cleveland-Rock outcrop complex, ALL	IV	IV	IV
Ashe-Rock outcrop complex, 15 to 70 percent slopes	IV	VI	IV
Augusta fine sandy loam, cool variant, 1 to 4 percent slopes (Delanco)	II	I	II
Balsam, ALL	IV	VI	IV
Balsam-Rubble land complex, windswept, ALL	IV	VI	IV
Balsam-Tanasee complex, extremely bouldery, ALL	IV	VI	IV
Bandana sandy loam, 0 to 3 percent slopes, occasionally flooded	II	II	II
Bandana-Ostin complex, 0 to 3 percent slopes, occasionally flooded	III	II	III
Biltmore, ALL	IV	II	IV
Braddock and Hayesville clay loams, eroded, ALL	III	I	III
Braddock clay loam, 2 to 6 percent slopes, eroded	II	I	III
Braddock clay loam, 2 to 8 percent slopes, eroded	II	I	III
Braddock clay loam, 6 to 15 percent slopes, eroded	II	I	III
Braddock clay loam, 8 to 15 percent slopes, eroded	II	I	III
Braddock clay loam, eroded, ALL OTHER	IV	I	III
Braddock clay loam, 15 to 30 percent slopes, eroded, stony	IV	I	IV
Braddock fine sandy loam, 15 to 30 percent slopes	III	I	III
Braddock gravelly loam, 2 to 8 percent slopes	I	I	I
Braddock gravelly loam, 8 to 15 percent slopes	II	I	I
Braddock loam, 2 to 8 percent slopes	I	I	I
Braddock loam, 8 to 15 percent slopes	II	I	I
Braddock-Urban land complex, ALL	IV	I	IV
Bradson gravelly loam, ALL	II	I	I
Brandywine stony soils, ALL	IV	IV	IV
Brasstown-Junaluska complex, 8 to 15 percent slopes	III	IV	III
Brasstown-Junaluska complex, 15 to 30 percent slopes	IV	IV	III
Brasstown-Junaluska complex, ALL OTHER	IV	IV	IV
Brevard fine sandy loam, 1 to 6 percent slopes, rarely flooded	I	I	I
Brevard loam, 2 to 6 percent slopes	I	I	I
Brevard loam, 6 to 10 percent slopes	II	I	I
Brevard loam, 7 to 15 percent slopes	II	I	I
Brevard loam, 10 to 25 percent slopes	IV	I	I
Brevard loam, 15 to 25 percent slopes	IV	I	I
Brevard loam, 25 to 45 percent slopes	IV	I	II
Brevard sandy loam, 8 to 15 percent slopes	II	I	I

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Brevard-Greenlee complex, extremely bouldery, ALL	IV	I	IV
Buladean-Chestnut complex, 15 to 30 percent slopes, stony	IV	I	III
Buladean-Chestnut complex, stony, ALL OTHER	IV	I	IV
Burton stony loam, ALL	IV	V	IV
Burton-Craggey complex, windswept, ALL	IV	VI	IV
Burton-Craggey-Rock outcrop complex, windswept, ALL	IV	VI	IV
Burton-Wayah complex, windswept, ALL	IV	VI	IV
Cashiers fine sandy loam, 2 to 8 percent slopes	II	I	I
Cashiers fine sandy loam, 8 to 15 percent slopes	II	I	II
Cashiers fine sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Cashiers fine sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Cashiers fine sandy loam, 50 to 95 percent slopes, stony	IV	I	IV
Cashiers gravelly fine sandy loam, 8 to 15 percent slopes	II	I	II
Cashiers gravelly fine sandy loam, 15 to 30 percent slopes	IV	I	II
Cashiers gravelly fine sandy loam, 30 to 50 percent slopes	IV	I	III
Cashiers gravelly fine sandy loam, 50 to 95 percent slopes	IV	I	IV
Cashiers sandy loam, 8 to 15 percent slopes, stony	II	I	II
Cashiers sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Cashiers sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Cashiers sandy loam, 50 to 95 percent slopes, stony	IV	I	IV
Cataska-Rock outcrop complex, 30 to 95 percent slopes	IV	VI	IV
Cataska-Sylco complex, 50 to 95 percent slopes	IV	VI	IV
Chandler and Fannin soils, 25 to 45 percent slopes	IV	I	IV
Chandler gravelly fine sandy loam, 8 to 15 percent slopes	IV	III	II
Chandler gravelly fine sandy loam, 15 to 30 percent slopes	IV	III	II
Chandler gravelly fine sandy loam, 30 to 50 percent slopes	IV	III	III
Chandler gravelly fine sandy loam, ALL OTHER	IV	III	IV
Chandler gravelly fine sandy loam, windswept, ALL	IV	VI	IV
Chandler loam, 2 to 8 percent slopes	III	III	II
Chandler loam, 8 to 15 percent slopes	IV	III	II
Chandler loam, 15 to 25 percent slopes	IV	III	III
Chandler loam, 25 to 65 percent slopes	IV	III	IV
Chandler silt loam, 10 to 25 percent slopes	IV	III	II
Chandler silt loam, 25 to 45 percent slopes	IV	III	III
Chandler stony loam, 45 to 70 percent slopes	IV	III	IV
Chandler stony silt loam, ALL	IV	III	IV
Chandler-Micaville complex, 8 to 15 percent slopes	IV	III	II
Chandler-Micaville complex, 15 to 30 percent slopes, stony	IV	III	II
Chandler-Micaville complex, 30 to 50 percent slopes, stony	IV	III	III
Chandler-Micaville complex, 50 to 95 percent slopes, stony	IV	III	IV
Cheoah channery loam, ALL	IV	I	IV
Cheoah channery loam, stony, ALL	IV	I	IV
Cheoah channery loam, windswept, stony	IV	VI	IV
Chester clay loam, 15 to 45 percent slopes, eroded (Evard)	IV	I	III
Chester fine sandy loam, 6 to 15 percent slopes (Evard)	II	I	I
Chester fine sandy loam, 15 to 25 percent slopes (Evard)	II	I	III
Chester fine sandy loam, 25 to 45 percent slopes (Evard)	IV	I	III
Chester loam, 2 to 6 percent slopes	II	I	I
Chester loam, 6 to 10 percent slopes	III	I	I
Chester loam, 10 to 25 percent slopes	IV	I	II
Chester loam, 25 to 45 percent slopes	IV	I	III
Chester stony loam, 10 to 15 percent slopes (Evard)	III	I	III

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Chester stony loam, (Evard), ALL OTHER	IV	I	IV
Chestnut and Edneyville soils, 15 to 25 percent slopes	IV	I	II
Chestnut and Edneyville soils, 25 to 50 percent slopes	IV	I	III
Chestnut gravelly loam, 50 to 80 percent slopes	IV	III	IV
Chestnut-Ashe complex, ALL	IV	III	IV
Chestnut-Buladean complex, 8 to 15 percent slopes, rocky	III	III	III
Chestnut-Buladean complex, stony, ALL	IV	III	IV
Chestnut-Cleveland-Rock outcrop complex, windswept, ALL	IV	VI	IV
Chestnut-Edneyville complex, 8 to 25 percent slopes, stony	IV	III	III
Chestnut-Edneyville complex, 25 to 60 percent slopes, stony	IV	III	IV
Chestnut-Edneyville complex, windswept, stony, ALL	IV	VI	IV
Chestoa-Ditney-Rock outcrop complex, 30 to 95 percent slopes, very bouldery	IV	VI	IV
Cleveland-Chestnut-Rock outcrop complex, windswept, ALL	IV	VI	IV
Cleveland-Rock outcrop complex, 8 to 90 percent slopes	IV	VI	IV
Clifffield-Cowee complex, 15 to 30 percent slopes, very stony	IV	V	IV
Clifffield-Fairview complex, 15 to 25 percent slopes	IV	V	IV
Clifffield-Pigeonroost complex, very stony, ALL	IV	V	IV
Clifffield-Rhodhiss complex, 25 to 60 percent slopes, very stony	IV	V	IV
Clifffield-Rock outcrop complex, 50 to 95 percent slopes	IV	VI	IV
Clifffield-Woolwine complex, 8 to 15 percent slopes	IV	V	IV
Clifton (Evard) stony loam, ALL	IV	I	IV
Clifton clay loam, 8 to 15 percent slopes, eroded	III	I	III
Clifton clay loam, 15 to 30 percent slopes, eroded	IV	I	III
Clifton clay loam, 30 to 50 percent slopes, eroded	IV	I	IIII
Clifton loam, 2 to 8 percent slopes	II	I	I
Clifton loam, 6 to 10 percent slopes	II	I	I
Clifton loam, 8 to 15 percent slopes	II	I	II
Clifton loam, 10 to 25 percent slopes	IV	I	II
Clifton loam, 15 to 25 percent slopes	IV	I	II
Clifton loam, 25 to 45 percent slopes	IV	I	III
Clifton stony loam, 15 to 45 percent slopes	IV	I	IV
Clingman-Craggey-Rock outcrop complex, windswept, 15 to 95 percent slopes, extremely bouldery	IV	VI	IV
Codorus, ALL	II	II	III
Colvard, ALL	I	II	III
Comus, ALL	I	II	III
Cowee gravelly loam, stony, ALL	IV	V	IV
Cowee-Evard-Urban land complex, 15 to 30 percent slopes	IV	III	IV
Cowee-Saluda complex, stony, ALL	IV	V	IV
Craggey-Rock outcrop complex, 40 to 90 percent slopes	IV	VI	IV
Craggey-Rock outcrop-Clingman complex, windswept, rubbly, ALL	IV	VI	IV
Crossnore-Jeffrey complex, very stony, ALL	IV	I	IV
Cullasaja cobbly fine sandy loam, 8 to 30 percent slopes, very bouldery	IV	II	IV
Cullasaja cobbly loam, extremely bouldery, ALL	IV	II	IV
Cullasaja very cobbly fine sandy loam, extremely bouldery, ALL	IV	II	IV
Cullasaja very cobbly loam, extremely bouldery, ALL	IV	II	IV
Cullasaja very cobbly sandy loam, extremely bouldery, ALL	IV	II	IV
Cullasaja-Tuckasegee complex, 8 to 15 percent slopes, stony	IV	II	II
Cullasaja-Tuckasegee complex, 15 to 30 percent slopes, stony	IV	II	II
Cullasaja-Tuckasegee complex, 30 to 50 percent slopes, stony	IV	II	III
Cullasaja-Tuckasegee complex, 50 to 90 percent slopes, stony	IV	II	IV
Cullasaja-Tuckasegee complex, 50 to 95 percent slopes, stony	IV	II	IV

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Cullasaja-Tusquitee complex, 10 to 45 percent slopes	IV	II	III
Cullowhee fine sandy loam, 0 to 2 percent slopes, occasionally flooded	II	II	II
Cullowhee, frequently flooded, ALL	IV	II	IV
Cullowhee-Nikwasi complex, 0 to 2 percent slopes, frequently flooded	IV	II	IV
Delanco (Dillard) loam, ALL	I	I	I
Delanco fine sandy loam, 2 to 6 percent slopes	II	I	I
Dellwood gravelly fine sandy loam, 0 to 5 percent slopes, frequently flooded	IV	II	IV
Dellwood, occasionally flooded, ALL	III	II	III
Dellwood-Reddies complex, 0 to 3 percent slopes, occasionally flooded	III	II	III
Dellwood-Urban land complex, 0 to 3 percent slopes, occasionally flooded	IV	II	IV
Dillard, ALL	I	I	I
Dillsboro clay loam, 2 to 8 percent slopes	I	I	I
Dillsboro clay loam, 8 to 15 percent slopes, rarely flooded	II	I	II
Dillsboro clay loam, 8 to 15 percent slopes, stony	III	I	II
Dillsboro clay loam, 15 to 30 percent slopes, stony	IV	I	II
Dillsboro loam, 2 to 8 percent slopes	I	I	I
Dillsboro loam, 8 to 15 percent slopes	II	I	II
Dillsboro-Urban land complex, 2 to 15 percent slopes	IV	I	IV
Ditney-Unicoi complex, very stony, ALL	IV	VI	IV
Ditney-Unicoi complex, 50 to 95 percent slopes, very rocky	IV	VI	IV
Ditney-Unicoi-Rock outcrop complex, ALL	IV	VI	IV
Edneytown gravelly sandy loam, 8 to 25 percent slopes	IV	I	III
Edneytown-Chestnut complex, 30 to 50 percent slopes, stony	IV	I	III
Edneytown-Chestnut complex, 50 to 80 percent slopes, stony	IV	I	IV
Edneytown-Pigeonroost complex, 8 to 15 percent slopes, stony	III	I	III
Edneytown-Pigeonroost complex, 15 to 30 percent slopes, stony	IV	I	III
Edneytown-Pigeonroost complex, 30 to 50 percent slopes, stony	IV	I	IV
Edneyville (Edneytown) fine sandy loam, 7 to 15 percent slopes	III	I	III
Edneyville (Edneytown) fine sandy loam, 15 to 25 percent slopes	IV	I	IV
Edneyville (Edneytown) fine sandy loam, 25 to 45 percent slopes	IV	I	IV
Edneyville loam, 15 to 25 percent slopes	IV	I	II
Edneyville loam, 25 to 45 percent slopes	IV	I	III
Edneyville stony loam, 45 to 70 percent slopes	IV	I	IV
Edneyville-Chestnut complex, 2 to 8 percent slopes, stony	III	I	III
Edneyville-Chestnut complex, 8 to 15 percent slopes, stony	IV	I	III
Edneyville-Chestnut complex, 10 to 25 percent slopes, stony	IV	I	III
Edneyville-Chestnut complex, 15 to 30 percent slopes, stony	IV	I	III
Edneyville-Chestnut complex, ALL OTHER	IV	I	IV
Edneyville-Chestnut-Urban land complex, ALL	IV	I	IV
Ellijay silty clay loam, 2 to 8 percent slopes, eroded	III	I	I
Ellijay silty clay loam, 8 to 15 percent slopes, eroded	IV	I	I
Ellijay silty clay loam, eroded, ALL OTHER	IV	I	II
Elsinboro loam, ALL	I	I	I
Eutrochrepts, mined, 30 to 50 percent slopes, very stony	IV	VI	IV
Evard and Saluda fine sandy loams, 25 to 60 percent slopes	IV	I	IV
Evard fine sandy loam, 7 to 15 percent slopes	III	I	II
Evard fine sandy loam, 15 to 25 percent slopes	IV	I	II
Evard fine sandy loam, 25 to 50 percent slopes	IV	I	III
Evard gravelly sandy loam, 6 to 15 percent slopes	III	I	II
Evard gravelly sandy loam, 15 to 25 percent slopes	IV	I	III
Evard loam, ALL	IV	I	IV
Evard soils, 15 to 25 percent slopes	IV	I	III

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Evard soils, ALL OTHER	IV	I	IV
Evard stony loam, 25 to 60 percent slopes	IV	I	IV
Evard-Cowee complex, 2 to 8 percent slopes	III	I	II
Evard-Cowee complex, 8 to 15 percent slopes	III	I	II
Evard-Cowee complex, 8 to 15 percent slopes, eroded	III	I	II
Evard-Cowee complex, 8 to 25 percent slopes, stony	IV	I	III
Evard-Cowee complex, ALL OTHER	IV	I	IV
Evard-Cowee-Urban land complex, ALL	IV	I	IV
Fannin fine sandy loam, 8 to 15 percent slopes	III	I	I
Fannin fine sandy loam, 15 to 30 percent slopes	IV	I	II
Fannin fine sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Fannin fine sandy loam, 30 to 50 percent slopes	IV	I	II
Fannin fine sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Fannin fine sandy loam, 50 to 95 percent slopes	IV	I	III
Fannin loam, 8 to 15 percent slopes	III	I	II
Fannin loam, 15 to 25 percent slopes	IV	I	III
Fannin loam, 25 to 45 percent slopes	IV	I	III
Fannin loam, 30 to 50 percent slopes, eroded	IV	I	III
Fannin loam, 45 to 70 percent slopes	IV	I	IV
Fannin sandy clay loam, 8 to 15 percent slopes, eroded	III	I	II
Fannin sandy clay loam, eroded, ALL OTHER	IV	I	III
Fannin silt loam, 6 to 10 percent slopes, eroded	III	I	II
Fannin silt loam, 7 to 15 percent slopes	III	I	II
Fannin silt loam, 10 to 25 percent slopes, eroded	IV	I	III
Fannin silt loam, 15 to 25 percent slopes	IV	I	III
Fannin silt loam, 25 to 45 percent slopes	IV	I	III
Fannin silty clay loam, 15 to 45 percent slopes, eroded	IV	I	IV
Fannin-Chestnut complex, 50 to 85 percent slopes, rocky	IV	I	IV
Fannin-Cowee complex, 15 to 30 percent slopes, stony	IV	I	III
Fannin-Cowee complex, stony, ALL OTHER	IV	I	IV
Fannin-Urban land complex, 2 to 15 percent slopes	IV	I	IV
Fletcher and Fannin soils, 6 to 15 percent slopes	III	I	II
Fletcher and Fannin soils, 15 to 25 percent slopes	IV	I	II
Fluvaquents-Udifluvents complex, occasionally flooded, ALL	III	II	IV
Fontaflora-Ostin complex	IV	II	IV
French fine sandy loam, 0 to 3 percent slopes, frequently flooded	IV	II	IV
Greenlee ALL	IV	I	IV
Greenlee-Ostin complex, 3 to 40 percent slopes, very stony	IV	I	IV
Greenlee-Tate complex, ALL	IV	I	IV
Greenlee-Tate-Ostin complex, 1 to 15 percent slopes, extremely stony	IV	I	IV
Gullied land	IV	VI	IV
Harmiller-Shinbone complex, 15 to 30 percent slopes, stony	IV	III	III
Harmiller-Shinbone complex, 30 to 50 percent slopes, stony	IV	III	III
Hatboro loam	IV	II	IV
Hayesville channery fine sandy loam, 8 to 15 percent slopes, very stony	IV	I	II
Hayesville channery fine sandy loam, 15 to 25 percent slopes, very stony	IV	I	III
Hayesville channery fine sandy loam, 25 to 60 percent slopes, very stony	IV	I	IV
Hayesville clay loam, 2 to 8 percent slopes, eroded	III	I	II
Hayesville clay loam, 6 to 15 percent slopes, eroded	IV	I	II
Hayesville clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Hayesville clay loam, 10 to 25 percent slopes, severely eroded	IV	I	III
Hayesville clay loam, 15 to 30 percent slopes, eroded	IV	I	III

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Hayesville fine sandy loam, 6 to 15 percent slopes	III	I	I
Hayesville fine sandy loam, 8 to 15 percent slopes	III	I	I
Hayesville fine sandy loam, 15 to 25 percent slopes	III	I	II
Hayesville fine sandy loam, 15 to 30 percent slopes	III	I	II
Hayesville fine sandy loam, 25 to 50 percent slopes	IV	I	III
Hayesville loam, 2 to 7 percent slopes	II	I	I
Hayesville loam, 2 to 8 percent slopes	II	I	I
Hayesville loam, 6 to 10 percent slopes	II	I	I
Hayesville loam, 6 to 15 percent slopes	III	I	I
Hayesville loam, 7 to 15 percent slopes	III	I	I
Hayesville loam, 8 to 15 percent slopes	III	I	I
Hayesville loam, 10 to 25 percent slopes	III	I	II
Hayesville loam, 15 to 25 percent slopes	III	I	II
Hayesville loam, 15 to 30 percent slopes	III	I	II
Hayesville sandy clay loam, 15 to 30 percent slopes, eroded	IV	I	III
Hayesville sandy clay loam, eroded, ALL OTHER	III	I	II
Hayesville-Evard complex, 15 to 25 percent slopes	III	I	II
Hayesville-Evard-Urban land complex, 15 to 25 percent slopes	IV	I	IV
Hayesville-Sauratown complex, 2 to 8 percent slopes	II	I	II
Hayesville-Sauratown complex, 8 to 15 percent slopes	III	I	II
Hayesville-Sauratown complex, 15 to 25 percent slopes	III	I	III
Hayesville-Sauratown complex, 25 to 60 percent slopes	IV	I	III
Hayesville-Urban land complex, ALL	IV	I	IV
Haywood stony loam, 15 to 25 percent slopes	IV	I	III
Haywood stony loam, 25 to 50 percent slopes	IV	I	IV
Hemphill, rarely flooded, ALL	IV	II	IV
Humaquepts, loamy, 2 to 8 percent slopes, stony	IV	II	IV
Hunt Dale clay loam, 8 to 15 percent slopes, stony	III	I	II
Hunt Dale clay loam, 15 to 30 percent slopes, stony	IV	I	II
Hunt Dale clay loam, 30 to 50 percent slopes, stony	IV	I	III
Hunt Dale silty clay loam, 15 to 30 percent slopes, stony	IV	I	II
Hunt Dale silty clay loam, 30 to 50 percent slopes, very stony	IV	I	III
Hunt Dale silty clay loam, 50 to 95 percent slopes, very stony	IV	I	IV
Iotla sandy loam, 0 to 2 percent slopes, occasionally flooded	II	II	III
Junaluska-Brasstown complex, 6 to 25 percent slopes	IV	IV	II
Junaluska-Brasstown complex, 15 to 30 percent slopes	IV	IV	III
Junaluska-Brasstown complex, 25 to 60 percent slopes	IV	IV	III
Junaluska-Brasstown complex, 30 to 50 percent slopes	IV	IV	IV
Junaluska-Tsali complex, ALL	IV	IV	IV
Keener-Lostcove complex, 15 to 30 percent slopes, very stony	IV	I	III
Keener-Lostcove complex, 30 to 50 percent slopes, very stony	IV	I	IV
Kinkora loam	IV	I	III
Lonon loam, 2 to 8 percent slopes	I	I	I
Lonon loam, 8 to 15 percent slopes	II	I	I
Lonon loam, 15 to 30 percent slopes	IV	I	II
Lonon-Northcove complex, 6 to 15 percent slopes	IV	I	III
Maymead fine sandy loam, ALL	IV	I	II
Maymead-Greenlee-Potomac complex, 3 to 25 percent slopes	IV	I	IV
Nikwasi, ALL	IV	II	IV
Northcove very cobbly loam, ALL	IV	I	IV
Northcove-Maymead complex, extremely stony, ALL	IV	I	IV
Oconaluftee channery loam, ALL	IV	VI	IV

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Oconaluftee channery loam, windswept, ALL	IV	VI	IV
Ostin, occasionally flooded, ALL	IV	II	IV
Pigeonroost-Edneytown complex, stony, ALL	IV	I	III
Pineola gravelly loam, 2 to 8 percent slopes	IV	I	II
Pineola gravelly loam, 8 to 15 percent slopes, stony	IV	I	II
Pineola gravelly loam, 15 to 30 percent slopes, stony	IV	I	III
Pits, ALL	IV	VI	IV
Plott fine sandy loam, 8 to 15 percent slopes, stony	III	I	II
Plott fine sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Plott fine sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Plott fine sandy loam, 50 to 95 percent slopes, stony	IV	I	IV
Plott loam, 15 to 30 percent slopes, stony	IV	I	II
Plott loam, 30 to 50 percent slopes, stony	IV	I	III
Plott loam, 50 to 95 percent slopes, stony	IV	I	IV
Ponzer muck, cool variant	IV	VI	IV
Porters gravelly loam, 8 to 15 percent slopes, stony	III	I	II
Porters gravelly loam, 15 to 30 percent slopes, stony	IV	I	II
Porters gravelly loam, 30 to 50 percent slopes, stony	IV	I	III
Porters gravelly loam, 50 to 80 percent slopes, stony	IV	I	IV
Porters loam, 25 to 45 percent slopes	IV	I	III
Porters loam, 25 to 80 percent slopes, stony	IV	I	IV
Porters loam, 30 to 50 percent slopes, stony	IV	I	IV
Porters loam, ALL OTHER	IV	I	II
Porters stony loam, 10 to 25 percent slopes	IV	I	II
Porters stony loam, 15 to 25 percent slopes	IV	I	II
Porters stony loam, 15 to 45 percent slopes	IV	I	II
Porters stony loam, 25 to 45 percent slopes	IV	I	III
Porters stony loam, ALL OTHER	IV	I	IV
Porters-Unaka complex, 8 to 15 percent slopes, stony	IV	I	II
Porters-Unaka complex, 15 to 30 percent slopes, stony	IV	I	II
Porters-Unaka complex, 30 to 50 percent slopes, stony	IV	I	III
Porters-Unaka complex, 50 to 95 percent slopes, rocky	IV	I	IV
Potomac, frequently flooded, ALL	IV	II	IV
Potomac-Iotla complex, 0 to 3 percent slopes, mounded, frequently flooded	IV	II	IV
Rabun loam, 6 to 25 percent slopes	IV	I	II
Rabun loam, 25 to 50 percent slopes	IV	I	III
Reddies, occasionally flooded	II	II	II
Reddies, frequently flooded, ALL	IV	II	IV
Rock outcrop	IV	VI	IV
Rock outcrop-Ashe complex, ALL	IV	VI	IV
Rock outcrop-Ashe-Cleveland complex, ALL	IV	VI	IV
Rock outcrop-Cataska complex, ALL	IV	VI	IV
Rock outcrop-Cleveland complex, ALL	IV	VI	IV
Rock outcrop-Cleveland complex, windswept, ALL	IV	VI	IV
Rock outcrop-Craggey complex, windswept, ALL	IV	VI	IV
Rosman, frequently flooded, ALL	IV	II	IV
Rosman, ALL OTHER	I	II	I
Rosman-Reddies complex, 0 to 3 percent slopes, occasionally flooded	I	II	I
Saunook gravelly loam, 2 to 8 percent slopes	I	I	I
Saunook gravelly loam, 8 to 15 percent slopes	I	I	I
Saunook gravelly loam, 8 to 15 percent slopes, stony	II	I	II
Saunook gravelly loam, 15 to 30 percent slopes	IV	I	II

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Saunook gravelly loam, 15 to 30 percent slopes, stony	IV	I	II
Saunook gravelly loam, 30 to 50 percent slopes, stony	IV	I	III
Saunook loam, 2 to 8 percent slopes	I	I	I
Saunook loam, 8 to 15 percent slopes	I	I	I
Saunook loam, 8 to 15 percent slopes, stony	II	I	II
Saunook loam, 15 to 30 percent slopes, stony	IV	I	II
Saunook loam, 15 to 30 percent slopes, very stony	IV	I	III
Saunook loam, 30 to 50 percent slopes, very stony	IV	I	IV
Saunook sandy loam, 2 to 8 percent slopes	I	I	I
Saunook sandy loam, 8 to 15 percent slopes, stony	II	I	II
Saunook silt loam, 2 to 8 percent slopes	I	I	I
Saunook silt loam, 8 to 15 percent slopes, stony	II	I	II
Saunook-Nikwasi complex, 2 to 15 percent slopes	IV	I	III
Saunook-Thunder complex, ALL	IV	I	III
Saunook-Urban land complex, 2 to 15 percent slopes	IV	I	IV
Sauratown channery fine sandy loam, 8 to 15 percent slopes	IV	V	III
Sauratown channery fine sandy loam, 8 to 15 percent slopes, very stony	IV	V	III
Sauratown channery fine sandy loam, ALL OTHER	IV	V	IV
Soco-Cataska-Rock outcrop complex, 50 to 95 percent slopes	IV	VI	IV
Soco-Ditney complex, 6 to 25 percent slopes, stony	IV	III	III
Soco-Ditney complex, 8 to 15 percent slopes, very stony	IV	III	III
Soco-Ditney complex, 15 to 30 percent slopes, very stony	IV	III	III
Soco-Ditney complex, ALL OTHER	IV	III	IV
Soco-Stecoah complex, 8 to 15 percent slopes, stony	IV	III	II
Soco-Stecoah complex, 15 to 30 percent slopes	IV	III	III
Soco-Stecoah complex, 15 to 30 percent slopes, stony	IV	III	III
Soco-Stecoah complex, ALL OTHER	IV	III	IV
Soco-Stecoah complex, windswept, 30 to 50 percent slopes	IV	VI	IV
Spivey cobbly loam, extremely bouldery, ALL	IV	I	IV
Spivey stony loam, 10 to 40 percent slopes	IV	I	IV
Spivey-Santeetlah complex, 8 to 15 percent slopes, stony	IV	I	III
Spivey-Santeetlah complex, 15 to 30 percent slopes, stony	IV	I	III
Spivey-Santeetlah complex, stony, ALL OTHER	IV	I	IV
Spivey-Whiteoak complex, ALL	IV	I	IV
Statler, rarely flooded, ALL	I	I	I
Stecoah-Soco complex, 15 to 30 percent slopes, stony	IV	I	III
Stecoah-Soco complex, 30 to 50 percent slopes, stony	IV	I	III
Stecoah-Soco complex, 50 to 80 percent slopes, stony	IV	I	IV
Stony colluvial land	IV	II	IV
Stony land	IV	VI	IV
Stony steep land	IV	VI	IV
Suncook loamy sand, ALL	IV	II	II
Sylco-Cataska complex, ALL	IV	IV	IV
Sylco-Rock outcrop complex, 50 to 95 percent slopes	IV	IV	IV
Sylco-Soco complex, 10 to 30 percent slopes, stony	IV	IV	IV
Sylva-Whiteside complex, ALL	IV	I	II
Talladega, ALL	IV	IV	IV
Tanasee-Balsam complex, ALL	IV	VI	IV
Tate fine sandy loam, 2 to 6 percent slopes	I	I	I
Tate fine sandy loam, 2 to 7 percent slopes	I	I	I
Tate fine sandy loam, 2 to 8 percent slopes	I	I	I
Tate fine sandy loam, 2 to 8 percent slopes, very stony	IV	I	II

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Tate fine sandy loam, 6 to 15 percent slopes	II	I	I
Tate fine sandy loam, 7 to 15 percent slopes	II	I	I
Tate fine sandy loam, 8 to 15 percent slopes	II	I	I
Tate fine sandy loam, 8 to 25 percent slopes	IV	I	II
Tate fine sandy loam, 15 to 25 percent slopes	IV	I	II
Tate gravelly loam, 8 to 15 percent slopes	II	I	I
Tate gravelly loam, 8 to 15 percent slopes, stony	II	I	II
Tate gravelly loam, 15 to 30 percent slopes, stony	IV	I	II
Tate loam, 2 to 6 percent slopes	I	I	I
Tate loam, 2 to 8 percent slopes	I	I	I
Tate loam, 6 to 10 percent slopes	II	I	I
Tate loam, 6 to 15 percent slopes	II	I	I
Tate loam, 8 to 15 percent slopes	II	I	I
Tate loam, 10 to 15 percent slopes	II	I	I
Tate loam, 15 to 25 percent slopes	IV	I	II
Tate loam, 15 to 30 percent slopes	IV	I	II
Tate-Cullowhee complex, 0 to 25 percent slopes	IV	I	II
Tate-French complex, 2 to 10 percent slopes	II	I	II
Tate-Greenlee complex, ALL	IV	I	IV
Thunder-Saunook complex, ALL	IV	II	IV
Toecane-Tusquitee complex, ALL	IV	II	III
Toxaway, ALL	IV	II	IV
Transylvania silt loam	I	II	II
Trimont gravelly loam, ALL	IV	I	IV
Tuckasegee-Cullasaja complex, 8 to 15 percent slopes, stony	IV	II	III
Tuckasegee-Cullasaja complex, 15 to 30 percent slopes, very stony	IV	II	IV
Tuckasegee-Cullasaja complex, 30 to 50 percent slopes, extremely stony	IV	II	IV
Tuckasegee-Whiteside complex, 2 to 8 percent slopes	I	II	I
Tuckasegee-Whiteside complex, 8 to 15 percent slopes	II	II	I
Tusquitee and Spivey stony soils, ALL	IV	I	IV
Tusquitee loam, 6 to 10 percent slopes	I	I	I
Tusquitee loam, 6 to 15 percent slopes	II	I	I
Tusquitee loam, 7 to 15 percent slopes	II	I	I
Tusquitee loam, 8 to 15 percent slopes	II	I	I
Tusquitee loam, 10 to 15 percent slopes	II	I	I
Tusquitee loam, 15 to 25 percent slopes	IV	I	II
Tusquitee stony loam, 25 to 45 percent slopes	IV	I	IV
Tusquitee stony loam, ALL OTHER	IV	I	III
Udifluvents, frequently flooded, ALL	IV	II	IV
Udorthents, loamy, ALL	IV	V	IV
Udorthents-Pits complex, mounded, 0 to 2 percent slopes, occasionally flooded	IV	V	IV
Udorthents-Urban land complex, ALL	IV	V	IV
Unaka-Porters complex, very rocky, ALL	IV	V	IV
Unaka-Rock outcrop complex, 50 to 95 percent slopes, very bouldery	IV	VI	IV
Unicoi-Rock outcrop complex, 30 to 95 percent slopes, extremely bouldery	IV	V	IV
Unison fine sandy loam, 2 to 8 percent slopes	I	I	I
Unison fine sandy loam, 8 to 15 percent slopes	II	I	I
Unison fine sandy loam, 15 to 25 percent slopes	IV	I	II
Unison loam, 2 to 8 percent slopes	I	I	I
Unison loam, 8 to 15 percent slopes	II	I	I
Unison loam, 15 to 30 percent slopes	IV	I	II
Urban land	IV	VI	II

MLRA 130 – Mountains

Map Unit Name	Agri	For	Hort
Watauga loam, 6 to 10 percent slopes	III	I	II
Watauga loam, 6 to 15 percent slopes	III	I	II
Watauga loam, 8 to 15 percent slopes	III	I	II
Watauga loam, ALL OTHER	IV	I	III
Watauga sandy loam, 8 to 15 percent slopes, stony	III	I	II
Watauga sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Watauga sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Watauga stony loam, 15 to 45 percent slopes	IV	I	IV
Wayah loam, windswept, eroded, stony, ALL	IV	VI	IV
Wayah sandy loam, stony, ALL	IV	V	IV
Wayah sandy loam, windswept, stony, ALL	IV	VI	IV
Wayah-Burton complex, 15 to 30 percent slopes, bouldery	IV	V	IV
Wayah-Burton complex, 30 to 50 percent slopes, bouldery	IV	V	IV
Wayah-Burton complex, 50 to 95 percent slopes, very rocky	IV	V	IV
Wayah-Burton complex, windswept, ALL	IV	V	IV
Whiteoak cobbly loam, 8 to 15 percent slopes, stony	II	I	II
Whiteoak cobbly loam, 15 to 30 percent slopes, stony	IV	I	III
Whiteoak fine sandy loam, 2 to 8 percent slopes	I	I	I
Whiteoak fine sandy loam, 8 to 15 percent slopes, stony	II	I	II
Whiteoak fine sandy loam, 15 to 30 percent slopes, very stony	IV	I	III
Whiteside-Tuckasegee complex, 2 to 8 percent slopes	I	I	I

MLRA133A - Upper Coastal Plain

Map Unit Name	Agri	For	Hort
Alluvial land, wet	III	III	III
Alpin, ALL	IV	II	IV
Altavista, ALL	I	I	I
Altavista-Urban land complex, 0 to 3 percent slopes, rarely flooded	IV	I	IV
Augusta, ALL	I	I	I
Autryville loamy sand, ALL	III	II	III
Autryville, ALL OTHER	IV	II	IV
Autryville-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Aycock very fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Aycock, ALL OTHER	I	II	I
Ballahack fine sandy loam	I	I	I
Barclay very fine sandy loam	I	I	I
Bethera loam, 0 to 1 percent slopes	II	I	II
Bibb and Johnston soils, frequently flooded	IV	III	IV
Bibb, ALL	IV	III	IV
Blaney, ALL	IV	II	IV
Blanton, ALL	IV	V	IV
Bojac loamy fine sand, 0 to 3 percent slopes	III	II	III
Bonneau loamy fine sand, 0 to 4 percent slopes	II	II	II
Bonneau loamy sand, 0 to 4 percent slopes	II	II	II
Bonneau loamy sand, 0 to 6 percent slopes	II	II	II
Bonneau loamy sand, 6 to 12 percent slopes	III	II	III
Bonneau sand, 0 to 3 percent slopes	II	II	II
Butters fine sand, 0 to 2 percent slopes	II	II	II
Butters loamy sand, 0 to 2 percent slopes	II	II	II
Byars loam	II	I	II
Candor sand, 1 to 8 percent slopes	IV	V	IV
Candor sand, 8 to 15 percent slopes	IV	V	IV
Cape Fear loam	I	I	I
Caroline sandy loam, 0 to 2 percent slopes	II	II	II
Caroline sandy loam, 2 to 6 percent slopes	II	II	II
Centenary sand	IV	II	IV
Chastain and Bibb soils, 0 to 1 percent slopes, frequently flooded	IV	III	IV
Chastain silt loam, frequently flooded	IV	III	IV
Chewacla and Chastain soils, frequently flooded	IV	III	IV
Chewacla and Congaree loams, frequently flooded	III	III	III
Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded	IV	III	IV
Chewacla loam	II	III	II
Chewacla loam, 0 to 1 percent slopes, occasionally flooded	II	III	II
Chewacla loam, frequently flooded	IV	III	IV
Chewacla silt loam	II	III	II
Chipley loamy sand (Pactolus)	IV	II	IV
Chipley sand, 0 to 2 percent slopes	IV	II	IV
Conetoe loamy sand, ALL	III	II	III
Congaree silt loam	I	III	I
Congaree silt loam, frequently flooded	I	III	I
Cowarts loamy sand, 2 to 6 percent slopes	II	I	II
Cowarts loamy sand, 6 to 10 percent slopes	III	I	III
Cowarts sandy loam, 6 to 12 percent slopes, eroded	IV	I	IV
Coxville loam	II	I	II
Coxville sandy loam	II	I	II
Craven fine sandy loam, 0 to 1 percent slopes	II	I	II

MLRA133A - Upper Coastal Plain

Map Unit Name	Agri	For	Hort
Craven fine sandy loam, 1 to 4 percent slopes	II	I	II
Craven fine sandy loam, 4 to 10 percent slopes	III	I	III
Craven loam, 1 to 4 percent slopes	II	I	II
Craven sandy clay loam, 1 to 4 percent slopes, eroded	II	I	II
Craven sandy loam, 2 to 6 percent slopes, eroded	II	I	II
Craven sandy loam, 2 to 6 percent slopes, eroded (Gritney)	II	I	II
Craven sandy loam, 6 to 10 percent slopes, eroded (Gritney)	III	I	III
Craven-Urban land complex, 0 to 4 percent slopes	IV	I	IV
Croatan muck	I	V	I
Deloss loam	I	III	I
Dogue, ALL	II	I	II
Dothan loamy sand, 2 to 6 percent slopes	II	I	II
Dothan, ALL OTHER	I	I	I
Dragston loamy sand	I	III	I
Dunbar, ALL	II	I	II
Duplin, ALL	II	I	II
Duplin-Urban land complex, 0 to 5 percent slopes	IV	I	IV
Dystrochrepts, steep	IV	II	IV
Emporia, ALL	II	II	II
Emporia-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Emporia-Wedowee complex, 2 to 6 percent slopes	II	II	II
Eustis, ALL	IV	II	IV
Exum, ALL	I	II	I
Faceville fine sandy loam, ALL	II	II	II
Faceville loamy sand, 6 to 10 percent slopes, eroded	IV	II	IV
Faceville loamy sand, ALL OTHER	II	II	II
Faceville sandy loam, 0 to 2 percent slopes	II	II	II
Faceville sandy loam, 2 to 6 percent slopes	II	II	II
Faceville sandy loam, 2 to 6 percent slopes, eroded	III	II	III
Faceville sandy loam, 6 to 10 percent slopes, eroded	IV	II	IV
Faceville-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Foreston loamy sand, ALL	II	II	II
Fuquay, ALL	IV	II	IV
Gilead loamy sand, 0 to 2 percent slopes	III	II	III
Gilead loamy sand, 10 to 15 percent slopes	IV	II	IV
Gilead loamy sand, 2 to 6 percent slopes	IV	II	IV
Gilead loamy sand, 2 to 6 percent slopes, eroded	III	II	III
Gilead loamy sand, 6 to 10 percent slopes	IV	II	IV
Gilead loamy sand, 6 to 10 percent slopes, eroded	IV	II	IV
Gilead sandy loam, 2 to 8 percent slopes	III	II	III
Gilead sandy loam, 8 to 15 percent slopes	IV	II	IV
Goldsboro, ALL	I	I	I
Goldsboro-Urban land complex, ALL	IV	I	IV
Grantham, ALL	I	I	I
Grantham-Urban land complex	IV	I	IV
Grifton-Meggett complex, occasionally flooded	IV	I	IV
Gritney fine sandy loam, 2 to 6 percent slopes	II	II	II
Gritney fine sandy loam, 2 to 7 percent slopes	II	II	II
Gritney fine sandy loam, 4 to 8 percent slopes	III	II	III
Gritney fine sandy loam, 5 to 12 percent slopes, eroded	IV	II	IV
Gritney fine sandy loam, 6 to 10 percent slopes	III	II	III
Gritney fine sandy loam, 7 to 15 percent slopes	IV	II	IV

MLRA133A - Upper Coastal Plain

Map Unit Name	Agri	For	Hort
Gritney fine sandy loam, 10 to 15 percent slopes	IV	II	IV
Gritney loamy fine sand, 2 to 7 percent slopes	II	II	II
Gritney sandy clay loam, ALL	III	II	III
Gritney sandy loam, 2 to 5 percent slopes, eroded	III	II	III
Gritney sandy loam, 2 to 6 percent slopes	II	II	II
Gritney sandy loam, 5 to 12 percent slopes, eroded	IV	II	IV
Gritney sandy loam, 6 to 10 percent slopes	III	II	III
Gritney-Urban land complex, 2 to 12 percent slopes	IV	II	IV
Hoffman loamy sand, 6 to 10 percent slopes, eroded (Gilead)	IV	II	IV
Hoffman loamy sand, 10 to 20 percent slopes (Gilead)	III	II	III
Johns, ALL	II	I	II
Johnston, ALL	IV	III	IV
Kalmia loamy sand, 0 to 2 percent slopes	II	II	II
Kalmia loamy sand, 0 to 3 percent slopes	II	II	II
Kalmia loamy sand, 2 to 6 percent slopes	II	II	II
Kalmia loamy sand, 10 to 15 percent slopes	III	II	III
Kalmia loamy sand, 15 to 25 percent slopes	IV	II	IV
Kenansville, ALL	III	II	III
Kinston, ALL	IV	III	IV
Kureb sand, 1 to 8 percent slopes	IV	V	IV
Lakeland, ALL	IV	V	IV
Leaf loam	III	I	III
Lenoir loam	III	I	III
Leon sand, ALL	IV	V	IV
Liddell very fine sandy loam	I	I	I
Lillington-Turbeville complex, 8 to 15 percent slopes	III	II	III
Lucy loamy sand	II	II	II
Lumbee, ALL	II	I	II
Lynchburg, ALL	I	I	I
Lynchburg-Urban land complex	IV	I	IV
Lynn Haven and Torhunta soils	II	II	II
Mantachie soils, local alluvium	II	III	II
Marlboro, ALL	II	II	II
Marlboro-Cecil complex, 2 to 8 percent slopes	II	II	II
Marvyn and Gritney soils. 6 to 15 percent slopes	IV	I	IV
Marvyn loamy sand, 6 to 12 percent slopes	IV	I	IV
Maxton loamy sand, 0 to 2 percent slopes	II	II	II
McCull loam	III	II	III
McQueen loam, 1 to 6 percent slopes	II	II	II
Meggett, ALL	IV	I	IV
Muckalee, ALL	IV	III	IV
Myatt very fine sandy loam	II	I	II
Nahunta, ALL	I	I	I
Nankin ,ALL	II	II	II
Nixonton very fine sandy loam	I	I	I
Norfolk and Faceville soils, 6 to 10 percent slopes	II	II	II
Norfolk loamy fine sand, ALL	I	II	I
Norfolk loamy sand, 0 to 2 percent slopes	I	II	I
Norfolk loamy sand, 2 to 6 percent slopes	I	II	I
Norfolk loamy sand, 2 to 6 percent slopes, eroded	II	II	II
Norfolk loamy sand, 6 to 10 percent slopes	II	II	II
Norfolk loamy sand, 6 to 10 percent slopes, eroded	III	II	III

MLRA133A - Upper Coastal Plain

Map Unit Name	Agri	For	Hort
Norfolk sandy loam, 0 to 2 percent slopes	I	II	I
Norfolk sandy loam, 2 to 6 percent slopes	I	II	I
Norfolk sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Norfolk sandy loam, 6 to 10 percent slopes	II	II	II
Norfolk, Georgeville, and Faceville soils, 2 to 8 percent slopes	II	II	II
Norfolk-Urban land complex, 0 to 3 percent slopes	IV	II	IV
Norfolk-Wedowee complex, 2 to 6 percent slopes	II	II	II
Ocilla, ALL	III	II	III
Okenee loam (Paxville)	II	III	II
Orangeburg loamy sand, eroded, ALL	II	II	II
Orangeburg loamy sand, ALL OTHER	I	II	I
Pactolus, ALL	IV	II	IV
Pamlico muck	III	V	III
Pantego, ALL	I	I	I
Paxville fine sandy loam	II	III	II
Paxville loam	II	III	II
Peawick, ALL	II	II	II
Pits-Tarboro complex	IV	VI	IV
Plummer and Osier soils	IV	I	IV
Plummer, ALL	IV	V	IV
Pocalla loamy sand, 0 to 3 percent slopes	III	II	III
Polawana loamy sand, frequently flooded	IV	III	IV
Ponzer muck, siliceous subsoil variant	I	V	I
Portsmouth, ALL	I	I	I
Rains, ALL	I	I	I
Rains-Toisnot complex, 0 to 2 percent slopes	IV	I	IV
Rains-Urban land complex, ALL	IV	I	IV
Rimini sand	IV	V	IV
Riverview loam, 0 to 1 percent slopes, occasionally flooded	I	III	I
Roanoke and Wahee loams	II	III	II
Roanoke, ALL	II	III	II
Roanoke-Urban land complex	IV	III	IV
Ruston loamy sand, ALL	III	II	III
Ruston sandy loam, 2 to 6 percent slopes, eroded	IV	II	IV
Rutlege loamy sand	IV	V	IV
Seabrook loamy sand, rarely flooded	IV	II	IV
Smoothed sandy land	IV	VI	IV
St. Lucie sand (Kureb)	IV	V	IV
Stallings, ALL	II	II	II
State, ALL	I	I	I
Swamp	IV	III	IV
Tarboro, ALL	IV	II	IV
Toisnot, ALL	IV	II	IV
Tomahawk sand	III	II	III
Tomotley, ALL	I	I	I
Torhunta and Lynn Haven soils	II	I	II
Torhunta, ALL	I	I	I
Trebloc loam	I	I	I
Troup sand	IV	II	IV
Turbeville fine sandy loam, 2 to 6 percent slopes	I	II	I
Turbeville gravelly sandy loam, 2 to 8 percent slopes	II	II	II
Turbeville loamy sand, 0 to 2 percent slopes	I	II	I

MLRA133A - Upper Coastal Plain

Map Unit Name	Agri	For	Hort
Turbeville loamy sand, 2 to 6 percent slopes	I	II	I
Turbeville sandy clay loam, 2 to 6 percent slopes, eroded	II	II	II
Turbeville sandy loam, 0 to 2 percent slopes	I	II	I
Turbeville sandy loam, 2 to 6 percent slopes	I	II	I
Turbeville sandy loam, 2 to 8 percent slopes	I	II	I
Turbeville sandy loam, 6 to 12 percent slopes	II	II	II
Turbeville-Urban land complex, 0 to 8 percent slopes	IV	II	IV
Uchee, ALL	III	V	III
Udorthents, loamy	IV	VI	IV
Urban land	IV	VI	IV
Varina, ALL	II	II	II
Vaocluse loamy sand, 10 to 15 percent slopes	IV	II	IV
Vaocluse loamy sand, 10 to 15 percent slopes, eroded	IV	II	IV
Vaocluse loamy sand, 2 to 6 percent slopes	III	II	III
Vaocluse loamy sand, 2 to 6 percent slopes, eroded	III	II	III
Vaocluse loamy sand, 6 to 10 percent slopes	III	II	III
Vaocluse loamy sand, 6 to 10 percent slopes, eroded	III	II	III
Wagram fine sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 0 to 2 percent slopes	II	II	II
Wagram loamy sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 2 to 6 percent slopes	II	II	II
Wagram loamy sand, 6 to 10 percent slopes	III	II	III
Wagram loamy sand, 10 to 15 percent slopes	III	II	III
Wagram sand, thick surface, 0 to 6 percent slopes	II	II	II
Wagram sand, thick surface, 6 to 10 percent slopes	III	II	III
Wagram sand, thick surface, 10 to 15 percent slopes	III	II	III
Wagram-Troup sands, 0 to 4 percent slopes	IV	II	IV
Wagram-Urban land complex, ALL	IV	II	IV
Wahee, ALL	I	I	I
Wakulla, ALL	IV	V	IV
Wehadkee and Chewacla loams	IV	III	IV
Wehadkee, ALL	IV	III	IV
Wehadkee-Chastain association, frequently flooded	IV	III	IV
Weston loamy sand	III	I	III
Wickham fine sandy loam, 6 to 15 percent slopes, rarely flooded	II	I	II
Wickham fine sandy loam, ALL OTHER	I	I	I
Wickham loamy sandy, ALL	I	I	I
Wickham sandy loam, 0 to 4 percent slopes	I	I	I
Wickham sandy loam, 2 to 6 percent slopes, eroded	II	I	II
Wickham-Urban land complex, 1 to 6 percent slopes	IV	I	IV
Wilbanks loam, frequently flooded	IV	III	IV
Wilbanks silt loam	IV	III	IV
Winton fine sandy loam, ALL	IV	I	IV
Woodington loamy sand	II	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Ailey-Appling complex, 2 to 8 percent slopes	II	II	II
Ailey-Appling complex, 8 to 15 percent slopes, bouldery	IV	II	III
Alamance silt loam, gently sloping phase	II	II	II
Alamance variant gravelly loam, ALL	IV	II	II
Altavista fine sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Altavista fine sandy loam, 7 to 10 percent slopes	II	I	I
Altavista fine sandy loam, 0 to 2 percent slopes occasionally flooded	I	I	II
Altavista fine sandy loam, ALL OTHER	I	I	I
Altavista fine sandy loam, clayey variant	I	I	I
Altavista loam, 0 to 3 percent slopes, rarely flooded	I	I	I
Altavista sandy loam, ALL	I	I	I
Altavista silt loam, ALL	I	I	I
Appling coarse sandy loam, eroded gently sloping phase	II	II	II
Appling coarse sandy loam, eroded sloping phase	II	II	II
Appling coarse sandy loam, ALL OTHER	II	II	I
Appling fine sandy loam, 2 to 6 percent slopes	II	II	I
Appling fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Appling fine sandy loam, 2 to 7 percent slopes	II	II	I
Appling fine sandy loam, 2 to 7 percent slopes, eroded	II	II	II
Appling fine sandy loam, 6 to 10 percent slopes	II	II	I
Appling fine sandy loam, 6 to 10 percent slopes, eroded	II	II	II
Appling fine sandy loam, 7 to 10 percent slopes(Wedowee)	II	II	I
Appling fine sandy loam, 7 to 10 percent slopes, eroded (Wedowee)	II	II	II
Appling fine sandy loam, 10 to 14 percent slopes (Wedowee)	III	II	II
Appling fine sandy loam, 10 to 14 percent slopes, eroded (Wedowee)	III	II	II
Appling fine sandy loam, (Wedowee), ALL OTHER	IV	II	II
Appling gravelly sandy loam, 2 to 6 percent slopes	II	II	I
Appling gravelly sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Appling gravelly sandy loam, 6 to 10 percent slopes	II	II	I
Appling gravelly sandy loam, 6 to 10 percent slopes, eroded	II	II	II
Appling loamy sand, 2 to 6 percent slopes	II	II	I
Appling sandy clay loam, 6 to 10 percent slopes, severely eroded	III	II	II
Appling sandy clay loam, 10 to 15 percent slopes, severely eroded	IV	II	II
Appling sandy clay loam, severely eroded sloping phase	III	II	III
Appling sandy loam, 1 to 6 percent slopes	II	II	I
Appling sandy loam, 2 to 6 percent slopes	II	II	I
Appling sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Appling sandy loam, 2 to 8 percent slopes	II	II	I
Appling sandy loam, 6 to 10 percent slopes	II	II	I
Appling sandy loam, 6 to 10 percent slopes, eroded	II	II	II
Appling sandy loam, 6 to 12 percent slopes	II	II	II
Appling sandy loam, 8 to 15 percent slopes	II	II	II
Appling sandy loam, 10 to 15 percent slopes	III	II	II
Appling sandy loam, 10 to 15 percent slopes, eroded	III	II	II
Appling sandy loam, 10 to 25 percent slopes, eroded (Wedowee)	IV	II	II
Appling sandy loam, 15 to 25 percent slopes (Wedowee)	IV	II	II
Appling sandy loam, 15 to 25 percent slopes, eroded (Wedowee)	IV	II	II
Appling sandy loam, eroded gently sloping phase	II	II	II
Appling sandy loam, eroded sloping phase	II	II	II
Appling sandy loam, eroded strongly sloping phase	III	II	II
Appling sandy loam, gently sloping phase	II	II	I
Appling sandy loam, moderately steep phase (Wedowee)	III	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Appling sandy loam, sloping phase	II	II	II
Appling sandy loam, strongly sloping phase	II	II	II
Appling-Marlboro complex, 1 to 6 percent slopes	II	II	II
Appling-Urban land complex, ALL	IV	II	IV
Armenia, ALL	IV	III	III
Ashlar-Rock outcrop complex, ALL	IV	V	IV
Augusta, ALL	III	I	II
Ayersville gravelly loam, ALL	IV	V	II
Badin channery loam, 8 to 15 percent slopes	III	II	II
Badin channery silt loam, 2 to 8 percent slopes	III	II	II
Badin channery silt loam, 8 to 15 percent slopes	III	II	II
Badin channery silt loam, ALL OTHER	IV	II	II
Badin channery silty clay loam, eroded, ALL	III	II	II
Badin silty clay loam, 2 to 8 percent slopes, moderately eroded	III	II	II
Badin silty clay loam, 8 to 15 percent slopes, moderately eroded	IV	II	II
Badin-Goldston complex, 2 to 8 percent slopes	III	II	II
Badin-Goldston complex, 8 to 15 percent slopes	IV	II	III
Badin-Goldston complex, 15 to 25 percent slopes	IV	II	IV
Badin-Nanford complex, 15 to 30 percent slopes	IV	II	IV
Badin-Tarrus complex, 2 to 8 percent slopes	II	II	I
Badin-Tarrus complex, 2 to 8 percent slopes, moderately eroded	III	II	I
Badin-Tarrus complex, 8 to 15 percent slopes	III	II	II
Badin-Tarrus complex, 8 to 15 percent slopes, moderately eroded	IV	II	II
Badin-Tarrus complex, 15 to 25 percent slopes	IV	II	II
Badin-Tarrus complex, 25 to 45 percent slopes	IV	II	IV
Badin-Urban land complex, ALL	IV	II	IV
Banister loam, 1 to 6 percent slopes, rarely flooded	II	I	I
Bethlehem gravelly sandy loam, 2 to 8 percent slopes	III	II	II
Bethlehem gravelly sandy loam, 8 to 15 percent slopes	IV	II	II
Bethlehem-Hibriten complex, 6 to 15 percent slopes	IV	II	III
Bethlehem-Urban land complex, 2 to 15 percent slopes	IV	II	IV
Buncombe, ALL	IV	III	IV
Callison-Lignum complex, 2 to 6 percent slopes	III	II	II
Callison-Misenheimer complex, 6 to 10 percent slopes	III	II	II
Carbonton-Brickhaven complex, ALL	IV	II	IV
Cartecay and Chewacla soils	II	III	III
Cecil clay loam, 2 to 6 percent slopes, eroded	III	II	II
Cecil clay loam, 2 to 6 percent slopes, severely eroded	III	II	II
Cecil clay loam, 2 to 7 percent slopes, severely eroded	III	II	II
Cecil clay loam, 2 to 8 percent slopes, eroded	III	II	II
Cecil clay loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil clay loam, 6 to 10 percent slopes, severely eroded	IV	II	II
Cecil clay loam, ALL OTHER	IV	II	II
Cecil fine sandy loam, 2 to 6 percent slopes	II	II	I
Cecil fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Cecil fine sandy loam, 2 to 7 percent slopes	II	II	I
Cecil fine sandy loam, 2 to 7 percent slopes, eroded	II	II	II
Cecil fine sandy loam, 2 to 8 percent slopes	II	II	I
Cecil fine sandy loam, 6 to 10 percent slopes	III	II	II
Cecil fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil fine sandy loam, 7 to 10 percent slopes (Pacolet)	III	II	II
Cecil fine sandy loam, 7 to 10 percent slopes, eroded (Pacolet)	III	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Cecil fine sandy loam, 8 to 15 percent slopes	III	II	II
Cecil fine sandy loam, 10 to 14 percent slopes (Pacolet)	III	II	II
Cecil fine sandy loam, 10 to 14 percent slopes, eroded (Pacolet)	III	II	II
Cecil fine sandy loam, 10 to 15 percent slopes	III	II	II
Cecil fine sandy loam, 10 to 15 percent slopes (Pacolet)	III	II	II
Cecil fine sandy loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	II
Cecil fine sandy loam, 14 to 25 percent slopes (Pacolet)	IV	II	II
Cecil fine sandy loam, 14 to 25 percent slopes, eroded (Pacolet)	IV	II	II
Cecil fine sandy loam, 25 to 40 percent slopes (Pacolet)	IV	II	III
Cecil fine sandy loam, 25 to 40 percent slopes, eroded (Pacolet)	IV	II	III
Cecil fine sandy loam, eroded gently sloping phase	II	II	II
Cecil fine sandy loam, eroded sloping phase	II	II	II
Cecil fine sandy loam, eroded strongly sloping phase	III	II	II
Cecil fine sandy loam, gently sloping phase	II	II	I
Cecil fine sandy loam, moderately steep phase	III	II	II
Cecil fine sandy loam, sloping phase	III	II	II
Cecil fine sandy loam, strongly sloping phase	III	II	II
Cecil gravelly fine sandy loam, 2 to 6 percent slopes	II	II	I
Cecil gravelly fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Cecil gravelly fine sandy loam, 2 to 7 percent slopes	II	II	I
Cecil gravelly fine sandy loam, 2 to 7 percent slopes, eroded	III	II	II
Cecil gravelly fine sandy loam, 6 to 10 percent slopes	III	II	II
Cecil gravelly fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil gravelly fine sandy loam, 7 to 10 percent slopes	III	II	II
Cecil gravelly fine sandy loam, 7 to 10 percent slopes, eroded (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, 10 to 14 percent slopes (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, 10 to 14 percent slopes, eroded (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, 10 to 15 percent slopes	III	II	II
Cecil gravelly fine sandy loam, 10 to 15 percent, eroded (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, ALL OTHER	IV	II	II
Cecil gravelly sandy clay loam, 2 to 8 percent slopes, eroded	III	II	II
Cecil gravelly sandy clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Cecil gravelly sandy loam, 2 to 6 percent slopes	II	II	I
Cecil gravelly sandy loam, 2 to 6 percent slopes, eroded	II	II	I
Cecil gravelly sandy loam, 6 to 10 percent slopes	III	II	II
Cecil gravelly sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil gravelly sandy loam, 10 to 15 percent slopes	IV	II	IV
Cecil loam, 2 to 6 percent slopes	II	II	I
Cecil loam, ALL OTHER	III	II	II
Cecil sandy clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Cecil sandy clay loam, 8 to 15 percent slopes, moderately eroded	IV	II	II
Cecil sandy clay loam, ALL OTHER	III	II	II
Cecil sandy loam, 2 to 6 percent slopes	II	II	I
Cecil sandy loam, 2 to 6 percent slopes, eroded	III	II	II
Cecil sandy loam, 2 to 8 percent slopes	II	II	I
Cecil sandy loam, 2 to 8 percent slopes, eroded	III	II	II
Cecil sandy loam, 6 to 10 percent slopes	III	II	I
Cecil sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil sandy loam, 8 to 15 percent slopes	III	II	II
Cecil sandy loam, 8 to 15 percent slopes, eroded	IV	II	II
Cecil sandy loam, 10 to 15 percent slopes	III	II	II
Cecil sandy loam, 10 to 15 percent slopes, eroded	III	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Cecil sandy loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	II
Cecil sandy loam, 15 to 45 percent slopes (Pacolet)	IV	II	II
Cecil sandy loam, eroded gently sloping phase	III	II	II
Cecil sandy loam, eroded sloping phase	III	II	II
Cecil sandy loam, gently sloping phase	II	II	I
Cecil sandy loam, sloping phase	III	II	I
Cecil soils, (Pacolet), ALL	IV	II	II
Cecil stony fine sandy loam, (Uwharrie), ALL	IV	II	II
Cecil-Urban land complex, ALL	IV	II	IV
Chastain silty clay loam	IV	III	III
Chenneby silt loam, 0 to 2 percent slopes, frequently flooded	III	III	III
Chewacla and Chastain soils, 0 to 2 percent slopes, frequently flooded	IV	III	III
Chewacla and Wehadkee, ALL	IV	III	III
Chewacla silt loam, frequently flooded	III	III	III
Chewacla, ALL OTHER	II	III	III
Cid, ALL	III	II	II
Cid-Lignum complex, 1 to 6 percent slopes	II	II	II
Cid-Misenheimer complex, 0 to 4 percent slopes	III	II	II
Cid-Urban land complex, 1 to 5 percent slopes	IV	II	IV
Meadowfield-Fairview complex, 15 to 25 percent slopes	IV	IV	IV
Meadowfield-Rhodhiss complex, 25 to 60 percent slopes, very stony	IV	IV	IV
Meadowfield-Woolwine complex, 8 to 15 percent slopes	IV	IV	IV
Claycreek fine sandy loam, 0 to 2 percent slopes	III	I	II
Colfax sandy loam, ALL	III	II	II
Colvard sandy loam, 0 to 3 percent slopes, occasionally flooded	I	III	III
Colfax silt loam	III	II	II
Congaree, frequently flooded	II	III	III
Congaree, ALL OTHER	I	III	III
Coronaca clay loam, ALL	II	II	I
Coronaca-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Creedmoor coarse sandy loam, ALL	III	I	II
Creedmoor fine sandy loam, 8 to 15 percent slopes	IV	I	II
Creedmoor fine sandy loam, ALL OTHER	III	I	II
Creedmoor loam, 2 to 8 percent slopes	III	I	II
Creedmoor sandy loam, 10 to 15 percent slopes	IV	I	II
Creedmoor sandy loam, 10 to 20 percent slopes	IV	I	II
Creedmoor sandy loam, ALL OTHER	III	I	II
Creedmoor silt loam, ALL	III	I	II
Cullen clay loam, ALL	II	II	II
Cullen-Wynott complex, 15 to 35 percent slopes	IV	II	III
Cut and fill land	IV	VI	IV
Davidson clay, severely eroded strongly sloping phase	III	I	II
Davidson sandy clay loam, 15 to 25 percent slopes	III	I	I
Davidson, ALL OTHER	II	I	I
Dillard fine sandy loam, 2 to 8 percent slopes, rarely flooded	I	III	I
Dogue, ALL	II	I	I
Dogue-Roanoke complex, 0 to 6 percent slopes, rarely flooded	II	I	III
Durham coarse sandy loam, gently sloping phase	II	I	I
Durham coarse sandy loam, sloping phase	III	I	I
Durham loamy sand, 6 to 10 percent slopes, eroded	III	I	I
Durham loamy sand, ALL OTHER	II	I	I
Durham sandy loam, eroded sloping phase	II	I	I

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Durham sandy loam, ALL OTHER	III	I	I
Efland silt loam, eroded gently sloping phase (Badin)	II	II	II
Efland silt loam, eroded sloping phase (Badin)	III	II	II
Efland silt loam, gently sloping phase (Badin)	II	II	II
Efland silt loam, sloping phase (Badin)	II	II	II
Efland silt loam, strongly sloping phase (Badin)	III	II	II
Efland silty clay loam severely eroded strongly sloping phase (Badin)	III	II	II
Efland silty clay loam, severely eroded sloping phase (Badin)	III	II	II
Enon clay loam, 2 to 6 percent slopes, eroded	III	II	II
Enon clay loam, 6 to 10 percent slopes, eroded	III	II	II
Enon clay loam, 10 to 15 percent slopes, eroded	IV	II	II
Enon clay loam, severely eroded sloping phase	III	II	II
Enon clay loam, severely eroded strongly sloping phase	IV	II	II
Enon cobbly loam, 2 to 8 percent slopes	II	II	II
Enon cobbly loam, 8 to 15 percent slopes	III	II	II
Enon complex, gullied	IV	II	IV
Enon fine sandy loam, 2 to 15 percent slopes, very stony	IV	II	II
Enon fine sandy loam, 2 to 6 percent slopes	II	II	II
Enon fine sandy loam, 2 to 6 percent slopes, eroded	III	II	II
Enon fine sandy loam, 2 to 8 percent slopes	II	II	II
Enon fine sandy loam, 6 to 10 percent slopes	III	II	II
Enon fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Enon fine sandy loam, 8 to 15 percent slopes	III	II	II
Enon fine sandy loam, 10 to 15 percent slopes	III	II	II
Enon fine sandy loam, 10 to 15 percent slopes, eroded	III	II	II
Enon fine sandy loam, eroded gently sloping phase	II	II	II
Enon fine sandy loam, eroded sloping phase	III	II	II
Enon fine sandy loam, gently sloping phase	II	II	II
Enon fine sandy loam, sloping phase	III	II	II
Enon gravelly loam, 2 to 8 percent slopes	II	II	II
Enon gravelly loam, 8 to 15 percent slopes	III	II	II
Enon loam, 2 to 6 percent slopes	II	II	II
Enon loam, 6 to 10 percent slopes	II	II	II
Enon loam, 6 to 12 percent slopes	III	II	II
Enon loam, eroded gently sloping phase	II	II	II
Enon loam, eroded sloping phase	III	II	II
Enon loam, eroded strongly sloping phase	III	II	II
Enon loam, gently sloping phase	II	II	II
Enon loam, sloping phase	III	II	II
Enon loam, strongly sloping phase	III	II	II
Enon sandy loam, 2 to 8 percent slopes	II	II	II
Enon sandy loam, 8 to 15 percent slopes	III	II	II
Enon very cobbly loam, very stony, ALL	IV	II	IV
Enon very stony loam, ALL	IV	II	IV
Enon-Mayodan complex, 15 to 35 percent slopes, very stony	IV	II	III
Enon-Urban land complex, ALL	IV	II	IV
Enon-Wynott complex, 2 to 8 percent slopes	II	II	II
Enon-Wynott complex, 4 to 15 percent slopes, very bouldery	IV	II	IV
Fairview sandy clay loam, 2 to 8 percent slopes, moderately eroded	II	II	II
Fairview sandy clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Fairview sandy clay loam, 15 to 25 percent slopes, moderately eroded	IV	II	II
Fairview-Urban land complex, ALL	IV	II	IV

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Fluvaquents-Udifluvents complex, 0 to 3 percent slopes, mounded, occasionally flooded	IV	VI	IV
Gaston clay loam, 2 to 8 percent slopes, eroded	II	II	II
Gaston clay loam, 8 to 15 percent slopes, eroded	III	II	II
Gaston loam, 15 to 25 percent slopes	III	II	II
Gaston sandy clay loam, 2 to 8 percent slopes, eroded	II	II	II
Gaston sandy clay loam, 8 to 15 percent slopes, eroded	III	II	II
Georgeville clay loam, 2 to 6 percent slopes, eroded	II	I	II
Georgeville clay loam, 2 to 8 percent slopes, eroded	II	I	II
Georgeville clay loam, 8 to 15 percent slopes, eroded	III	I	II
Georgeville gravelly loam, 2 to 6 percent slopes	II	I	I
Georgeville gravelly loam, 2 to 8 percent slopes, stony	III	I	II
Georgeville gravelly loam, 6 to 10 percent slopes	II	I	I
Georgeville gravelly loam, 10 to 25 percent slopes	IV	I	II
Georgeville gravelly silt loam, 2 to 8 percent slopes	II	I	I
Georgeville gravelly silt loam, 8 to 15 percent slopes	III	I	II
Georgeville loam, 2 to 6 percent slopes	II	I	I
Georgeville loam, 2 to 8 percent slopes	II	I	I
Georgeville loam, 6 to 10 percent slopes	II	I	I
Georgeville loam, 8 to 15 percent slopes	III	I	I
Georgeville loam, ALL OTHER	IV	I	II
Georgeville silt loam, 2 to 6 percent slopes	II	I	I
Georgeville silt loam, 2 to 6 percent slopes, eroded	III	I	II
Georgeville silt loam, 2 to 8 percent slopes	II	I	I
Georgeville silt loam, 2 to 10 percent slopes, eroded	III	I	II
Georgeville silt loam, 4 to 15 percent slopes, extremely stony	IV	I	IV
Georgeville silt loam, 6 to 10 percent slopes	II	I	I
Georgeville silt loam, 6 to 10 percent slopes, eroded	III	I	II
Georgeville silt loam, 8 to 15 percent slopes	III	I	I
Georgeville silt loam, 10 to 15 percent slopes	III	I	I
Georgeville silt loam, 10 to 15 percent slopes, eroded	III	I	II
Georgeville silt loam, 10 to 25 percent slopes	IV	I	II
Georgeville silt loam, 15 to 45 percent slopes, extremely bouldery	IV	I	IV
Georgeville silt loam, eroded gently sloping phase	II	I	II
Georgeville silt loam, eroded sloping phase	III	I	II
Georgeville silt loam, eroded strongly sloping phase	III	I	II
Georgeville silt loam, gently sloping phase	II	I	I
Georgeville silt loam, moderately steep phase	III	I	II
Georgeville silt loam, sloping phase	II	I	I
Georgeville silt loam, strongly sloping phase	III	I	I
Georgeville silty clay loam, 2 to 6 percent slopes, moderately eroded	II	I	II
Georgeville silty clay loam, 2 to 8 percent slopes	II	I	II
Georgeville silty clay loam, 2 to 8 percent slopes, eroded	II	I	II
Georgeville silty clay loam, 2 to 8 percent slopes, moderately eroded	II	I	II
Georgeville silty clay loam, 6 to 10 percent slopes, moderately eroded	III	I	II
Georgeville silty clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Georgeville silty clay loam, 8 to 15 percent slopes, moderately eroded	IV	I	II
Georgeville silty clay loam, severely eroded gently sloping phase	III	I	II
Georgeville silty clay loam, severely eroded moderately steep phase	IV	I	III
Georgeville silty clay loam, severely eroded sloping phase	III	I	III
Georgeville silty clay loam, severely eroded strongly sloping phase	IV	I	III
Georgeville-Badin complex, ALL	IV	I	II
Georgeville-Montonia complex, very stony ALL	IV	I	III

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Georgeville-Urban land complex, ALL	IV	I	IV
Goldston, ALL	IV	II	III
Goldston-Badin complex, ALL	IV	II	III
Granville gravelly sandy loam, 2 to 8 percent slopes	II	II	I
Granville sandy loam, 2 to 6 percent slopes	II	II	I
Granville sandy loam, 2 to 6 percent slopes, eroded	II	II	I
Granville sandy loam, 2 to 8 percent slopes	II	II	I
Granville sandy loam, 6 to 10 percent slopes	III	II	I
Granville sandy loam, 6 to 10 percent slopes, eroded	III	II	I
Granville sandy loam, 10 to 15 percent slopes	IV	II	I
Grover, ALL	IV	II	III
Gullied land, ALL	IV	VI	IV
Halewood stony sandy loam, (Edneyville), ALL	IV	III	II
Hatboro sandy loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV
Hayesville and Cecil clay loams, 7 to 14 percent slopes, severely eroded (Cecil and Cecil)	II	II	II
Hayesville and Cecil clay loams, 7 to 14 percent slopes, severely eroded (Cecil and Cecil)	III	II	II
Hayesville and Cecil clay loams, 14 to 25 percent slopes, severely eroded (Pacolet and Pacolet)	IV	II	II
Hayesville and Cecil fine sandy loam, eroded, ALL	IV	II	II
Helena clay loam, severely eroded sloping phase	IV	II	II
Helena coarse sandy loam, sloping phase	IV	II	II
Helena coarse sandy loam, ALL OTHER	III	II	II
Helena fine sandy loam, 2 to 8 percent slopes	III	II	II
Helena sandy loam, 10 to 15 percent slopes	IV	II	II
Helena sandy loam, ALL OTHER	III	II	II
Helena-Sedgefield sandy loams, ALL	III	II	II
Helena-Urban land complex, ALL	IV	II	IV
Helena-Worsham complex, 1 to 6 percent slopes	IV	II	III
Herndon loam, 2 to 6 percent slopes	II	II	I
Herndon loam, 6 to 10 percent slopes	II	II	I
Herndon silt loam, 2 to 6 percent slopes	II	II	I
Herndon silt loam, 2 to 6 percent slopes, eroded	II	II	II
Herndon silt loam, 2 to 8 percent slopes	II	II	I
Herndon silt loam, 6 to 10 percent slopes	III	II	I
Herndon silt loam, 6 to 10 percent slopes, eroded	III	II	II
Herndon silt loam, 8 to 15 percent slopes	III	II	I
Herndon silt loam, 10 to 15 percent slopes, eroded	III	II	II
Herndon silt loam, 15 to 25 percent slopes	III	II	I
Herndon silt loam, eroded gently sloping phase	II	II	II
Herndon silt loam, eroded sloping phase	III	II	II
Herndon silt loam, eroded strongly sloping phase	III	II	II
Herndon silt loam, gently sloping phase	II	II	I
Herndon silt loam, moderately steep phase	III	II	I
Herndon silt loam, sloping phase	II	II	I
Herndon silt loam, strongly sloping phase	III	II	I
Herndon silty clay loam, ALL	IV	II	II
Herndon stony silt loam, 2 to 10 percent slopes	III	II	II
Hibriten very cobbly sandy loam, ALL	IV	V	III
Hiwassee clay loam, 8 to 15 percent slopes, eroded	III	II	II
Hiwassee clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Hiwassee clay loam, 10 to 15 percent slopes, eroded	III	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Hiwassee clay loam, 15 to 30 percent slopes, moderately eroded	IV	II	II
Hiwassee clay loam, ALL OTHER	II	II	II
Hiwassee gravelly loam, 2 to 8 percent slopes	II	II	I
Hiwassee gravelly loam, 8 to 15 percent slopes	II	II	II
Hiwassee loam, 2 to 6 percent slopes	II	II	I
Hiwassee loam, 2 to 6 percent slopes, eroded	II	II	II
Hiwassee loam, 2 to 7 percent slopes, eroded	II	II	II
Hiwassee loam, 2 to 8 percent slopes	II	II	I
Hiwassee loam, 6 to 10 percent slopes	II	II	I
Hiwassee loam, 6 to 10 percent slopes, eroded	II	II	II
Hiwassee loam, 8 to 15 percent slopes	II	II	I
Hiwassee loam, 10 to 15 percent slopes	II	II	I
Hiwassee loam, 10 to 15 percent slopes, eroded	III	II	II
Hiwassee loam, 15 to 25 percent slopes	IV	II	II
Hornsboro, ALL	I	I	I
Hulett, ALL	IV	II	II
Hulett-Saw complex, 4 to 15 percent slopes, very rocky	IV	II	III
Hulett-Urban Land complex, 2 to 8 percent slopes	IV	II	IV
Iotla sandy loam, 0 to 2 percent slopes, occasionally flooded	II	III	III
Iredell clay loam, 2 to 6 percent slopes	III	II	III
Iredell fine sandy loam, 10 to 14 percent slopes (Wilkes)	IV	II	III
Iredell fine sandy loam, 10 to 14 percent slopes, eroded (Wilkes)	IV	II	III
Iredell fine sandy loam, ALL OTHER	III	II	III
Iredell gravelly loam, 1 to 4 percent slopes	III	II	III
Iredell loam, ALL	III	II	III
Iredell sandy loam, ALL	III	II	III
Iredell very stony loam, gently sloping phase (Enon)	IV	II	IV
Iredell-Urban land complex, ALL	IV	II	IV
Iredell-Urban land-Picture complex, 0 to 10 percent slopes	IV	II	IV
Kirksey silt loam, ALL	II	II	II
Kirksey-Cid complex, 2 to 6 percent slopes	III	II	II
Leaksville silt loam, 0 to 4 percent slopes	III	III	III
Leaksville-Urban land complex, 0 to 4 percent slopes	IV	III	IV
Leveled clayey land	IV	VI	IV
Lignum gravelly silt loam, 2 to 8 percent slopes	II	III	II
Lignum loam, 2 to 6 percent slopes	II	III	II
Lignum silt loam, 7 to 12 percent slopes	III	III	II
Lignum silt loam, ALL OTHER	II	III	II
Lloyd clay loam, 2 to 6 percent slopes, severely eroded (Gaston)	II	II	II
Lloyd clay loam, 2 to 10 percent slopes, severely eroded (Pacolet)	II	II	II
Lloyd clay loam, 6 to 10 percent slopes, severely eroded (Gaston)	II	II	II
Lloyd clay loam, 10 to 14 percent slopes, severely eroded (Pacolet)	III	II	III
Lloyd clay loam, 10 to 15 percent slopes, severely eroded (Gaston)	III	II	III
Lloyd clay loam, 14 to 25 percent slopes, severely eroded (Pacolet)	IV	II	IV
Lloyd clay loam, 15 to 25 percent slopes, severely eroded (Gaston)	IV	II	IV
Lloyd clay loam, severely eroded gently sloping phase (Gaston)	II	II	II
Lloyd clay loam, severely eroded sloping phase (Gaston)	II	II	II
Lloyd clay loam, severely eroded strongly sloping phase (Gaston)	III	II	III
Lloyd clay loam, severely eroded, moderately steep phase (Cecil)	IV	II	III
Lloyd fine sandy loam, 2 to 6 percent slopes (Cecil)	II	II	II
Lloyd fine sandy loam, 2 to 6 percent slopes, eroded (Cecil)	II	II	II
Lloyd fine sandy loam, 6 to 10 percent slopes (Cecil)	III	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Lloyd fine sandy loam, 6 to 10 percent slopes, eroded (Cecil)	III	II	II
Lloyd fine sandy loam, 10 to 15 percent slopes (Pacolet)	II	II	II
Lloyd fine sandy loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	II
Lloyd fine sandy loam, 15 to 25 percent slopes (Pacolet)	IV	II	II
Lloyd fine sandy loam, 15 to 25 percent slopes, eroded (Pacolet)	IV	II	III
Lloyd loam, 2 to 6 percent slopes (Gaston)	II	II	I
Lloyd loam, 2 to 6 percent slopes, eroded (Davidson)	II	II	II
Lloyd loam, 2 to 6 percent slopes, eroded (Gaston)	II	II	I
Lloyd loam, 2 to 7 percent slopes (Pacolet)	II	II	I
Lloyd loam, 2 to 7 percent slopes, eroded (Pacolet)	II	II	II
Lloyd loam, 6 to 10 percent slopes (Cecil)	III	II	II
Lloyd loam, 6 to 10 percent slopes, eroded (Cecil)	III	II	II
Lloyd loam, 6 to 10 percent slopes, eroded (Davidson)	II	II	II
Lloyd loam, 7 to 10 percent slopes (Pacolet)	III	II	II
Lloyd loam, 7 to 10 percent slopes, eroded (Pacolet)	III	II	II
Lloyd loam, 10 to 14 percent slopes (Pacolet)	IV	II	II
Lloyd loam, 10 to 14 percent slopes, eroded (Pacolet)	IV	II	III
Lloyd loam, 10 to 15 percent slopes (Cecil)	IV	II	II
Lloyd loam, 10 to 15 percent slopes, eroded (Davidson)	II	II	III
Lloyd loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	III
Lloyd loam, 14 to 25 percent slopes (Pacolet)	IV	II	II
Lloyd loam, 14 to 25 percent slopes, eroded (Pacolet)	IV	II	III
Lloyd loam, 15 to 25 percent slopes (Pacolet)	IV	II	II
Lloyd loam, 15 to 25 percent slopes, eroded (Pacolet)	IV	II	III
Lloyd loam, 25 to 40 percent slopes (Pacolet)	IV	II	IV
Lloyd loam, eroded gently sloping phase (Gaston)	III	II	II
Lloyd loam, eroded sloping phase (Cecil)	III	II	II
Lloyd loam, eroded strongly sloping phase (Cecil)	IV	II	II
Lloyd loam, gently sloping phase (Gaston)	II	II	I
Lloyd loam, level phase (Gaston)	II	II	I
Lloyd loam, moderately steep phase (Cecil)	II	II	II
Lloyd loam, sloping phase (Cecil)	II	II	II
Lloyd loam, strongly sloping phase (Cecil)	IV	II	II
Local alluvial land, ALL	IV	III	III
Louisa fine sandy loam, 25 to 45 percent slopes	IV	II	III
Louisa sandy loam, 25 to 45 percent slopes	IV	II	III
Louisburg and Louisa soils, 25 to 55 percent slopes	IV	II	II
Louisburg and Louisa soils, ALL OTHER	IV	II	III
Louisburg coarse sandy loam, ALL	IV	II	II
Louisburg loamy coarse sand, ALL	IV	II	IV
Louisburg loamy sand, 2 to 6 percent slopes	III	II	II
Louisburg loamy sand, 6 to 10 percent slopes	III	II	II
Louisburg loamy sand, 6 to 15 percent slopes	IV	II	II
Louisburg loamy sand, 10 to 15 percent slopes	IV	II	II
Louisburg loamy sand, 15 to 45 percent slopes	IV	II	III
Louisburg sandy loam, ALL	IV	II	II
Louisburg-Wedowee complex, 15 to 25 percent slopes	IV	II	II
Louisburg-Wedowee complex, ALL OTHER	III	II	II
Made land	IV	VI	IV
Madison clay loam, 2 to 6 percent slopes, eroded	III	II	II
Madison clay loam, 6 to 10 percent slopes, eroded	III	II	II
Madison clay loam, eroded, ALL OTHER	IV	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Madison complex, gullied	IV	II	IV
Madison fine sandy loam, 2 to 6 percent slopes	II	II	II
Madison fine sandy loam, 2 to 7 percent slopes	II	II	II
Madison fine sandy loam, 2 to 7 percent slopes, eroded	II	II	II
Madison fine sandy loam, 6 to 10 percent slopes	III	II	II
Madison fine sandy loam, 7 to 10 percent slopes	III	II	II
Madison fine sandy loam, 7 to 10 percent slopes, eroded	III	II	II
Madison fine sandy loam, 10 to 14 percent slopes	III	II	II
Madison fine sandy loam, 10 to 14 percent slopes, eroded	IV	II	II
Madison fine sandy loam, 10 to 15 percent slopes	III	II	II
Madison fine sandy loam, 14 to 25 percent slopes	IV	II	II
Madison fine sandy loam, 15 to 45 percent slopes	IV	II	II
Madison gravelly fine sandy loam, 2 to 6 percent slopes	II	II	II
Madison gravelly fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Madison gravelly fine sandy loam, 6 to 10 percent slopes	III	II	II
Madison gravelly fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Madison gravelly fine sandy loam, 7 to 10 percent slopes	III	II	II
Madison gravelly fine sandy loam, 10 to 14 percent slopes	III	II	II
Madison gravelly fine sandy loam, 10 to 15 percent slopes	III	II	II
Madison gravelly fine sandy loam, ALL OTHER	IV	II	II
Madison gravelly sandy clay loam, 2 to 8 percent slopes, moderately eroded	III	II	II
Madison gravelly sandy clay loam, 8 to 15 percent slopes, moderately eroded	IV	II	II
Madison gravelly sandy loam, 10 to 25 percent slopes, eroded	IV	II	II
Madison gravelly sandy loam, ALL OTHER	III	II	II
Madison sandy clay loam, 2 to 8 percent slopes, eroded	III	II	II
Madison sandy clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Madison sandy clay loam, 15 to 25 percent slopes, eroded	IV	II	II
Madison sandy loam, 2 to 6 percent slopes	II	II	II
Madison sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Madison sandy loam, 6 to 10 percent slopes	II	II	II
Madison sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Madison sandy loam, 8 to 15 percent slopes	III	II	II
Madison sandy loam, 10 to 15 percent slopes	III	II	II
Madison sandy loam, ALL OTHER	IV	II	II
Madison-Bethlehem complex, 2 to 8 percent slopes, stony, moderately eroded	III	II	II
Madison-Bethlehem complex, 8 to 15 percent slopes, very stony, moderately eroded	IV	II	III
Madison-Bethlehem-Urban Land complex, 2 to 8 percent slopes	IV	II	IV
Madison-Udorthents complex, 2 to 15 percent slopes, gullied	IV	II	IV
Madison-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Mantachie soils	III	III	II
Masada fine sandy loam, ALL	I	II	I
Masada gravelly sandy clay loam, eroded, ALL	II	II	I
Masada loam, 2 to 8 percent slopes	I	II	I
Masada loam, 8 to 15 percent slopes	II	II	I
Masada sandy clay loam, eroded ALL	II	II	I
Masada sandy loam, 2 to 8 percent slopes	I	II	I
Masada sandy loam, 8 to 15 percent slopes	II	II	I
Masada sandy loam, 15 to 25 percent slopes	IV	II	II
Masada-Urban land complex, 2 to 15 percent slopes	IV	II	IV
Mayodan fine sandy loam, 2 to 6 percent slopes	II	I	I
Mayodan fine sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Mayodan fine sandy loam, 2 to 7 percent slopes	II	I	I

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Mayodan fine sandy loam, 2 to 8 percent slopes	II	I	I
Mayodan fine sandy loam, 6 to 10 percent slopes	III	I	I
Mayodan fine sandy loam, 7 to 10 percent slopes	III	I	I
Mayodan fine sandy loam, 7 to 10 percent slopes, eroded	III	I	I
Mayodan fine sandy loam, 8 to 15 percent slopes	III	I	I
Mayodan fine sandy loam, 10 to 14 percent slopes	III	I	I
Mayodan fine sandy loam, 10 to 14 percent slopes, eroded	III	I	II
Mayodan fine sandy loam, ALL OTHER	IV	I	II
Mayodan gravelly sandy loam, 2 to 6 percent slopes	II	I	I
Mayodan gravelly sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Mayodan gravelly sandy loam, 2 to 8 percent slopes	II	I	I
Mayodan gravelly sandy loam, 6 to 10 percent slopes	III	I	I
Mayodan gravelly sandy loam, 6 to 10 percent slopes, eroded	IV	I	I
Mayodan gravelly sandy loam, 8 to 15 percent slopes	III	I	II
Mayodan gravelly sandy loam, 10 to 15 percent slopes	III	I	II
Mayodan gravelly sandy loam, 15 to 25 percent slopes	IV	I	II
Mayodan sandy clay loam, 2 to 8 percent slopes, eroded	II	I	II
Mayodan sandy clay loam, 8 to 15 percent slopes, eroded	III	I	II
Mayodan sandy clay loam, 15 to 25 percent slopes, eroded	IV	I	II
Mayodan sandy loam, 2 to 6 percent slopes	II	I	I
Mayodan sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Mayodan sandy loam, 2 to 8 percent slopes	II	I	I
Mayodan sandy loam, 6 to 10 percent slopes	III	I	I
Mayodan sandy loam, 6 to 10 percent slopes, eroded	III	I	I
Mayodan sandy loam, 8 to 15 percent slopes	III	I	II
Mayodan sandy loam, 10 to 15 percent slopes	III	I	II
Mayodan sandy loam, 10 to 15 percent slopes, eroded	IV	I	II
Mayodan sandy loam, 15 to 25 percent slopes	IV	I	II
Mayodan sandy loam, 15 to 25 percent slopes, stony	IV	I	IV
Mayodan silt loam, 2 to 8 percent slopes	II	I	I
Mayodan silt loam, 8 to 15 percent slopes	III	I	II
Mayodan silt loam, 15 to 25 percent slopes	IV	I	II
Mayodan silt loam, 25 to 45 percent slopes	IV	I	III
Mayodan silt loam, thin, ALL	III	I	II
Mayodan silty clay loam, 2 to 8 percent slopes, eroded	III	I	II
Mayodan silty clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Mayodan-Brickhaven complex, 15 to 30 percent slopes	IV	I	III
Mayodan-Exway complex, eroded, ALL	III	I	II
Mayodan-Pinkston complex, 25 to 45 percent slopes	IV	I	III
Mayodan-Urban land complex, ALL	IV	I	IV
McQueen loam, 1 to 6 percent slopes	II	II	II
Mecklenburg clay loam, 2 to 8 percent slopes, eroded	II	II	II
Mecklenburg clay loam, 2 to 8 percent slopes, moderately eroded	II	II	II
Mecklenburg clay loam, 6 to 15 percent slopes, severely eroded	IV	II	II
Mecklenburg clay loam, 8 to 15 percent slopes, eroded	III	II	II
Mecklenburg clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Mecklenburg clay loam, severely eroded sloping phase	IV	II	II
Mecklenburg fine sandy loam, 2 to 6 percent slopes	II	II	I
Mecklenburg fine sandy loam, 2 to 8 percent slopes	II	II	II
Mecklenburg fine sandy loam, 8 to 15 percent slopes	III	II	II
Mecklenburg loam, 2 to 6 percent slopes	II	II	I
Mecklenburg loam, 2 to 6 percent slopes, eroded	II	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Mecklenburg loam, 2 to 7 percent slopes, eroded	II	II	II
Mecklenburg loam, 2 to 8 percent slopes	II	II	I
Mecklenburg loam, 6 to 10 percent slopes	II	II	II
Mecklenburg loam, 6 to 10 percent slopes, eroded	II	II	II
Mecklenburg loam, 7 to 14 percent slopes, eroded	III	II	II
Mecklenburg loam, 8 to 15 percent slopes	III	II	II
Mecklenburg loam, 10 to 15 percent slopes, eroded	III	II	II
Mecklenburg loam, ALL OTHER	IV	II	II
Mecklenburg loam, dark surface variant, 2 to 6 percent slopes	II	II	I
Mecklenburg loam, dark surface variant, 6 to 10 percent slopes	II	II	II
Mecklenburg loam, dark surface variant, 10 to 15 percent slopes	III	II	II
Mecklenburg loam, eroded gently sloping phase	II	II	II
Mecklenburg loam, eroded sloping phase	II	II	II
Mecklenburg loam, eroded strongly sloping phase	III	II	II
Mecklenburg sandy clay loam, eroded, ALL	III	II	II
Mecklenburg-Urban land complex, ALL	IV	II	IV
Miscellaneous water	IV	VI	IV
Misenheimer channery silt loam, 0 to 4 percent slopes	IV	V	III
Misenheimer-Callison complex, 0 to 3 percent slopes	IV	V	III
Misenheimer-Cid complex, 0 to 3 percent slopes	IV	V	III
Misenheimer-Kirksey complex, 0 to 5 percent slopes	IV	V	III
Mixed alluvial land, ALL	IV	III	III
Mocksville sandy loam, 2 to 8 percent slopes	II	II	II
Mocksville sandy loam, 8 to 15 percent slopes	III	II	II
Mocksville sandy loam, 15 to 45 percent slopes	IV	II	III
Moderately gullied land, ALL	IV	VI	IV
Monacan and Arents soils	I	III	IV
Monacan loam	I	III	III
Montonia very channery silt loam, 25 to 60 percent slopes, very stony	IV	V	IV
Mooshaunee-Hallison complex, 2 to 8 percent slopes	III	II	II
Mooshaunee-Hallison complex, 8 to 15 percent slopes	IV	II	III
Mooshaunee-Hallison complex, 15 to 25 percent slopes	IV	II	IV
Mooshaunee-Hallison complex, ALL OTHER	IV	II	IV
Nanford gravelly fine sandy loam, 8 to 15 percent slopes	III	II	II
Nanford silt loam, 2 to 6 percent slopes	II	II	I
Nanford silt loam, 2 to 8 percent slopes	II	II	I
Nanford silt loam, 8 to 15 percent slopes	III	II	II
Nanford silty clay loam, 2 to 6 percent slopes, moderately eroded	III	II	II
Nanford-Badin complex, 6 to 10 percent slopes	III	II	II
Nanford-Badin complex, 10 to 15 percent slopes	IV	II	II
Nanford-Emporia complex, 2 to 8 percent slopes	II	II	I
Nason gravelly loam, 2 to 6 percent slopes	III	II	I
Nason gravelly loam, 6 to 10 percent slopes	III	II	II
Nason gravelly loam, 10 to 25 percent slopes	IV	II	II
Nason gravelly loam, 25 to 50 percent slopes	IV	II	III
Nason gravelly silt loam, 2 to 8 percent slopes	II	II	I
Nason gravelly silt loam, 8 to 15 percent slopes	III	II	II
Nason loam, 2 to 6 percent slopes	II	II	I
Nason loam, 6 to 10 percent slopes	III	II	I
Nason silt loam, 2 to 6 percent slopes	II	II	I
Nason silt loam, 2 to 8 percent slopes	II	II	I
Nason silt loam, 6 to 12 percent slopes	III	II	I

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Nason silt loam, 8 to 15 percent slopes	III	II	I
Nason silt loam, 10 to 15 percent slopes	III	II	I
Nason silt loam, 15 to 25 percent slopes	IV	II	II
Nason stony silt loam, 10 to 15 percent slopes (Uwharrie)	IV	II	IV
Oakboro silt loam, ALL	III	III	III
Orange gravelly loam, 2 to 7 percent slopes	II	II	II
Orange loam, 0 to 2 percent slopes	II	II	II
Orange silt loam, 0 to 3 percent slopes	II	II	II
Orange silt loam, eroded gently sloping moderately well drained variant	III	II	II
Orange silt loam, eroded gently sloping phase	III	II	II
Orange silt loam, eroded sloping moderately well drained variant	III	II	II
Orange silt loam, gently sloping moderately well drained variant	III	II	II
Orange silt loam, gently sloping phase	II	II	II
Orange silt loam, nearly level phase	II	II	II
Orange silt loam, sloping moderately well drained variant	III	II	II
Pacolet clay loam, 2 to 6 percent slopes, eroded	II	II	II
Pacolet clay loam, 2 to 8 percent slopes, moderately eroded	II	II	II
Pacolet clay loam, 6 to 10 percent slopes, eroded	III	II	II
Pacolet clay loam, 6 to 10 percent slopes, severely eroded	III	II	II
Pacolet clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Pacolet clay loam, 10 to 15 percent slopes, eroded	III	II	II
Pacolet clay loam, 15 to 45 percent slopes, eroded	IV	II	II
Pacolet complex, 10 to 25 percent slopes, severely eroded	IV	II	III
Pacolet fine sandy loam, 2 to 6 percent slopes	II	II	I
Pacolet fine sandy loam, 6 to 10 percent slopes	III	II	I
Pacolet fine sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet fine sandy loam, 10 to 15 percent slopes	III	II	II
Pacolet fine sandy loam, ALL OTHER	IV	II	II
Pacolet gravelly fine sandy loam, 2 to 6 percent slopes	II	II	I
Pacolet gravelly fine sandy loam, 6 to 10 percent slopes	III	II	II
Pacolet gravelly fine sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet gravelly fine sandy loam, 15 to 25 percent slopes	IV	II	II
Pacolet gravelly sandy clay loam, 15 to 30 percent slopes, eroded	IV	II	II
Pacolet gravelly sandy loam, 2 to 8 percent slopes	II	II	I
Pacolet gravelly sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet gravelly sandy loam, ALL OTHER	IV	II	II
Pacolet loam, 10 to 15 percent slopes	III	II	II
Pacolet loam, 15 to 25 percent slopes	IV	II	II
Pacolet sandy clay loam, 2 to 6 percent slopes, eroded	II	II	II
Pacolet sandy clay loam, 2 to 6 percent slopes, moderately eroded	II	II	II
Pacolet sandy clay loam, 2 to 8 percent slopes, eroded	II	II	II
Pacolet sandy clay loam, 6 to 10 percent slopes, moderately eroded	III	II	II
Pacolet sandy clay loam, 8 to 15 percent slopes, eroded	III	II	II
Pacolet sandy clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Pacolet sandy clay loam, 10 to 15 percent slopes, moderately eroded	III	II	II
Pacolet sandy clay loam, ALL OTHER	IV	II	II
Pacolet sandy loam, 2 to 6 percent slopes	II	II	I
Pacolet sandy loam, 2 to 8 percent slopes	II	II	I
Pacolet sandy loam, 6 to 10 percent slopes	III	II	II
Pacolet sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet sandy loam, 10 to 15 percent slopes	III	II	II
Pacolet sandy loam, ALL OTHER	IV	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Pacolet soils, 10 to 25 percent slopes	IV	II	III
Pacolet-Bethlehem complex, 2 to 8 percent slopes, eroded	III	II	II
Pacolet-Bethlehem complex, 2 to 8 percent slopes, moderately eroded	III	II	II
Pacolet-Bethlehem complex, ALL OTHER	IV	II	II
Pacolet-Bethlehem complex, 15 to 25 percent slopes, stony	IV	II	III
Pacolet-Bethlehem-Urban Land complex, ALL	IV	II	IV
Pacolet-Madison-Urban land complex, ALL	IV	II	IV
Pacolet-Saw complex, 2 to 8 percent slopes, eroded	III	II	II
Pacolet-Saw complex, 2 to 8 percent slopes, moderately eroded	III	II	II
Pacolet-Saw complex, ALL OTHER	IV	II	II
Pacolet-Udorthents complex, gullied, ALL	IV	II	IV
Pacolet-Urban land complex, ALL	IV	II	IV
Pacolet-Wilkes complex, 8 to 15 percent slopes	III	II	II
Pacolet-Wilkes complex, 15 to 25 percent slopes	IV	II	II
Picture loam, 0 to 3 percent slopes	IV	II	III
Pinkston, ALL	IV	II	III
Pinoka, ALL	IV	II	III
Pinoka-Carbonton complex, 2 to 8 percent slopes	IV	II	III
Pits, ALL	IV	VI	IV
Poindexter and Zion sandy loams, 2 to 8 percent slopes	III	II	II
Poindexter and Zion sandy loams, 8 to 15 percent slopes	IV	II	II
Poindexter and Zion sandy loams, ALL OTHER	IV	II	III
Poindexter fine sandy loam, 25 to 60 percent slopes	IV	II	III
Poindexter loam, 2 to 8 percent slopes	III	II	II
Poindexter loam, 8 to 15 percent slopes	IV	II	II
Poindexter loam, 15 to 45 percent slopes	IV	II	III
Poindexter-Mocksville complex, 2 to 8 percent slopes	IV	II	II
Poindexter-Mocksville complex, 8 to 15 percent slopes	IV	II	II
Poindexter-Mocksville complex, ALL OTHER	IV	II	III
Poindexter-Zion-Urban land complex, 2 to 15 percent slopes	IV	II	IV
Polkton-White Store complex, 2 to 8 percent slopes, severely eroded	III	II	III
Polkton-White Store complex, ALL OTHER	IV	II	III
Quarry, ALL	IV	VI	IV
Rhodhiss, ALL	IV	II	II
Rhodhiss-Bannertown complex, 25 to 50 percent slopes	IV	II	III
Rion fine sandy loam, 2 to 8 percent slopes	III	II	II
Rion fine sandy loam, 8 to 15 percent slopes	IV	II	II
Rion fine sandy loam, 15 to 25 percent slopes	IV	II	II
Rion fine sandy loam, 25 to 60 percent slopes	IV	II	III
Rion loamy sand, 8 to 15 percent slopes	IV	II	II
Rion loamy sand, 15 to 25 percent slopes	IV	II	III
Rion sandy loam, 2 to 8 percent slopes	III	II	II
Rion sandy loam, 8 to 15 percent slopes	III	II	II
Rion sandy loam, 15 to 25 percent slopes	IV	II	II
Rion sandy loam, 15 to 30 percent slopes	IV	II	II
Rion sandy loam, ALL OTHER	IV	II	III
Rion, Pacolet, and Wateree soils, 25 to 60 percent slopes	IV	II	IV
Rion-Ashlar complex, 15 to 35 percent slopes, stony	IV	II	III
Rion-Ashlar complex, 25 to 60 percent slopes, rocky	IV	II	IV
Rion-Ashlar-Rock outcrop complex, 45 to 70 percent slopes	IV	II	IV
Rion-Cliffside complex, 25 to 60 percent slopes, very stony	IV	II	IV
Rion-Hibriten complex, 25 to 45 percent slopes, very stony	IV	II	IV

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Rion-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Rion-Wateree-Wedowee complex, 8 to 15 percent slopes	IV	II	III
Rion-Wedowee complex, ALL	III	II	II
Rion-Wedowee-Ashlar complex, ALL	IV	II	III
Riverview and Buncombe soils, 0 to 3 percent slopes, frequently flooded	II	III	III
Riverview and Toccoa soils, 0 to 4 percent slopes, occasionally flooded	II	III	III
Riverview, frequently flooded, ALL	II	III	III
Riverview, occasionally flooded, ALL	I	III	III
Roanoke, ALL	II	III	III
Roanoke-Wahee complex, 0 to 3 percent slopes, occasionally flooded	II	III	III
Rock outcrop	IV	VI	IV
Rock outcrop-Ashlar complex, 2 to 15 percent slopes	IV	VI	IV
Rock outcrop-Wake complex, ALL	IV	VI	IV
Sauratown channery fine sandy loam, 25 to 60 percent slopes, very stony	IV	IV	IV
Saw-Pacolet complex, ALL	IV	II	II
Saw-Wake Complex, very rocky, ALL	IV	II	IV
Secrest-Cid complex, 0 to 3 percent slopes	III	II	II
Sedgefield fine sandy loam, 1 to 4 percent slopes	II	II	II
Sedgefield fine sandy loam, 1 to 6 percent slopes	III	II	II
Sedgefield sandy loam, 1 to 6 percent slopes	III	II	II
Sedgefield sandy loam, 2 to 8 percent slopes	III	II	II
Severely gullied land, ALL	IV	VI	IV
Shellbluff loam, 0 to 2 percent slopes, occasionally flooded	II	III	III
Shellbluff silt loam, 0 to 2 percent slopes, frequently flooded	IV	III	III
Skyuka clay loam, 2 to 8 percent slopes, eroded	II	I	II
Skyuka loam, 2 to 8 percent slopes	I	I	II
Spray loam, 0 to 5 percent slopes	IV	II	III
Spray-Urban land complex, 0 to 5 percent slopes	IV	II	IV
Starr loam, ALL	II	I	III
State, ALL	I	I	I
Stoneville loam, 2 to 8 percent slopes	II	II	I
Stoneville loam, 8 to 15 percent slopes	III	II	I
Stoneville loam, 15 to 25 percent slopes	IV	II	II
Stoneville-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Stony land	IV	VI	IV
Swamp	IV	III	IV
Tallapoosa fine sandy loam, ALL	IV	II	III
Tarrus gravelly silt loam, 2 to 8 percent slopes	II	II	I
Tarrus-Georgeville complex, 8 to 15 percent slopes	II	II	I
Tatum and Nason channery silt loams, 15 to 25 percent slopes	IV	II	II
Tatum channery silt loam, ALL	III	II	I
Tatum channery silty clay loam, ALL	III	II	II
Tatum gravelly loam, 2 to 8 percent slopes	II	II	I
Tatum gravelly loam, 8 to 15 percent slopes	III	II	I
Tatum gravelly loam, ALL OTHER	IV	II	II
Tatum gravelly silt loam, 2 to 8 percent slopes	II	II	I
Tatum gravelly silt loam, 8 to 15 percent slopes	III	II	I
Tatum gravelly silt loam, ALL OTHER	IV	II	II
Tatum gravelly silty clay loam, eroded, ALL	III	II	II
Tatum loam, 2 to 6 percent slopes	II	II	I
Tatum loam, 10 to 15 percent slopes	III	II	II
Tatum loam, ALL OTHER	IV	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Tatum silt loam, 2 to 8 percent slopes	II	II	I
Tatum silt loam, 8 to 15 percent slopes	III	II	I
Tatum silt loam, ALL OTHER	IV	II	II
Tatum silty clay loam, eroded, ALL	III	II	II
Tatum-Badin complex, 2 to 8 percent slopes	III	II	I
Tatum-Badin complex, 2 to 8 percent slopes, eroded	III	II	II
Tatum-Badin complex, 8 to 15 percent slopes	III	II	II
Tatum-Montonia complex, 15 to 30 percent slopes	IV	II	II
Tatum-Montonia complex, ALL OTHER	III	II	II
Tatum-Urban land complex, 2 to 8 percent slopes	IV	II	IV
Tetotum fine sandy loam, 1 to 4 percent slopes	I	I	I
Tetotum silt loam, 0 to 3 percent slopes	I	I	I
Tirzah silt loam, eroded gently sloping phase (Tatum)	III	II	I
Tirzah silt loam, eroded sloping phase (Tatum)	II	II	I
Tirzah silt loam, eroded strongly sloping phase (Tatum)	III	II	II
Tirzah silt loam, gently sloping phase (Stoneville)	II	II	II
Tirzah silt loam, sloping phase (Stoneville)	III	II	II
Tirzah silt loam, strongly sloping phase (Stoneville)	III	II	II
Tirzah silty clay loam, severely eroded gently sloping phase (Tatum)	III	II	II
Tirzah silty clay loam, severely eroded sloping phase (Tatum)	III	II	II
Tirzah silty clay loam, severely eroded strongly sloping phase (Tatum)	IV	II	II
Toast sandy loam, 2 to 8 percent slopes	II	I	I
Toast sandy loam, 8 to 15 percent slopes	III	I	II
Toccoa, ALL	I	III	III
Turbeville fine sandy loam, 0 to 3 percent slopes	I	II	I
Udorthents, ALL	IV	VI	IV
Udorthents-Pits complex, mounded, 0 to 2 percent slopes, occasionally flooded	IV	VI	IV
Udorthents-Urban land complex, ALL	IV	VI	IV
Urban land, ALL	IV	VI	IV
Urban land-Arents complex, occasionally flooded	IV	III	IV
Urban land-Iredell-Creedmoor complex, 2 to 10 percent slopes	IV	II	IV
Urban land-Masada complex, 2 to 15 percent slopes	IV	II	IV
Uwharrie clay loam, 2 to 8 percent slopes, eroded	III	II	III
Uwharrie clay loam, 8 to 15 percent slopes, eroded	IV	II	III
Uwharrie loam, 15 to 25 percent slopes	IV	II	III
Uwharrie loam, very stony, ALL	IV	II	III
Uwharrie silt loam, 2 to 8 percent slopes	II	II	I
Uwharrie silty clay loam, 2 to 8 percent slopes, eroded	III	II	II
Uwharrie silty clay loam, 2 to 8 percent slopes, moderately eroded	III	II	II
Uwharrie silty clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Uwharrie stony loam, ALL	IV	II	III
Uwharrie stony loam, very bouldery, ALL	IV	II	IV
Uwharrie-Badin complex, ALL	IV	II	III
Uwharrie-Tatum complex, 8 to 15 percent slopes	III	II	III
Uwharrie-Tatum complex, 8 to 15 percent slopes, moderately eroded	IV	II	III
Uwharrie-Urban Land, 2 to 8 percent slopes	IV	II	IV
Vance clay loam, severely eroded sloping phase	IV	II	II
Vance coarse sandy loam, 2 to 8 percent slopes	II	II	II
Vance coarse sandy loam, eroded gently sloping phase	III	II	II
Vance coarse sandy loam, eroded sloping phase	III	II	II
Vance coarse sandy loam, gently sloping phase	II	II	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Vance sandy clay loam, ALL	III	II	II
Vance sandy loam, 2 to 6 percent slopes	II	II	II
Vance sandy loam, 2 to 6 percent slopes, eroded	III	II	II
Vance sandy loam, 2 to 8 percent slopes	II	II	II
Vance sandy loam, 6 to 10 percent slopes	III	II	II
Vance sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Vance sandy loam, 8 to 15 percent slopes	III	II	II
Vance sandy loam, 10 to 15 percent slopes	III	II	II
Vance sandy loam, eroded gently sloping phase	III	II	II
Vance sandy loam, eroded moderately sloping phase	III	II	II
Vance sandy loam, eroded strongly sloping phase	IV	II	II
Vance sandy loam, gently sloping phase	II	II	II
Vance-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Wadesboro clay loam, 2 to 8 percent slopes, moderately eroded	II	I	II
Wadesboro clay loam, 8 to 15 percent slopes, moderately eroded	III	I	II
Wadesboro fine sandy loam, 2 to 7 percent slopes (Mayodan)	II	I	II
Wadesboro fine sandy loam, 2 to 7 percent slopes, eroded (Mayodan)	II	I	II
Wadesboro fine sandy loam, 7 to 10 percent slopes (Mayodan)	III	I	II
Wadesboro fine sandy loam, 7 to 10 percent slopes, eroded (Mayodan)	III	I	II
Wadesboro fine sandy loam, 10 to 14 percent slopes (Mayodan)	III	I	II
Wadesboro fine sandy loam, 10 to 14 percent slopes, eroded (Mayodan)	IV	I	II
Wadesboro fine sandy loam, 14 to 30 percent slopes (Mayodan)	IV	I	II
Wahee, ALL	II	III	I
Wake soils, ALL	IV	II	III
Wake-Saw-Wedowee complex, 2 to 8 percent slopes, rocky	IV	II	III
Wake-Wateree complex, 15 to 30 percent slopes, very rocky	IV	II	III
Wake-Wateree-Wedowee complex, 8 to 15 percent slopes, rocky	IV	II	III
Warne and Roanoke fine sandy loams (Dogue)	IV	III	II
Wateree fine sandy loam, ALL	IV	II	II
Wateree-Rion complex, 40 to 95 percent slopes	IV	II	III
Wateree-Rion-Wedowee complex, 15 to 30 percent slopes	IV	II	III
Wedowee coarse sandy loam, 2 to 6 percent slopes	II	I	I
Wedowee coarse sandy loam, 6 to 10 percent slopes	III	I	II
Wedowee loam, 2 to 8 percent slopes	II	I	I
Wedowee loam, 8 to 15 percent slopes	III	I	II
Wedowee loam, 15 to 25 percent slopes	IV	I	II
Wedowee sandy clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Wedowee sandy loam, 2 to 10 percent slopes, extremely bouldery	IV	I	IV
Wedowee sandy loam, 2 to 15 percent slopes, bouldery	IV	I	III
Wedowee sandy loam, 2 to 6 percent slopes	II	I	I
Wedowee sandy loam, 2 to 6 percent slopes, eroded	II	I	II
Wedowee sandy loam, 2 to 8 percent slopes	II	I	I
Wedowee sandy loam, 6 to 10 percent slopes	III	I	II
Wedowee sandy loam, 6 to 10 percent slopes, eroded	III	I	II
Wedowee sandy loam, 6 to 15 percent slopes	III	I	II
Wedowee sandy loam, 8 to 15 percent slopes	III	I	II
Wedowee sandy loam, 10 to 15 percent slopes	III	I	II
Wedowee sandy loam, 10 to 15 percent slopes, eroded	III	I	II
Wedowee sandy loam, 10 to 25 percent slopes	III	I	II
Wedowee sandy loam, 15 to 25 percent slopes	IV	I	II
Wedowee sandy loam, 15 to 35 percent slopes, bouldery	IV	I	III
Wedowee sandy loam, 15 to 40 percent slopes	IV	I	II

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Wedowee-Louisburg complex, 2 to 6 percent slopes	II	I	II
Wedowee-Louisburg complex, ALL OTHER	III	I	III
Wedowee-Urban land-Udorthents complex, 2 to 10 percent slopes	IV	I	IV
Wehadkee and Bibb soils	IV	III	III
Wehadkee, ALL	IV	III	III
White Store clay loam, ALL	IV	II	III
White Store fine sandy loam, moderately eroded, ALL	IV	II	III
White Store loam, 8 to 15 percent slopes	IV	II	III
White Store loam, ALL OTHER	III	II	III
White Store sandy loam, 2 to 6 percent slopes	III	II	III
White Store sandy loam, ALL OTHER	IV	II	III
White Store silt loam, 8 to 15 percent slopes	IV	II	III
White Store silt loam, ALL OTHER	III	II	III
White Store-Polkton complex, ALL	IV	II	III
White Store-Urban land complex, ALL	IV	II	IV
Wickham fine sandy loam, 0 to 3 percent slopes, rarely flooded	I	I	I
Wickham fine sandy loam, 2 to 6 percent slopes	I	I	I
Wickham fine sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Wickham fine sandy loam, 2 to 7 percent slopes, eroded	II	I	I
Wickham fine sandy loam, 2 to 8 percent slopes	II	I	I
Wickham fine sandy loam, 6 to 10 percent slopes	II	I	I
Wickham fine sandy loam, 6 to 10 percent slopes, eroded	III	I	II
Wickham fine sandy loam, 7 to 14 percent slopes, eroded	III	I	II
Wickham fine sandy loam, 10 to 15 percent slopes	III	I	II
Wickham sandy loam, ALL	I	I	I
Wilkes, ALL	IV	II	III
Wilkes-Poindexter-Wynott complex, ALL	IV	II	III
Wilkes-Urban land complex, 8 to 15 percent slopes	IV	II	IV
Winnsboro fine sandy loam, 2 to 8 percent slopes	II	II	I
Winnsboro loam, 2 to 8 percent slopes	III	II	I
Winnsboro loam, 8 to 15 percent slopes	IV	II	II
Winnsboro-Wilkes complex, 2 to 8 percent slopes	III	II	II
Winnsboro-Wilkes complex, ALL OTHER	IV	II	III
Woolwine-Fairview complex, 2 to 8 percent slopes, moderately eroded	III	II	II
Woolwine-Fairview complex, moderately eroded, ALL OTHER	IV	II	II
Woolwine-Fairview-Urban land complex, ALL	IV	II	IV
Worsham, ALL	IV	III	III
Wynott cobbly loam, 2 to 10 percent slopes, extremely stony	IV	II	IV
Wynott loam, 2 to 8 percent slopes	III	II	II
Wynott-Enon complex, 2 to 8 percent slopes	II	II	II
Wynott-Enon complex, 2 to 8 percent slopes, moderately eroded	II	II	II
Wynott-Enon complex, 8 to 15 percent slopes	II	II	II
Wynott-Enon complex, 8 to 15 percent slopes, moderately eroded	III	II	II
Wynott-Enon complex, 15 to 25 percent slopes	IV	II	II
Wynott-Enon complex, extremely bouldery, ALL	IV	II	IV
Wynott-Wilkes-Poindexter complex, 2 to 8 percent slopes	IV	II	II
Wynott-Winnsboro complex, 2 to 8 percent slopes	II	II	II
Wynott-Winnsboro complex, 8 to 15 percent slopes	II	II	II
Wynott-Winnsboro complex, 15 to 25 percent slopes	IV	II	II
Zion gravelly loam, 2 to 8 percent slopes	III	II	II
Zion gravelly loam, 8 to 15 percent slopes	IV	II	II
Zion-Enon complex, 2 to 8 percent slopes	III	II	III

MLRA136 – Piedmont

Map Unit Name	Agri	For	Hort
Zion-Enon complex, 8 to 15 percent slopes	IV	II	II
Zion-Mocksville complex, 25 to 45 percent slopes	IV	II	III
Zion-Wilkes complex, 8 to 15 percent slopes	IV	II	II
Zion-Winnsboro-Mocksville complex, ALL	IV	II	II

MLRA137 – Sandhills

Map Unit Name	Agri	For	Hort
Ailey gravelly loamy sand, 8 to 15 percent slopes	III	V	III
Ailey gravelly loamy sand, 15 to 25 percent slopes	IV	V	IV
Ailey loamy sand, ALL	III	V	III
Ailey sand, moderately wet, 0 to 6 percent slopes	II	V	II
Ailey-Urban land complex, ALL	IV	V	IV
Bibb loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV
Blaney loamy sand, 2 to 8 percent slopes	II	II	II
Blaney loamy sand, 8 to 15 percent slopes	III	II	III
Blaney-Urban land complex, ALL	IV	II	IV
Bragg sandy loam, 1 to 4 percent slopes	IV	V	IV
Candor and Wakulla soils, 8 to 15 percent slopes	IV	V	IV
Candor sand, ALL	IV	V	IV
Candor-Urban land complex, 2 to 12 percent slopes	IV	V	IV
Dothan gravelly loamy sand, 0 to 6 percent slopes	I	II	I
Dothan loamy sand, ALL	I	II	I
Emporia loamy sand, ALL	II	II	II
Faceville sandy clay loam, 2 to 6 percent slopes, eroded	II	II	II
Fuquay, ALL	II	II	II
Fuquay-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Gilead loamy sand, ALL	II	II	II
Johns fine sandy loam, 0 to 2 percent slopes	I	I	I
Johnston, ALL	IV	III	IV
Kalmia sandy loam, wet substratum, 0 to 2 percent slopes	I	II	I
Kenansville loamy sand, 0 to 4 percent slopes	II	I	II
Lakeland, ALL	IV	V	IV
Lakeland-Urban land complex, 1 to 8 percent slopes	IV	V	IV
Lillington gravelly sandy loam, 2 to 8 percent slopes	III	II	III
Lillington gravelly sandy loam, 8 to 15 percent slopes	IV	II	IV
Lillington gravelly sandy loam, 15 to 25 percent slopes	IV	II	IV
Pactolus sand, 0 to 3 percent slopes	IV	II	IV
Paxville fine sandy loam, 0 to 2 percent slopes	I	III	I
Pelion loamy sand, 0 to 2 percent slopes	II	II	II
Pelion loamy sand, 1 to 4 percent slopes	IV	II	IV
Pelion loamy sand, 2 to 8 percent slopes	III	II	III
Pelion loamy sand, 8 to 15 percent slopes	IV	II	IV
Pelion-Urban land complex, ALL	IV	II	IV
Pelion-Urban land complex, 8 to 15 percent slopes	IV	II	IV
Pocalla loamy sand, 0 to 6 percent slopes	II	II	II
Rains fine sandy loam, 0 to 2 percent slopes	III	I	III
Tetotum silt loam, 0 to 3 percent slopes, rarely flooded	I	I	I
Udorthents, ALL	IV	VI	IV
Urban land, ALL	IV	VI	IV
Vaocluse gravelly loamy sand, 2 to 8 percent slopes	III	II	III
Vaocluse gravelly loamy sand, 8 to 15 percent slopes	IV	II	IV
Vaocluse gravelly loamy sand, 15 to 25 percent slopes	IV	II	IV
Vaocluse gravelly sandy loam, ALL	III	II	III
Vaocluse gravelly sandy loam, 8 to 15 percent slopes	III	II	III
Vaocluse gravelly sandy loam, 15 to 25 percent slopes	III	II	III
Vaocluse loamy sand, 2 to 8 percent slopes	II	II	II
Vaocluse loamy sand, 8 to 15 percent slopes	III	II	III
Vaocluse loamy sand, 15 to 25 percent slopes	IV	II	IV
Vaocluse very gravelly loamy sand, ALL	IV	II	IV

MLRA137 – Sandhills

Map Unit Name	Agri	For	Hort
Vaucluse-Gilead loamy sands, 15 to 25 percent slopes	IV	II	IV
Vaucluse-Urban land complex, ALL	IV	II	IV
Wakulla and Candor soils, 0 to 8 percent slopes	IV	V	IV
Wakulla sand, ALL	IV	V	IV
Wakulla-Candor-Urban land complex, 0 to 10 percent slopes	IV	V	IV
Wehadkee fine sandy loam	IV	III	IV
Wehadkee loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV

MLRA153A – Lower Coastal Plain

Map Unit Name	Agri	For	Hort
Alaga, ALL	IV	II	IV
Alpin, ALL	IV	II	IV
Altavista, ALL	I	I	I
Altavista-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Arapahoe fine sandy loam	II	I	II
Augusta, ALL	II	I	II
Autryville fine sand, 1 to 4 percent slopes	IV	II	IV
Autryville, ALL OTHER	III	II	III
Aycock, ALL ERODED	II	I	II
Aycock, ALL OTHER	I	I	I
Ballahack loam, 0 to 2 percent slopes, occasionally flooded	I	I	I
Bayboro, ALL	I	I	I
Baymeade and Marvyn soils, 6 to 12 percent slopes	IV	V	IV
Baymeade fine sand, ALL	IV	V	IV
Baymeade-Urban land complex, 0 to 6 percent slopes	IV	V	IV
Bethera, ALL	II	I	II
Bibb and Johnston loams, frequently flooded	IV	III	IV
Bibb, ALL	IV	III	IV
Bladen, ALL	III	I	III
Blanton, ALL	IV	V	IV
Bohicket, ALL	IV	VI	IV
Bonneau loamy fine sand, 0 to 6 percent slopes	II	II	II
Bonneau loamy sand, 0 to 4 percent slopes	II	II	II
Bonneau loamy sand, 0 to 6 percent slopes	II	II	II
Bonneau loamy sand, 6 to 10 percent slopes	III	II	III
Bonneau loamy sand, 6 to 12 percent slopes	III	II	III
Borrow pits	IV	VI	IV
Bragg, ALL	IV	VI	IV
Brookman loam, frequently flooded	IV	III	IV
Butters loamy fine sand, 0 to 3 percent slopes	III	II	III
Byars loam	II	III	II
Cainhoy, ALL	IV	V	IV
Cape Fear loam, ALL	I	I	I
Caroline fine sandy loam, ALL	II	II	II
Carteret, ALL	IV	VI	IV
Centenary fine sand	IV	II	IV
Chastain and Chenneby soils, frequently flooded	IV	III	IV
Chastain silt loam, frequently flooded	IV	III	IV
Chewacla and Chastain soils, frequently flooded	IV	III	IV
Chewacla loam, frequently flooded	IV	III	IV
Chipley sand	IV	II	IV
Chowan silt loam	IV	III	IV
Conetoe, ALL	III	II	III
Congaree silt loam, 0 to 4 percent slopes, occasionally flooded	I	III	I
Corolla fine sand	IV	VI	IV
Coxville, ALL	II	I	II
Craven clay loam, 4 to 12 percent slopes, eroded	IV	I	IV
Craven fine sandy loam, 0 to 1 percent slopes	II	I	II
Craven fine sandy loam, 1 to 4 percent slopes	II	I	II
Craven fine sandy loam, 1 to 6 percent slopes, eroded	III	I	III
Craven fine sandy loam, 4 to 8 percent slopes	III	I	III
Craven fine sandy loam, 4 to 8 percent slopes, eroded	IV	I	IV

MLRA153A – Lower Coastal Plain

Map Unit Name	Agri	For	Hort
Craven fine sandy loam, 6 to 10 percent slopes	IV	I	IV
Craven fine sandy loam, 8 to 12 percent slopes, eroded	IV	I	IV
Craven loam, 1 to 4 percent slopes	II	I	II
Craven loam, 1 to 4 percent slopes, eroded	III	I	III
Craven silt loam, 1 to 4 percent slopes	II	I	II
Craven very fine sandy loam, 1 to 4 percent slopes	II	I	II
Craven very fine sandy loam, 4 to 8 percent slopes	IV	I	IV
Craven-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Croatan muck, frequently flooded	III	V	III
Croatan muck, ALL OTHER	II	V	II
Dogue sandy loam, 0 to 2 percent slopes	II	I	II
Dogue sandy loam, 2 to 6 percent slopes	III	I	III
Dogue sandy loam, 6 to 12 percent slopes	IV	I	IV
Dorovan, ALL	IV	V	IV
Duckston fine sand	IV	VI	IV
Echaw, ALL	IV	V	IV
Exum fine sandy loam, 0 to 1 percent slopes	I	II	I
Exum fine sandy loam, 1 to 6 percent slopes	II	II	II
Exum loam, 0 to 2 percent slopes	I	II	I
Exum silt loam, 0 to 2 percent slopes	I	II	I
Exum very fine sandy loam, 0 to 2 percent slopes	I	II	I
Exum very fine sandy loam, 2 to 5 percent slopes	II	II	II
Exum-Urban land complex, 0 to 2 percent slopes	IV	II	IV
Foreston loamy fine sand, ALL	II	II	II
Goldsboro sandy loam, 1 to 6 percent slopes	I	I	I
Goldsboro, ALL OTHER	I	I	I
Goldsboro-Urban land complex, ALL	IV	I	IV
Grantham, ALL	I	I	I
Grifton, ALL	II	I	II
Hobonny muck	IV	VI	IV
Icaria fine sandy loam, ALL	II	I	II
Invershiel-Pender complex, 0 to 2 percent slopes	I	II	I
Johns, ALL	II	I	II
Johnston and Pamlico soils, 0 to 1 percent slopes, frequently flooded	IV	III	IV
Johnston soils	IV	III	IV
Kalmia, ALL	II	II	II
Kenansville, ALL	III	II	III
Kinston loam, frequently flooded	IV	III	IV
Kureb, ALL	IV	V	IV
Lafitte muck	IV	VI	IV
Lakeland sand, 0 to 6 percent slopes	IV	V	IV
Leaf, ALL	III	I	III
Lenoir, ALL	III	I	III
Leon, ALL	IV	V	III
Leon-Urban land complex	IV	V	IV
Liddell silt loam	II	I	II
Lucy loamy sand, 0 to 6 percent slopes	II	II	II
Lumbee, ALL	II	I	II
Lynchburg, ALL	II	I	II
Lynchburg-Urban land complex	IV	I	IV
Lynn Haven sand	IV	II	IV
Mandarin, ALL	IV	V	IV

MLRA153A – Lower Coastal Plain

Map Unit Name	Agri	For	Hort
Mandarin-Urban land complex	IV	V	IV
Marvyn and Craven soils, 6 to 12 percent slopes	IV	I	IV
Marvyn, ALL	IV	I	IV
Masada sandy loam, 0 to 4 percent slopes	I	II	I
Masontown, ALL	IV	III	IV
Masontown mucky fine sandy loam and Muckalee sandy loam, frequently flooded	IV	III	IV
Meggett fine sandy loam, frequently flooded	IV	III	IV
Meggett, ALL OTHER	III	I	III
Mine pits	IV	VI	IV
Muckalee loam, ALL	IV	III	IV
Murville, ALL	IV	V	IV
Nahunta, ALL	I	I	I
Nakina fine sandy loam	I	I	I
Nawney loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV
Newhan, ALL	IV	VI	IV
Newhan-Corolla complex, 0 to 30 percent slopes	IV	VI	IV
Newhan-Corolla-Urban land complex, 0 to 30 percent slopes	IV	VI	IV
Noboco fine sandy loam, 0 to 2 percent slopes	I	I	I
Noboco fine sandy loam, 2 to 6 percent slopes	II	I	II
Norfolk, ALL	II	II	II
Norfolk-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Ocilla loamy fine sand, 0 to 4 percent slopes	IV	II	IV
Olustee loamy sand, sandy subsoil variant (Murville)	IV	II	IV
Onslow, ALL	II	II	II
Osier loamy sand, loamy substratum	IV	I	IV
Pactolus, ALL	IV	II	IV
Pamlico muck, frequently flooded	IV	V	IV
Pamlico muck, ALL OTHER	III	V	III
Pantego, ALL	I	I	I
Paxville sandy loam	II	III	II
Pender fine sandy loam	II	I	II
Pender-Urban land complex	IV	I	IV
Pits, ALL	IV	VI	IV
Pocalla loamy sand, 0 to 6 percent slopes	III	II	III
Rains, ALL	I	I	I
Rains-Urban land complex	IV	I	IV
Rimini sand 1 to 6 percent slopes	IV	V	IV
Roanoke, frequently flooded	IV	III	IV
Roanoke, ALL OTHER	II	III	II
Rumford, ALL	III	II	III
Rutlege mucky loamy fine sand	IV	V	IV
Seabrook, ALL	IV	II	IV
Seabrook-Urban land complex	IV	II	IV
Stallings, ALL	II	II	II
State fine sandy loam, 0 to 2 percent slopes	I	I	I
State fine sandy loam, 2 to 6 percent slopes	II	I	II
State loamy sand, 0 to 2 percent slopes	I	I	I
Stockade fine sandy loam	I	I	I
Suffolk loamy sand, 10 to 30 percent slopes	I	II	I
Swamp	IV	III	IV
Tarboro, ALL	IV	II	IV
Tarboro-Urban land complex, 0 to 6 percent slopes	IV	II	IV

MLRA153A – Lower Coastal Plain

Map Unit Name	Agri	For	Hort
Tomahawk fine sand, 0 to 3 percent slopes	IV	II	IV
Tomahawk loamy fine sand	IV	II	IV
Tomahawk loamy fine sand	IV	II	IV
Tomahawk loamy sand, 0 to 3 percent slopes	III	II	III
Tomotley, ALL	I	I	I
Torhunta, ALL	II	I	II
Torhunta-Urban land complex	IV	I	IV
Tuckerman fine sandy loam	II	II	II
Udorthents, ALL	IV	VI	IV
Udults, steep	IV	VI	IV
Umbric Ochraqualfs	IV	VI	IV
Urban land	IV	VI	IV
Valhalla fine sand, 0 to 6 percent slopes	III	II	III
Wagram loamy fine sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 6 to 10 percent slopes	III	II	III
Wagram loamy sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 10 to 15 percent slopes	IV	II	IV
Wahee, ALL	II	I	II
Wando fine sand, 0 to 6 percent slopes	IV	II	IV
Wando-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Wakulla sand, ALL	IV	V	IV
Wasda muck	I	I	I
Wehadkee silt loam	IV	III	IV
Wickham fine sandy loam, 0 to 2 percent slopes	I	I	I
Wickham fine sandy loam, 2 to 6 percent slopes	II	I	II
Wickham fine sandy loam, 6 to 10 percent slopes	II	I	II
Wickham loamy sand, 1 to 6 percent slopes	II	I	II
Wickham sandy loam, 0 to 2 percent slopes	I	I	I
Wickham sandy loam, 0 to 6 percent slopes	II	I	II
Wickham sandy loam, 0 to 6 percent slopes, rarely flooded	II	I	II
Wickham sandy loam, 2 to 6 percent slopes	II	I	II
Wickham-Urban land complex, 2 to 10 percent slopes	IV	I	IV
Wilbanks, ALL	IV	III	IV
Winton, ALL	IV	I	IV
Woodington, ALL	II	II	II
Wrightsboro fine sandy loam 0 to 2 percent slopes	I	I	I
Yaupon silty clay loam, 0 to 3 percent slopes	III	VI	III

MLRA153B – Tidewater Area

Map Unit Name	Agri	For	Hort
Acredale silt loam, 0 to 2 percent slopes, rarely flooded	I	I	I
Altavista ,ALL	I	I	I
Altavista-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Arapahoe, ALL	I	I	I
Argent, ALL	II	I	II
Augusta ,ALL	II	I	II
Augusta-Urban land complex	IV	I	IV
Backbay mucky peat, 0 to 1 percent slopes, very frequently flooded	IV	VI	IV
Ballahack fine sandy loam, occasionally flooded	I	I	I
Barclay very fine sandy loam	I	I	I
Bayboro, ALL	I	I	I
Baymeade ,ALL	IV	V	IV
Baymeade-Urban land complex 1 to 6 percent slopes	IV	V	IV
Beaches, ALL	IV	VI	IV
Beaches-Newhan association	IV	VI	IV
Beaches-Newhan complex, ALL	IV	VI	IV
Belhaven muck, 0 to 2 percent slopes, frequently flooded	IV	V	IV
Belhaven muck, ALL OTHER	II	V	II
Bertie ,ALL	II	I	II
Bibb soils	IV	III	IV
Bladen ,ALL	III	I	III
Bohicket silty clay loam	IV	VI	IV
Bojac, ALL	III	II	III
Bolling loamy fine sand, 0 to 3 percent slopes, rarely flooded	II	I	II
Borrow pits	IV	VI	IV
Brookman loam, 0 to 2 percent slopes, rarely flooded	II	I	II
Brookman mucky loam, frequently flooded	IV	III	IV
Brookman mucky silt loam	I	I	I
Cape Fear, ALL	I	I	I
Carteret, ALL	IV	VI	IV
Chapanoke silt loam, ALL	I	I	I
Charleston loamy fine sand	III	II	III
Chowan, ALL	IV	III	IV
Conaby muck, ALL	II	I	II
Conetoe, ALL	III	II	III
Corolla, ALL	IV	VI	IV
Corolla-Duckston complex, ALL	IV	VI	IV
Corolla-Urban land complex	IV	VI	IV
Currituck, ALL	IV	VI	IV
Dare muck	IV	V	IV
Deloss fine sandy loam	I	III	I
Deloss mucky loam, frequently flooded	IV	III	IV
Delway muck, 0 to 1 percent slopes, very frequently flooded	IV	VI	IV
Dogue, ALL	II	I	II
Dorovan, ALL	IV	V	IV
Dragston, ALL	II	I	II
Duckston, ALL	IV	VI	IV
Duckston-Corolla complex, 0 to 6 percent slopes, rarely flooded	IV	VI	IV
Dune land, ALL	IV	VI	IV
Dune land-Newhan complex, 2 to 40 percent slopes	IV	VI	IV
Elkton, ALL	II	I	II
Engelhard loamy very fine sand, 0 to 2 percent slopes, frequently flooded	IV	III	IV

MLRA153B – Tidewater Area

Map Unit Name	Agri	For	Hort
Engelhard loamy very fine sand, 0 to 2 percent slopes, rarely flooded	II	III	II
Fallsington fine sandy loam	IV	I	IV
Fork fine sandy loam, 0 to 2 percent slopes, rarely flooded	I	I	I
Fork loamy fine sand	II	I	II
Fortescue, ALL	I	III	I
Fripp fine sand, 2 to 30 percent slopes	IV	VI	IV
Galestown loamy fine sand	IV	II	IV
Gullrock muck, 0 to 2 percent slopes, rarely flooded	II	I	II
Hobonny muck, 0 to 1 percent slopes, frequently flooded	IV	VI	IV
Hobucken, ALL	IV	VI	IV
Hyde, ALL	I	I	I
Hydeland silt loam, 0 to 2 percent slopes, rarely flooded	I	I	I
Icaria loamy fine sand, 0 to 2 percent slopes, rarely flooded	II	I	II
Johns loamy sand, 0 to 2 percent slopes	II	I	II
Klej loamy fine sand	IV	II	IV
Kureb sand 1 to 8 percent slopes	IV	V	IV
Kureb-Urban land complex 1 to 8 percent slopes	IV	V	IV
Lafitte muck, ALL	IV	VI	IV
Lakeland sand 1 to 8 percent slopes	IV	V	IV
Leaf silt loam	III	I	III
Lenoir, ALL	III	I	III
Leon fine sand, 0 to 2 percent slopes, rarely flooded	IV	V	III
Leon sand	IV	V	III
Longshoal mucky peat, 0 to 1 percent slopes, very frequently flooded	IV	VI	IV
Lynn Haven, ALL	IV	II	IV
Made land and dumps	IV	VI	IV
Masontown mucky fine sandy loam	IV	III	IV
Matapeake fine and very fine sandy loams	I	II	I
Mattapex, ALL	II	I	II
Munden, ALL	II	I	II
Newhan, ALL	IV	VI	IV
Newhan-Beaches complex,	IV	VI	IV
Newhan-Corolla complex, ALL	IV	VI	IV
Newhan-Corolla-Urban land complex, 0 to 30 percent slopes	IV	VI	IV
Newhan-Urban land complex, ALL	IV	VI	IV
Newholland mucky loamy sand, 0 to 2 percent slopes, frequently flooded	IV	V	IV
Newholland mucky loamy sand, 0 to 2 percent slopes, rarely flooded	I	V	I
Nimmo, ALL	II	I	II
Nixonton very fine sandy loam	I	I	I
Osier fine sand, ALL	IV	I	IV
Othello, ALL	I	II	I
Ousley fine sand, ALL	IV	V	IV
Pactolus fine sand	IV	II	IV
Pasquotank, ALL	I	I	I
Paxville mucky fine sandy loam	II	III	II
Perquimans, ALL	I	I	I
Pettigrew muck, ALL	II	I	II
Pits, mine	IV	VI	IV
Pocomoke, ALL	II	I	II
Ponzer, ALL	II	V	II
Portsmouth, ALL	I	I	I
Psamments, 0 to 6 percent slopes	IV	VI	IV

MLRA153B – Tidewater Area

Map Unit Name	Agri	For	Hort
Pungo muck, ALL	III	V	III
Roanoke, ALL	II	I	II
Roper muck, ALL	I	I	I
Sassafras loamy fine sand	II	I	II
Scuppernong muck, ALL	II	V	II
Seabrook, ALL	IV	II	IV
Seabrook-Urban land complex	IV	II	IV
Seagate fine sand	IV	II	IV
Seagate-Urban land complex	IV	II	IV
State fine sandy loam, ALL	I	I	I
State loamy fine sand, ALL	II	I	II
State sandy loam, ALL	I	I	I
State-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Stockade loamy fine sand	I	III	I
Stockade mucky loam, ALL	IV	III	IV
Stono, ALL	I	I	I
Tarboro sand, ALL	IV	II	IV
Tidal marsh	IV	VI	IV
Tomotley fine sandy loam, ALL	I	I	I
Udorthents, ALL	IV	VI	IV
Urban land ALL	IV	VI	IV
Wahee, ALL	II	I	II
Wakulla sand, ALL	IV	V	IV
Wando, ALL	IV	II	IV
Wasda muck ALL	I	I	I
Weeksville loam, 0 to 2 percent slopes, frequently flooded	IV	I	IV
Weeksville, ALL OTHER	I	I	I
Wickham loamy sand, 0 to 4 percent slopes	II	I	II
Woodstown fine sandy loam	I	I	I
Wysocking very fine sandy loam, 0 to 3 percent slopes, rarely flooded	I	III	I
Yaupon fine sandy loam, 0 to 3 percent slopes	III	VI	III
Yeopim loam, 0 to 2 percent slopes	I	I	I
Yeopim loam, 2 to 6 percent slopes	II	I	II
Yeopim silt loam, ALL	I	I	I
Yonges, ALL	I	I	I