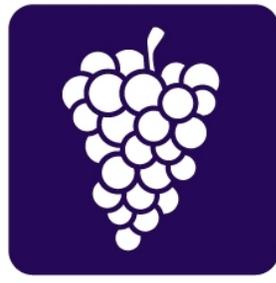


# New Kent

C O U N T Y



V I R G I N I A

## 2016 REASSESSMENT PROCEDURE

## **INTRODUCTION**

### **Scope of Responsibility**

The New Kent County Commissioner of the Revenue has prepared this report to provide our citizens and taxpayers with a better understanding of the assessors' responsibilities and activities. The 2016 reassessment was prepared under the provisions of the Code of Virginia, 58.1-3252

The 2016 reassessment results is an estimate of the market value of each taxable property within New Kent County's boundaries. Where required by law, estimates value on several bases other than market value. These are described where applicable later in this report.

### **General Assumptions and Limiting Conditions**

The assessed value estimates are subject to the following conditions:

The assessments were prepared exclusively for ad valorem tax purposes. The property characteristic data upon which the assessments are based is assumed to be correct. Physical inspections of the property assessed were performed as staff resources and time allowed.

Validation of sales transactions occurred through multiple listing service and field review. In the absence of such confirmation, residential sales data obtained from vendors was considered reliable.

- *No responsibility is assumed for the legal description or for matters including legal or title considerations. Title to any property is assumed to be good and marketable, unless otherwise stated.*
- *All property is assessed fee simple, as if free and clear of any or all liens or encumbrances, unless otherwise stated. All taxes are assumed to be current.*
- *All property is assessed as though under responsible, adequately capitalized ownership and competent property management.*
- *All engineering is assumed to be correct, unless otherwise noted. Any plat plans and/or illustrative material contained with the assessment records are included only to assist in visualizing the property.*
- *It is assumed that there is full compliance with all applicable federal, state and local environmental regulations and laws unless noncompliance is stated, defined and considered.*
- *It is assumed that all applicable zoning and use regulations and restrictions have been complied with unless nonconformity has been stated, defined and considered in this mass assessment report.*

Unless otherwise stated in this report, the assessment has taken into account any existence of hazardous substances or other environmental conditions that the assessor is aware of. Diligent inquiry into any properties suffering a loss in value based on the existence of hazardous substances or other environmental conditions has been made. The value estimates are predicated on the assumption that any such conditions on or in the property or in such proximity thereto that it would cause a loss in value

have been addressed. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them.

### **Effective Date of Appraisal and Date of the Report**

All assessments are as of January 1, 2016.

### **Definition of Value**

Except as otherwise provided by the Code of Virginia 58.1 chapter 32, all taxable property is assessed at its “market value” as of January 1. Under the tax code, “market value” means the price at which a property would transfer for cash or its equivalent under prevailing market conditions if:

- *Exposed for sale in the open market with a reasonable time for the seller to find a purchaser:*
- *Both the seller and the buyer know of all uses and purposes to which the property is adapted and for which it is capable of being used and of the enforceable restrictions on its use, and;*
- *Both the seller and buyer seek to maximize their gains and neither is in a position to take advantage of the exigencies of the other.*

### **Properties Appraised**

The CAMA system, Computer assisted mass appraisal technique, assesses all taxable real property known to New Kent County as of January 1, 2016. Any taxable real property discovered to be left off of the appraisal roll and any clerical or calculation error will be supplemented or refunded for the tax years allowed as prescribed under Codes of Virginia. 58.1-3903; 58.1-3313

### **Scope of Work Used to Develop the Assessments**

This mass assessment all taxable real property within the boundaries of New Kent County Virginia. This involves approximately 20,000 parcels. Work is distributed among several appraisal personnel. The following sections describe, by area of responsibility.

The Chief Assessor, Commissioner of the Revenue, manages the reassessment. All employees report to the chief assessor through their immediate department manager. The department is divided into separate assessment divisions, customer service, sales and research, mapping and new parcel creation, field inspection and administration. Customer Service encompasses tax relief for the elderly & handicapped, Veterans, AFD and related exemption applications, and taxpayer information and assistance. The sales and research division handles gathering sales information and sales verification. Field Inspections handles the physical inspection of real property. Administration is responsible for budget and financial matters, and Information Services computer facilities and is responsible for deed transfers and GIS mapping.

### **Determination of Highest and Best Use for Real Property**

New Kent's market value assessments are performed pursuant to Article X, Sec. 2., Constitution of Virginia, which provides that all assessments shall be at their fair market value, to be ascertained as prescribed by law.

§ 58.1- 3280

**Assessment of values.**

*Every assessor or appraiser so designated under this chapter shall, as soon as practicable after being so designated, proceed to ascertain and assess the fair market value of all lands and lots assessable by them, with the improvements and buildings thereon. They shall make a physical examination thereof if required by the taxpayer, and in all other cases where they deem it advisable.*

§ 58.1-3201

**What real estate to be taxed; amount of assessment; public service corporation property.**

*All real estate, except that exempted by law, shall be subject to such annual taxation as may be prescribed by law. All general reassessments or annual assessments in those localities which have annual assessments of real estate, except as otherwise provided in § 58.1-2604, shall be made at 100 percent fair market value and, except as provided in § 58.1-2608, the State Corporation Commission and the Department of Taxation shall certify public service corporation property to such county or city, with the exception of the nonoperating (noncarrier) property of railroads, on the basis of the assessment ratio as most recently determined and published by the Department of Taxation. The Department of Taxation shall, ten days after determining the assessment ratio, notify the locality of that determination and the basis on which the determination was made. Nonoperating (noncarrier) property of railroads shall be valued for assessment by the city or county in which it is located uniformly with similarly situated real estate in the same jurisdiction upon the best and most reliable information that can be procured. The Tax Commissioner shall determine which property is part of the operating unit of the railroads and which is nonoperating (noncarrier) property for purposes of the report described in § 58.1-2653. Such determination shall be made in accordance with the meaning of such terms in the Interstate Commerce Commission's Uniform System of Accounts. The inclusion, or failure to include, property in such report described in § 58.1-2653 may be reviewed and redetermined by the Tax Commissioner at the request of any railroad, county, city, town or magisterial district.*

**Highest and Best Use Analysis**

The highest and best use of property is the reasonable and probable use that supports the highest present value as of the date of the appraisal. The highest and best use must be physically possible, legal, financially feasible, and productive to its maximum. The highest and best use of residential property is normally its current use. This is due in part to the fact that residential development, in many areas through use of deed restrictions and zoning, precludes other land uses. Residential Valuation undertakes reassessment of highest and best use in transition areas and areas of mixed residential and commercial use. In areas of transition, the analyst reviews the existing residential property use and makes a determination regarding highest and best use. As an example, it may be determined that a neighborhood is undergoing urban gentrification. (Gentrification refers to the changes that result when people of higher income levels acquire property in lower income communities.) Based on the analysis a determination will be made as to whether the use remains the same or has changed. In areas of mixed residential and commercial use,

the analyst reviews properties in these areas to determine if changes in the real estate market require reassessment of the highest and best use of a select population of properties

## **FIELD OPERATIONS**

### ***Scope of Work***

The field operations activities for the residential assessor are collecting and maintaining property characteristic data for all residential property types, which are located within the boundaries of New Kent County. These activities involve the field inspection of real property, as well as data entry of all data collection into the appraisal Vision CAMA system.

Periodic physical review of property is performed.

### ***Procedure for Collecting and Validating Data***

Data collection of real property involves maintaining data characteristics of the property on CAMA (Computer Assisted Mass Appraisal). The information contained in CAMA files includes site characteristics, such as land size and topography, and improvement data, such as square foot of living area, year built and effective age, quality of construction, and condition.

Data collection requires organization, planning and supervision of the assessment staff. Data collection procedures have been established. The inspectors are assigned areas throughout the jurisdiction to conduct field inspections and record information needed for an appraisal.

The quality of the data used is extremely important in establishing estimates of market value for taxable properties. While production standards are established and upheld for various responsibilities, quality of data is emphasized to each assessor. New assessors are trained in the specifics of data collection procedures. Experienced assessors routinely review data collection procedures, new software available, and general construction. A quality assurance process exists to review the work being performed by all the assessors. The quality assurance is used to ensure that assessors follow procedures, identify training issues and provide uniform training throughout the field assessment staff.

### ***Sources of Data***

The sources of our data collection and verification are through building permits, field inspections, data mailers, hearings, newspapers and publications, and property owner via the Internet.

Building permit data attained from New Kent County Building Development trigger field inspections on property experiencing significant characteristic changes due to new construction or remodeling. Unreported improvements are identified from aerial photographs, and visual inventories. Data accuracy is also enhanced by the availability of New Kent County's property records on the Internet. Property owners frequently contact our website to report data inaccuracies such as the number of baths and bedrooms requiring a correction in characteristic of the property. Some may initiate a field inspection.

Data reviews of entire neighborhoods are conducted when ratio studies indicate wide dispersions between the value and the sale price. The sales validation effort in real property pertains to the collection of data of properties that have sold.

## **MODEL SPECIFICATION**

### ***Area Analysis***

Data on regional economic forces such as demographic patterns, regional location factors, employment and income patterns, general trends in real property prices and rents, interest rate trends, availability of vacant land, construction trends and cost are collected from local real estate professionals, private vendors and public sources. Information is gleaned from real estate publications and sources Marshall & Swift, IAAO, and applicable sources found on the Internet, Realty rates, Colliers, Weldon Cooper and Richmond MLS. Local newspapers, builders and suppliers also provide the valuation analysts a current economic outlook on New Kent County's real estate market.

### ***Neighborhood and Market Analysis***

Neighborhood analysis involves the examination of how physical, economic, governmental and social forces and other influences affect property values. The effects of these forces are also used to identify, classify, and stratify comparable properties into smaller, manageable subsets of the universe of properties known as neighborhoods. Current analysis is defined within a given subdivision and then expanded to neighborhoods. Subdivisions with common elements are grouped together. Any differences within the subdivisions are analyzed, studied, and changes made as determined by our studies.

The first step in neighborhood analysis is the identification of a group of properties that share certain common traits. A "neighborhood" for analysis purposes is defined as the largest geographic grouping of properties where the property's physical, economic, governmental and social forces are generally similar and uniform. Geographic stratification accommodates the local supply and demand factors that vary across a jurisdiction. Once a neighborhood has been identified, the next step is to define its boundaries. This process is known as "delineation". Some factors used in neighborhood delineation include location, sales price range, lot size, age of dwelling, quality of construction and condition of dwellings, square footage of living area, and story height. Delineation can involve the physical drawing of neighborhood boundary lines on a map, but it can also involve statistical separation or stratification based on attribute analysis. Part of neighborhood analysis is the consideration of discernible patterns of growth that influence a neighborhood's individual market. Few neighborhoods are fixed in character. Each neighborhood may be characterized as being in a stage of growth, stability or decline. The growth period is a time of development and construction. As new neighborhoods in a community are developed they compete with existing neighborhoods. An added supply of new homes tends to induce population shift from older homes to newer homes. In the period of stability or equilibrium the forces of supply and demand are about equal. Generally, in the stage of equilibrium, older neighborhoods can be more desirable due to their stability of residential character and proximity to the workplace and other community facilities. The period of decline reflects diminishing demand or desirability. During decline

general property use may change from residential to a mix of residential and commercial uses. Declining neighborhoods may also experience renewal, reorganization, rebuilding, or restoration, which promotes increased demand and economic desirability.

Neighborhood identification and delineation is the cornerstone of the residential valuation system at the district. All the residential analysis work done in association with the residential valuation process is neighborhood specific. Neighborhoods are reviewed and delineated based on observable aspects of homogeneity. Neighborhood grouping is highly beneficial in cost-derived areas of limited or no sales, or use in direct sales comparison analysis. Neighborhood groups and clustered neighborhoods increase the available market data by linking comparable properties outside a given neighborhood. Sales ratio analysis is performed on a neighborhood basis, neighborhood group basis and cluster basis.

## **MODEL CALIBRATION**

Assessors nationwide use what are commonly referred to as "Mass Appraisal Techniques" in the valuation of property. Mass appraisal is a widely accepted tool for the valuation of property for the purposes of taxation. It differs markedly from appraisal techniques utilized by fee appraisers, who are concerned with the valuation of one specific property only. Inasmuch as the market approach is often the best indicator of value for various other types of property, it is often used for valuation of non-residential property classes, as well. The advent of computer systems and software with large data storage and sophisticated analytical capability made possible utilization of sales information, property characteristics, and statistical techniques to estimate the value of individual properties using sales information from many properties. This capability is the basis of the modern Computer Aided Mass Appraisal system (CAMA) employed nearly universally by Assessors nationwide.

### ***CAMA Modeling***

The appraiser developing a CAMA model uses various techniques in order to develop an appraisal model that replicates the market in assigning value to the various features of a property. Such techniques may include linear or multiple regression statistical analysis, trend analysis, other statistical techniques, or modification of existing or accepted models. A key part of the modeling process involves continual testing of the model to determine if it is accurately predicting the value of properties. This is generally done by comparing the sale price of properties with the value assigned by the model to the property.

### ***Application of the Model***

Once a CAMA model is developed by the appraiser for a class or subclass of property, it is then applied to all properties, sold and unsold, in that class or subclass. This assures that all properties in the class or subclass are treated equitably.

### ***Sales Information***

Sales information on sold properties is maintained within the CAMA system. Residential improved sales are collected from a variety of sources including, but not limited to, district questionnaires sent to buyer

and seller, field discovery, appeal hearings, local real estate professionals, various sale vendors, builders, and Realtors. A system of type, source, and validity codes was established to define salient facts related to a property's purchase or transfer. Neighborhood and subdivision sales reports are generated as an analysis tool for the analyst in the development of value estimates.

### ***Land Analysis***

Residential land analysis is conducted by developing a base lot primary rate for each neighborhood using either sold lots which are preferred in the absence of sold lots abstraction and allocation methods are used. The acre, square foot or building lot land table is designed to systematically value the primary with residual land based on a secondary class rates. Specific land influences are used where necessary to adjust parcels outside the norm of the land table pricing. Adjustments are made to parcels for things such as view, shape, size, and topography, among others.

### ***Statistical Analysis***

Statistical analysis is done on regular bases to evaluate whether values are equitable and consistent with the market. Ratio studies are conducted on each neighborhood to judge the primary aspects of mass appraisal; an estimate of market value and uniformity of value. Measures of central tendency are used to determine if the estimate of market value and uniformity have been met. These statistical measurements include but are not limited to, the weighted mean, mean, mode, median, standard deviation, coefficient of variation, and coefficient of dispersion provide the appraiser with tools by which to determine both the level of market value and uniformity in the appraised values for a neighborhood.

Through the use of sales ratio reports and neighborhood profiling the appraiser reviews each neighborhood annually. The sales ratio report shows a comparison (ratio) between current appraised values and recent sales prices in neighborhoods. This set of ratios is an excellent means of judging the present level of appraised value. The COD (coefficient of dispersion) will show the uniformity in the appraisals. Charts and graphs are also of benefit when reviewing data. Histogram (bar chart) shows the distribution of ratios within a class of properties, neighborhood or city. This distribution of ratios will show the frequency in the level of appraisals and the tightness of the distribution shows uniformity. The height of the bars in the chart indicates the number or percentage of the ratios that fall in each interval. A bell shaped curve will show the extent to which the ratios are normal. Anything outside of the curve are concerned outliers and must be looked at individually by the assessor. Based on this analysis of data the appraiser will make a decision as to whether the level of assessment is acceptable for each class/neighborhood.

### ***Market Adjustment or Trending Factors***

Market adjustment factors are developed from appraisal statistics provided from ratio studies and are used to ensure that estimated values are consistent with the market. The primary approach to the valuation of residential properties uses a hybrid cost-sales comparison approach. This type of approach accounts for neighborhood market influences not specified in the cost approach.

Where the market value equals the land value plus the replacement cost new less depreciation time market adjustment factors. As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an estimate of market value. Market or location adjustments are applied uniformly within neighborhoods to account for location variances between market areas or across a jurisdiction.

If the subdivision/neighborhood is to be updated, the assessor uses a ratio study that compares recent sales prices of properties within a delineated subdivision/neighborhood with the properties' assessed value. The calculated ratio derived from the sum of the sold properties' assessed value divided by the sum of the sales prices indicates the subdivision/neighborhood level of value based on the unadjusted value for the sold properties. This comparison of assessed value-to-sale ratio determines the market adjustment factor for each subdivision/neighborhood. This market adjustment factor is needed to trend the values closer to the actual market evidenced by recent sales prices within a given subdivision/neighborhood. The market adjustment factor calculated for each updated subdivision/neighborhood is applied uniformly to all properties within a neighborhood and as needed in the subdivision. Once the market-trend factors are applied, a second set of ratio studies is generated that compares recent sale prices with the proposed appraised values for these sold properties. From this set of ratio studies, the assessor judges the assessment level and uniformity in both updated and non-updated subdivision/neighborhoods.

When considering adjustments for time the assessor will look for paired sales, preferable several properties that have sold and then resold within a designated period of time. The difference between the first sale and then the resale indicates the percentage of the increase or the decrease in the market.

### ***The Income Approach***

In general, for income-producing properties the income approach is the preferred valuation approach when reliable income and expense data are available, along with well-supported income multipliers, overall rates, and required rates of return on investment. Successful application of the income approach requires the collection, maintenance, and careful analysis of income and expense data. Mass appraisal applications of the income approach begin with collecting and processing income and expense data. The collected data are then analyzed to determine typical figures. The developed income figures can be capitalized into estimates of value in a number of ways. The most direct method involves the application of gross income multipliers, which express the ratio of market value to gross income. At a more refined level, net income multipliers or their reciprocals, overall capitalization rates, can be developed and applied. These multipliers and rates should always be extracted from actual income and sale price data obtained from properties that have recently been sold. Due to a lack of reliable commercial.

### ***The Cost Approach***

Reliable cost data are imperative in any successful application of the cost approach. The data must be complete, typical, and current. Current construction costs should be based on the cost of replacing a structure with one of equal utility, using current materials, design, and building standards. Costs of individual construction components and building items should also be included in order to adjust

for features that differ from the base specifications. These costs are incorporated into a construction cost manual and related computer software. Construction cost schedules can be developed internally, based on a systematic study of local construction costs, obtained from firms specializing in such information, or custom generated by a contractor. Cost schedules should be verified for accuracy by applying them to recently constructed improvements of known cost. Construction costs also should be updated before each assessment cycle. The estimation of accrued depreciation must be based on non-cost data (primarily sales) and can involve considerable subjectivity. Also the land value must be estimated from sales, often from sales of improved.

## **VALUE REVIEW PROCEDURES**

### ***Field Review***

The assessor identifies individual properties in critical need of field review through sales ratio analysis. Sold properties with a high variance in sales ratios are field reviewed to check for accuracy of data characteristics. If data inaccuracies are found in a large percentage of the sold properties, the entire subdivision/ neighborhood is field reviewed by the assessor in their annual work plan. A concerted effort is made to field review transition or other areas experiencing high degrees of remodeling, new construction, or wide variations in sales prices. Additionally, the assessor frequently field reviews subjective data items such as quality of construction, condition, and physical, functional and economic obsolescence, factors contributing significantly to the market value of the property.

### ***Office Review***

Given the resources and time required to conduct a routine field review of properties, homogeneous properties consisting of tract housing with a low variance in sales ratios and other properties having a recent field inspection date are value reviewed in the office. Valuation reports comparing previous values against proposed and final values can be generated for all residential improved properties. Previous values resulting from a formal appeal hearing and others from informal hearings are individually reviewed to determine if the value remains appropriate for the current year. Although the value estimates are determined in a computerized mass appraisal environment, assessor review helps to identify value anomalies before the value is released for noticing.

## **PERFORMANCE TESTS**

### ***Sales Ratio Studies***

The primary analytical tool used by the appraiser to measure and improve performance is the ratio study. This helps to insure that the appraised values that are produced meet the standards of accuracy in several ways. Overall sales ratios are generated for each ISD to allow the appraiser to review general market trends within their area of responsibility, and provide an indication of market appreciation or depreciation over a specified period of time. Sales ratio reports are run several times prior to the setting of preliminary values as well as after finalization of appraisal values in order to catch any inaccuracies, value anomalies, or outliers. The sales ratio chart is a quick view of outliers outside of a bell curve.

The use of profiling neighborhoods is a useful tool to ensure classification, quality, condition are all similar within similar neighborhoods and similar type properties. The analysis tool in the profiling allows the appraiser to sort the sold properties by total living area, date of sale and indicated adjustment that appear as outliers or trends.

### ***Median Sales Ratio***

Calculation of median sales ratio is a fairly straightforward technique. First, a Sales Ratio is calculated for each sale in the sales base. This is done by dividing the Assessor's Actual Value by the Adjusted Sales Price (for example, if the Assessor's Actual Value for a property is \$95,000 and the Adjusted Sales Price is \$100,000, the Sales Ratio for that property would be .95). Sales Ratios for all qualified sales in the sales base are then arrayed from lowest ratio to the highest and the Median Sales Ratio is calculated.

### ***Coefficient of Dispersion***

The second statistical test that is applied to a sales base is calculation of the Coefficient of Dispersion (often referred to as COD). After the Median Sales Ratio is calculated, it is subtracted from each sold property's Sale Ratio. The result is called the Absolute Deviation (ignoring a positive or negative sign of the sum) for each sold property. For example, if a property's Sales Ratio is 1.05, the Absolute Deviation between it and a Median Sales Ratio of 1.00 would be .05. The Absolute Deviation between a Sales Ratio of .95 and a Median Sales Ratio of 1.00 would also be .05. After all Absolute Deviations are computed, they are added and an Average Absolute Deviation computed. The Average Absolute Deviation is then divided by the Median Sales Ratio. This equals the Coefficient of Dispersion.

These two tests are designed to measure two important factors. One is that, to the best means available, the value computed for properties approximates what they sold for in a large number of cases. Second, that the difference between the value computed for properties, and their actual adjusted sales price is minimize in a large number of individual cases. The goal is to achieve assessment equity for the largest number of properties; that is, that a computed value approximates the actual adjusted sales price for the largest number of cases. Such a model can then be applied with confidence to the unsold properties in the count. While these tests are applied countywide to classes of property to insure compliance with state assessment guidelines, they are often also applied to subclasses of property (i.e. neighborhoods, building types, construction qualities, etc.) to test the CAMA model's prediction of value. While this appraisal methodology differs considerably from a market approach fee-type appraisal, it is similar in its intent in that it utilizes market information to estimate value of subject properties.

### ***Market Adjustment or Trending Factors***

Market adjustment factors are developed from appraisal statistics provided from ratio studies and are used to ensure that estimated values are consistent with the market. The district's primary approach to the valuation of commercial properties uses a hybrid cost-sales-income comparison approach. This type of approach accounts for neighborhood market influences not specified in the cost approach. The following equation denotes the hybrid model used:

$$MV = LV + ((CN - D) \times MA)$$

$$\text{Market Value} = \text{Land Value} + ((\text{Cost New} - \text{Depreciation}) \times \text{Market Adjustment})$$

$$\$1,135,440 = \$200,000 + ((\$850,400 - 12\%) \times 1.25\%)$$

Where the market value equals the land value plus the replacement cost new less depreciation and market adjustment factors. As the cost approach separately estimates both land and building values and uses depreciated replacement costs, which reflect only the supply side of the market, it is expected that adjustments to the cost values are needed to bring the level of appraisal to an estimate of market value. Market or location adjustments are applied uniformly within neighborhoods to account for location variances between market areas or across a jurisdiction.