Real Property Assessment
Loudoun County, VA.

BOB WERTZ, LOUDOUN COUNTY COMMISSIONER OF THE REVENUE
JAMES WHITE, DEPUTY COMMISSIONER
JAMIE RITCHIE & PATRICK JEWELL, SUPERVISING APPRAISERS
Commissioner of the Revenue

As the chief tax assessing officer, the Commissioner’s primary duty under the Code of Virginia § 58.1-3103 is to ascertain and assess, at fair market value, all real and personal property in Loudoun. The Office of the Commissioner of the Revenue administers business licenses, land use assessment, applications for tax exemptions, tax relief program for persons 65 or older or with disabilities, and also provides state income tax filing assistance.
The Commissioner of the Revenue Real Estate Division employs a mass appraisal system for the annual reassessment of real property. This includes but is not limited to:

- Data Management: Collection, Entry/editing, Conversion, Storage & Security.
- Sales Analysis: Data collection, screening & processing, Sales Ratio Studies, Sales reports.
- Valuation Systems: iasWorld, contains cost, sales & income, review and reconciliation modules.
- Administrative systems: Budgeting, scheduling, planning, reporting, assessment rolls & notices, appeals.
Mass Appraisal vs. Fee Appraisal

Mass appraisal is the systematic appraisal of groups of properties as of a given date using standardized procedures and statistical testing. This differs from single-property appraisal, commonly referred to as "fee" or "bank" appraisal, which normally deals with only a single property as of a given date.

- Mass appraisal includes the development of appraisal formulas and statistical models that can be applied uniformly to a group of properties.
- Loudoun County COR values over 140,000 parcels annually using generally accepted mass appraisal practices. Over 120,000 parcels are improved with some type of structure on them.
- 19 Residential Real Estate Appraisers, 6 Commercial Real Estate appraisers
Assessment Process

- **Assessment is made annually at 100% of fair market value** per state code 58.1-3201 and Loudoun County Ordinance 860.09. The effective date of the assessment is January 1st of each year.

- The effective date of the assessment is January 1st

- Data collection and property review

- Land component of assessment valued first

- Group subject property with like properties.

- Develop cost/market models.

- Review valid sales in group to check appropriateness of model.

- Apply market, cost or income models to produce the assessment

- Notify property owners of assessment – **effective date January 1st**

- Provide review of assessment and notify owners of any revised assessment

- Submit assessment roll to be recorded in current year Land book.
Data Integrity

Property characteristics need to be verified periodically.

The quality of property characteristics data, more than anything else, determines the reliability of values generated in the reassessment.
Data Collection and Property Reviews

• On-site property inspections
• Permit and building plan reviews
• Multiple Listing Systems
• Pictometry and other aerial photography
• Geographic Information Systems (GIS)
• Data collection surveys
• Property owners
On-site property inspections

**Code of Virginia 58.1-3280. Assessment of value**

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 to 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.

Reasons for on-site property inspection:

- Owner Request
- Uniformity Issues
- Appeal
- Ratio Studies
- New improvement discovered
- Data Quality
- Sales Verification
- Neighborhood Review/Special Projects
Permit and building plan review

Decking Plan  1/4" Scale
Multiple Listing Systems

41155 Trotter Ln, Paeonian Springs, VA 20129

Closed
Residential
$1,110,000

MLS #: 1000868298
Tax ID #: 227450331000
Ownership Interest: Fee Simple
Structure Type: Detached
Levels/Stories: 3+
Waterfront: No
Views: Garden Lawn, Mountain, Scenic Vista
Garage:

Beds: 5
Baths: 5 / 1
Above Grade Fin SQFT: 4,595 / Estimated
Price / Sq Ft: 241.57
Year Built: 2000
Property Condition: Shows Well
Style: French
Central Air: Yes
Basement: Yes
Pictometry
Geographic Information Systems
Data Collection Surveys

PIN: ___________________________  Appraiser: ___________________________

Property Address: __________________________________________________________

1. Does your house have a basement? Yes / No  If yes, what percent is finished living area: ________% 

2. Number of bedrooms (not in the basement): ________  Number of basement bedrooms: ________

3. Number of bathrooms: _____Full  ____Half  Total # of all sinks, tubs, showers and toilet fixtures: ____

4. Does your house have a full 2nd kitchen? Yes / No  If yes, describe: ________________________________

5. Numbers of: Above-grade fireplaces ________  Basement fireplaces ________  Chimneys ________

6. Heating system:  Forced Air / Heat Pump / Other  If other, please describe: ________________________________

7. Type of fuel used for heating system:  Gas / Electric / Solar / Other  If other, please describe: ________

8. Have you made any improvements to the property in the last 10 years (renovate kitchen/bathrooms, replace roof, new HVAC, etc.)? If so, please describe: ________________________________
Property Owners

Property owners are the most helpful resource for data collection.

Here are ways you can report errors:

- Email or call your appraiser (contact information provided on the Annual Assessment Notice)
- Email realestate@loudoun.gov
- Call the Commissioner of the Revenue, Real Estate Division at 703-777-0260, choose option #3
- Visit the Commissioner of the Revenue’s Leesburg Office at the Loudoun County Government Center
LAND VALUATION & MODELING

• Highest and Best Use Analysis
  • Predominant assumption is for single family residential use
  • Parcels are assumed to be buildable unless:
    • Documentation otherwise is on file or provided
    • Readily apparent conditions limiting development
    • Governmental restrictions
    • Easements
LAND VALUATION & MODELING

- **Sales Comparison Method**: This is the most accurate approach to land values and should be used when sufficient sales are available. Land sales are gathered and studied to determine that the sale occurred at arm’s length. Recent sales of similar vacant parcels are compared with the subject property.

- **Comparative Unit Method**: The average or typical per unit value of each stratum of land is determined.

- **Base Lot Method**: The value of the standard or “base” parcel is established in each stratum through traditional sales comparison with the base lot serving as the subject parcel.

- **Allocation Method**: The allocation method is based on the principal of balance, a logical value relationship based on a normal or typical ratio of land value to the total property value for specific categories of real estate in specific locations, example – condos.

- **Abstraction Method**: Abstraction is a method in which land value is extracted from the sale price of an improved property.

- **Cost of Development Method**: This method subtracts the total development costs from projected sales prices to derive land values. The basis of value is limited to the accurate and reliable reporting of development costs.
LAND VALUATION & MODELING

• Assuming the highest and best use of a parcel is for single family residential use

• A combination of the
  ◦ **Sales Comparison Method**: This is the most accurate approach to land values and should be used when sufficient sales are available. Land sales are gathered and studied to determine that the sale occurred at arm’s length. Recent sales of similar vacant parcels are compared with the subject property.
  ◦ **Comparative Unit Method**: The average or typical per unit value of each unit of land is determined.
  ◦ **Allocation Method**: The allocation method is based on the principal of balance, a logical value relationship based on a normal or typical ratio of land value to the total property value for specific categories of real estate in specific locations
Allocation Method Example

The allocation method is based on the principal of balance, a logical value relationship based on a normal or typical ratio of land value to the total property value for specific categories of real estate in specific locations. This method is predominately used in planned subdivisions where parcels of land are similar in size and location.

Example:

Based on sales from 2018, the ratio between land value and total value was around 35% for sales in the Dulles Area. This percentage could then be used to determine the relationship between the Land Assessment and the Total Assessment.

<table>
<thead>
<tr>
<th>Dulles Area</th>
<th>Average Land Price</th>
<th>Average New Construction Price</th>
<th>Land Allocation Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Attached</td>
<td>$228,000</td>
<td>$636,000</td>
<td>36%</td>
</tr>
<tr>
<td>Single Family Detached</td>
<td>$296,000</td>
<td>$853,000</td>
<td>35%</td>
</tr>
</tbody>
</table>

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Application:

If the total fair market value = $600,000, then the land would be worth $210,000.
PRIMARY COMPARATIVE UNITS USED FOR LAND MODELING - RURAL LOCATIONS

HOMESITE

- 1st acre
- Predominant driver of value due to ability to support a residential dwelling

SURPLUS ACREAGE

- Economies of Scale
  - The contributory value of acreage will decrease as additional acreage increase
    - Value of 10 acres is not twice the value of 5 acres
SECONDARY ATTRIBUTES ADJUSTED FOR LAND VALUATION

- FLOOD PLAIN ACREAGE
  - REDUCED RATE TO REFLECT DIMINISHED UTILITY

- STEEP SLOPE ACREAGE
  - REDUCED RATE TO REFLECT DIMINISHED UTILITY

- ROAD FRONTAGE
  - VALUE REDUCTIONS CAN BE APPLIED TO REFLECT REDUCED MARKETABILITY DUE TO LACK OF FRONTAGE
Valuation Data – Market Influence

Market Areas – defined to value properties that share similar geographic location influences.
Valuation Data- Verified Market Value Indicating Sales

Valid Indicators of Market Value – Sales within the market areas are researched and verified to identify reliable data from which to establish a land valuation model.
Valuation Data - Verified Market

Purcellville South Market Area

Sales Prices  Assessment Model Values  Linear Regression Line

\[ y = 8085x + 168420 \]
\[ R^2 = 0.9449 \]
Development & Application of Valuation Models (Improvements)

Statistical analysis is performed to calibrate assessment cost and market models.

Market Adjusted Cost models have been developed based on 2015 countywide ratio study.

Market Regression models are currently not used in Loudoun County but, are being considered for certain types of properties.
PRIMARY ATTRIBUTES FOR MARKET ADJUSTED COST MODEL

SIZE (Living Area)
STORIES
BASEMENT
ATTIC (Finished or Unfinished)
EXTERIOR WALL (Brick, Stucco, Siding, etc...)
HVAC (Heating and Air Conditioning)
BATHROOMS
QUALITY
CONDITION
SECONDARY ATTRIBUTES

FINISHED BASEMENT

GARAGES

FIREPLACES

DECKS, PATIOS, PORCHES etc.

MISC. FEATURES
  ◦ 2nd Kitchens, wet bars, elevators etc.

Other Buildings and Yard Improvements (OBYs)
  ◦ – Pools, barns, det. Garage, wells, septics etc.
Other Buildings
Residential Tab

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PARID</td>
<td>116232132000</td>
</tr>
<tr>
<td>Name</td>
<td>WHITE, JAMES L &amp; TRACEY M, 20619 COPPERSMITH DR</td>
</tr>
<tr>
<td>Primary Building</td>
<td></td>
</tr>
<tr>
<td>Card</td>
<td>1</td>
</tr>
<tr>
<td>Property Address</td>
<td>20619 COPPERSMITH DR</td>
</tr>
<tr>
<td>Location 2</td>
<td>ASHBURN, VA, 20147</td>
</tr>
<tr>
<td>City, State, Zip</td>
<td></td>
</tr>
<tr>
<td>Occupancy</td>
<td>SINGLE FAMILY</td>
</tr>
<tr>
<td>Story Height</td>
<td>2</td>
</tr>
<tr>
<td>Style</td>
<td>COLONIAL</td>
</tr>
<tr>
<td>Model</td>
<td>ESSEX</td>
</tr>
<tr>
<td>Exterior Wall Material</td>
<td>ALUMVINYL SIDING</td>
</tr>
<tr>
<td>Grade</td>
<td>Average Plus</td>
</tr>
<tr>
<td>Year Built</td>
<td>2000</td>
</tr>
<tr>
<td>Net SFLA (above grade)</td>
<td>2,392</td>
</tr>
<tr>
<td>Total SFLA (includes Fin. Bsm)</td>
<td>3,366</td>
</tr>
<tr>
<td>Condition</td>
<td>AVERAGE</td>
</tr>
<tr>
<td>Dwelling % Complete</td>
<td>100</td>
</tr>
<tr>
<td>Full Baths</td>
<td>3</td>
</tr>
<tr>
<td>Half Baths</td>
<td>1</td>
</tr>
<tr>
<td>Additional Fixtures</td>
<td>2</td>
</tr>
<tr>
<td>Total Fixtures</td>
<td>13</td>
</tr>
<tr>
<td>Roof Type</td>
<td>QABLE</td>
</tr>
<tr>
<td>Roof Material</td>
<td>ASPHALT/FOGLY SHINGLE</td>
</tr>
<tr>
<td>Heating/AC</td>
<td>CENTRAL HEAT AND AC</td>
</tr>
<tr>
<td>Fuel Type 1</td>
<td>GAS</td>
</tr>
<tr>
<td>Fuel Type 2</td>
<td>NONE OR UNSPECIFIED</td>
</tr>
<tr>
<td>Cathedral Ceiling/Foyer</td>
<td></td>
</tr>
<tr>
<td>Unfinished Area</td>
<td></td>
</tr>
<tr>
<td>Fireplace Stacks/Opnns</td>
<td>1</td>
</tr>
<tr>
<td>Prefab FP without Stack</td>
<td></td>
</tr>
<tr>
<td>1. Misc Features/Qty</td>
<td></td>
</tr>
<tr>
<td>2. Misc Features/Qty</td>
<td></td>
</tr>
<tr>
<td>Total Basement Area</td>
<td>1,203</td>
</tr>
<tr>
<td>Basement Entrance</td>
<td>ENTRANCE</td>
</tr>
<tr>
<td>Finished Basement Sq Ft</td>
<td>974</td>
</tr>
<tr>
<td>Bsmt Den/Bdrms</td>
<td></td>
</tr>
<tr>
<td>Bsmt Garage # Cars</td>
<td>Concrete</td>
</tr>
<tr>
<td>Foundation Type</td>
<td>NONE</td>
</tr>
<tr>
<td>Attic Type</td>
<td>0</td>
</tr>
<tr>
<td>Total Attic Area</td>
<td>0</td>
</tr>
<tr>
<td>Economic Reason</td>
<td></td>
</tr>
<tr>
<td>Economic % (pct good)</td>
<td></td>
</tr>
</tbody>
</table>

Provides builder & model, total bathrooms, living area & finished basement area.
Detached Structures

Provides structure detail for various structure types.

<table>
<thead>
<tr>
<th>Card</th>
<th>Line</th>
<th>Structure Type</th>
<th>Size Yr Bld.</th>
<th>Quality</th>
<th>Condition</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>WELL</td>
<td>1 2004</td>
<td>Average</td>
<td>Average</td>
<td>8500</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>SEPTIC</td>
<td>1 2004</td>
<td>Average</td>
<td>Average</td>
<td>12750</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>DETACHED FRAME GAR</td>
<td>1,372 2004</td>
<td>Good</td>
<td>Average</td>
<td>41540</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>GUNITE/CONCRETE POOL</td>
<td>1,100 2013</td>
<td>Average</td>
<td>Average</td>
<td>40210</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>MASONRY/STONE PATIO COVERED</td>
<td>324 2013</td>
<td>Average</td>
<td>Average</td>
<td>2880</td>
</tr>
</tbody>
</table>
Data Verification – Sales

How are sales reviewed and verified?

1. Real Estate Transfer Documents: Deeds, sale contracts, transfer affidavits, etc...

2. Third Party Sources:
   - Bright MLS
   - Real Estate brokers and agencies

3. Buyers & Sellers

4. Sale Verification Questionnaires: Sent to property owner after the sale.
Sale Codes – What do they mean?

- Market Sale
- Market Land Sale
- Non-market Sale
- Non-market Land Sale
- Market Multi-parcel Sale
- Non-market Multi-parcel Sale
- Related Parties
- Bank Sale
- Auction
- Lease Agreement

- Old Contract Date
- ADU Sale
- Split Jurisdiction or Partial Value
- To/From A Trustee
- Estate Sale
- Market Sale w/ Changes After Sale
- Includes Business Value
- Sale Includes Business Equipment or Personal Property
- Unable to Verify
- Deed in Lieu of Foreclosure

- Multi-parcel Foreclosure
- Outlier Non-representative Price
- Not Yet Verified
- Short Sale
- New Construction
- Multi-parcel Bank Sale
- Multi-parcel Short Sale
- Multi-parcel Includes Business Value
- Foreclosure
Sale Codes – Where can you see them?
Valuation Data – Market Influence

Neighborhood Groups – created to value properties that share similar characteristics.

- **Location**: (Leesburg)
- **Sub-Market**: (Greenway Farms or Country Club)
- **Style**: (Colonial, rambler, split level)
- **Age**: (year built)
- **Quality**: (Poor, Average, Good, Excellent)
- **Size**: (Living area, not including basement)
- **Condition**: (Fair, Average, Good, Very Good)
Sample of Neighborhood Group - Homogeneous
Sample of Neighborhood Group - Heterogeneous
Statistical Testing

Assessment to Sale Price Ratio – Calculated by taking the sale price and dividing by the Sale Price. This is used to see how appropriate the valuation model is.

Coefficient of Dispersion (COD) - This statistic provides a measure of the variation of individual assessment ratios around the median.

Price Related Differential (PRD) - The price-related differential measures a pattern of inequity in assessments that has a correlation with the value of the property. Differentials greater than 1.03 (high value) or less than .98 (low value) are both indicative of an inequity of assessment.
Neighborhood Reassessment Ratio Study

Ratio Statistics:
- Average: 0.926
- Weighted Mean: 0.925
- COD: 4.768
- PRD: 1.002
- Target Nbhd Factor: 1.076

Sales Summary

<table>
<thead>
<tr>
<th>Address</th>
<th>Period</th>
<th>Sales Price</th>
<th>Cost Value</th>
<th>Ratio</th>
<th>Sales $ Sq Ft</th>
<th>Assd $ Sq Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>4771 IYANALE RD</td>
<td>416-19-1888-000</td>
<td>449,900</td>
<td>423,280</td>
<td>0.76</td>
<td>146.27</td>
<td>146.19</td>
</tr>
<tr>
<td>5603 RAMBLING PINE DR</td>
<td>417-19-1658-000</td>
<td>1,646,006</td>
<td>1,256,300</td>
<td>1.07</td>
<td>466.32</td>
<td>394.82</td>
</tr>
<tr>
<td>8619 RITTEN DR</td>
<td>417-19-3026-000</td>
<td>764,698</td>
<td>707,198</td>
<td>0.93</td>
<td>211.92</td>
<td>195.16</td>
</tr>
<tr>
<td>6612 RAMBLING PINE DR</td>
<td>417-19-0816-000</td>
<td>726,250</td>
<td>680,575</td>
<td>0.92</td>
<td>203.97</td>
<td>189.69</td>
</tr>
<tr>
<td>6625 HEATHER GLEN PL</td>
<td>417-30-8646-000</td>
<td>185,500</td>
<td>116,026</td>
<td>0.64</td>
<td>30.20</td>
<td>24.02</td>
</tr>
</tbody>
</table>

Sales Date: 20/06/2018
Annual Assessment Notice

REAL ESTATE ASSESSMENT CHANGE NOTICE FOR TAX YEAR 2019
THIS IS NOT A BILL

Parcel ID: 01357907000
Acres: 0.18
Property Owner: REDACTED
Property Address: 4 STAFFORD CT
STERLING VA 20165-6226
Legal Description: COUNTRYSIDE S.5F LOT 185
201102220012241

Magisterial District: ALGONKIAN
Property Location: Algonkian District

Should you desire to have a discussion about your real estate assessment, your appraiser, Brandon White, can be reached at 703-777-0265 or brandon.white@loudoun.gov. Office hours are Monday - Friday, 8:30 a.m. to 5:00 p.m.

<table>
<thead>
<tr>
<th>EFFECTIVE DATE</th>
<th>1-JAN-19</th>
<th>1-JAN-18</th>
<th>1-JAN-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAND</td>
<td>177,900</td>
<td>177,900</td>
<td>177,900</td>
</tr>
<tr>
<td>STRUCTURE</td>
<td>423,530</td>
<td>387,750</td>
<td>380,320</td>
</tr>
<tr>
<td>TOTAL FAIR MARKET VALUE (FMV)</td>
<td>601,430</td>
<td>575,650</td>
<td>558,220</td>
</tr>
<tr>
<td>TOTAL TAXABLE VALUE</td>
<td>601,430</td>
<td>575,650</td>
<td>558,220</td>
</tr>
<tr>
<td>TAX RATE PER $100</td>
<td>*Not Yet Set</td>
<td>1,085</td>
<td>1,125</td>
</tr>
<tr>
<td>TOTAL TAX</td>
<td>N/A</td>
<td>6,245.80</td>
<td>6,279.98</td>
</tr>
<tr>
<td>PERCENT CHANGE IN TAX LEVIED</td>
<td>N/A</td>
<td>-0.54%</td>
<td>N/A</td>
</tr>
</tbody>
</table>
The Review Process

1. Administrative (COR)
2. Board of Equalization (Independent Body)
3. Court System (Trial or Settlement)
1. Assessment is made annually at 100% of fair market value per state code 58.1-3201 and LC Ordinance 860.09.

2. The effective date of the assessment is January 1st

3. Land component of assessment valued first

4. Group subject property with like properties.

5. Develop cost/market models.

6. Review valid sales in group to check appropriateness of model.

7. Apply market, cost or income models to produce the assessment

8. Notify property owners of assessment

9. Provide review of assessment and notify owners of any revised assessment

10. Submit assessment roll to be recorded in current year Land book.
Land Use Assessment

There are 4 classification categories...

1. Agriculture/Horticulture: To qualify, the property must be at least five acres in size, excluding house site. The property must have a continual five-year history of production for commercial sale of plants or animals.

2. Forestry: minimum of twenty acres and must meet the standards for productive forestland or nonproductive forestland.

3. Open Space: the real estate must be subject to a perpetual conservation, historic or open space easement held by a public body; be part of an agricultural or forestal district approved by local government with a recorded commitment entered into with the governing body.
IMPORTANT DATES FOR TAX YEAR 2019

JANUARY 1 – Real Estate Valuation Date

FEBRUARY 2 – Assessments Available Online

MARCH 4 – Assessment Review Application Deadline

APRIL 3 – Elderly or Disabled Tax Relief Renewal Deadline

JUNE 3 – BOE Appeal Deadline

JUNE 5 – First Half Real Estate Tax Payment Deadline

NOVEMBER 1 – Land Use Recertification Deadline w/o Penalty

DECEMBER 5 – Land Use Recertification Deadline w/ $300 Penalty

DECEMBER 5 – Second Half Real Estate Tax Payment Deadline

DECEMBER 31 – Elderly or Disabled Tax Relief Deadline for First-time filers (real estate only)
Questions?
THANK YOU

Information is available online at www.loudoun.gov/cor or by calling 703 777-0260

Questions?