



Georgia Department of Revenue

For Educational Purposes Only:

The material within is intended to give the course participant a solid understanding of general principles in the subject area. As such, the material may not necessarily reflect the official procedures and policies of the Georgia Department of Revenue or the Department's official interpretation of the laws of the State of Georgia. The application of applicability to specific situations of the theories, techniques, and approaches discussed herein must be determined on a case-by-case basis.



Georgia Department of Revenue

"The statutory materials reprinted or quoted verbatim on the following pages are taken from the Official Code of Georgia Annotated, Copyright 2016 by the State of Georgia, and are reprinted with the permission of the State of Georgia. All rights reserved."

Hearing Officer Training

Mark Loyd
Tracy Thomas

DOR-LGS



Georgia Department of Revenue

Contact Information

Mark Loyd

404-290-0172

Mark.loyd@dor.ga.gov

Tracy Thomas

404-831-0158

Tracy.thomas@dor.ga.gov



Georgia Department of Revenue

Logistics

- Start @ 9
- Breaks @ ~ 10:00
- Lunch 12:00 – 1:00
- Join 4 hour class 1-5pm
- Please set cell phones to vibrate



Georgia Department of Revenue

Successful Completion

- Exam
 - 25 questions
 - Multiple Choice, True False, Essay
 - Open Book



Georgia Department of Revenue

Electronic Materials

- DOR Website
 - <http://dor.georgia.gov/georgia-certification-program-county-tax-assessors-and-appraisers-course-materials>



Georgia Department of Revenue

Course Content

- Georgia Property Tax System
- Mass Appraisal Process
- Sales Ratio & Uniformity



Georgia Department of Revenue

Terminology

- Appraisal vs Assessment
 - Appraisal - property's Fair Market Value
 - Assessment - property's Taxable Value
 - CHO are focused on the 'Appraisal' value
- BOA = board of tax assessors
- TAO = tax assessor's office



Georgia Department of Revenue

Annotated Georgia Law

Title 48, Chapter 5, Section 1 (48-5-1)



Georgia Department of Revenue

Rules and Regulations

48-5-269

(a) Subject to the limitations contained in Chapter 2 of this title, the commissioner may promulgate rules and regulations specifically regarding this part



Georgia Department of Revenue

Rules and Regulations

- 560-11-X-.XX- Rules and Regulations pertaining to Revenue
- 560-11-13-.01 “Applicability of Rules”
- See page 56



Georgia Department of Revenue

Laws : Disclaimer

- While each specific appeal and appraisal situation might require consideration and usage of the entire Official Code of Georgia, we have attempted to provide some of the more obvious statutes we believe to be applicable.
- Failure to list a specific statute does not indicate or imply that you are not bound by it's contents.



Georgia Department of Revenue

Value Overview

- Values are based on definitions of fair market value (plus special considerations of law for covenants, ALT value, etc)
- Values are expressed as 100%
- Taxable value (“assessed value”) is established by 48-5-7 as **40%** of fair market value.



Georgia Department of Revenue

Role of the Tax Assessor

- Locate & identify all taxable property (discovery)
- Make an inventory of all taxable property, including quantify, quality & important characteristics
- Classify each property & determine the extent of taxability
- Estimate the market value of each taxable property-100% (valuation)
- Calculate the taxable value of each property-40%(assessment ratio)
- Prepare & certify the assessment roll of the jurisdiction (listing)
- Notify owners of the taxable value of their properties(notice of assessment)
- Defending value estimates & valuation methods during appeals(County Hearing Officer)



Georgia Department of Revenue

48-5-1. Legislative intent.

The intent and purpose of the tax laws of this state are to have all property and subjects of taxation returned at the value which would be realized from the cash sale, but not the forced sale, of the property and subjects as such property and subjects are usually sold



Georgia Department of Revenue

48-5-1. Legislative intent.

**.....except as otherwise provided
in this chapter.**



Georgia Department of Revenue

FMV Defined: OCGA 48-5-2

- “Fair market value of property” means the amount a knowledgeable buyer would pay for the property and a willing seller would accept for the property at an **arm’s length, bona fide sale**”
 - *Arm’s length bona fide sale defined in OCGA 48-5-2(.1) and will be discussed in a few slides*



Georgia Department of Revenue

48-5-2 definitions

'Arm's length, bona fide sale'

(.1) means a transaction which has occurred in good faith without fraud or deceit carried out **by unrelated or unaffiliated parties, as by a willing buyer and a willing seller**, each acting in his or her own self-interest, including but not limited to a distress sale, short sale, bank sale, or sale at public auction.



Georgia Department of Revenue

FMV: 48-5-2 – Factors the BOA **shall apply**

1. Existing Zoning of Property
2. Existing Use of property, including any restrictions or limitations on the use of the property
3. Existing covenants or restrictions in deed



Georgia Department of Revenue

FMV: 48-5-2 – Factors the BOA *shall apply*

4. Bank sales, other financial institution owned sales or distressed sales, or any combination thereof of comparable real property
5. Decreased value of the property based on limitations and restrictions resulting from the property being in a conservation easement



Georgia Department of Revenue

FMV: 48-5-2 – Factors the BOA **shall apply**

6. Rent limitations, operational requirements, and any other restrictions imposed upon the property in connection with the property being eligible for any income tax credits described in subparagraph (B.1) of this paragraph or receiving any other state or federal subsidies provided with respect to the use of the property as residential rental property;



Georgia Department of Revenue

provided, however, that such properties described in subparagraph (B.1) of this paragraph shall not be considered comparable real property for assessment or appeal of assessment of other properties; and

HB 954

Became Law July 1st, 2014



Georgia Department of Revenue

FMV Defined: OCGA 48-5-2

- (B.1) The tax assessor shall not consider any income tax credits with respect to real property which are claimed and granted pursuant to either Section 42 of the Internal Revenue Code of 1986, as amended, or Chapter 7 of this title in determining the fair market value of real property.



Georgia Department of Revenue

FMV: 48-5-2 – Factors the BOA **shall apply**

7. Any other factors provided by law or rule and regulation of the commissioner deemed pertinent



Georgia Department of Revenue

FMV: 48-5-2

- What about Highest and Best Use?
- TAO are authorized to consider Highest and Best use as part of the 'any other factors' included as item 7 on previous slide, however, items 1-6 must also be applied in the valuation process



Georgia Department of Revenue

FMV Defined - 560-11-10-0.2-.09 (3)(a)

- APM defines existing factors pertinent as:
- The other factors the appraiser shall apply include, but are not limited to, environmental, economic, governmental, and social factors. Site-specific information that may be considered includes, but is not limited to, location, frontage, width, depth, shape, size, topography, landscaping, slope, view, drainage, hydrology, off-site improvements, soil condition, soil productivity, zoning, absorption, nuisances, use, covenants, neighborhood, corner influence, proximity to recreational water, and quality of access
- Page 136



Georgia Department of Revenue

FMV Defined: OCGA 48-5-2

- (3) The income approach, if data is available, shall be considered in determining the fair market value of income-producing property.



Georgia Department of Revenue

FMV Defined: OCGA 48-5-2(3)

Notwithstanding any other provision of this chapter to the contrary, The transaction amount of the most recent **arm's length, bona fide sale** in any year shall be the maximum allowable fair market value for the next taxable year.



Georgia Department of Revenue

48-5-3. Taxable property

- All real property including, but not limited to, leaseholds, interests less than fee, and all personal property shall be liable to taxation and shall be taxed, except as otherwise provided by law.



Georgia Department of Revenue

48-5-6. Return of property at fair market value

- All property shall be returned for taxation at its fair market value except as otherwise provided in this chapter.



Georgia Department of Revenue

48-5-7. Assessment of tangible property.

(a) Except as otherwise provided in this Code section, taxable tangible property shall be assessed at 40 percent of its fair market value and shall be taxed on a levy made by each respective tax jurisdiction according to 40 percent of the property's fair market value.



Georgia Department of Revenue

Appraised value – FMV – 100% value

\$125,000

Assessed Value - 40% value

$\$125,000 \times .40 = \$50,000$



Georgia Department of Revenue

48-5-10. Returnable property.

- All property shall be returned by the taxpayers for taxation to the tax commissioner or tax receiver as provided by law. Each return by a taxpayer shall be for property held and subject to taxation on **January 1** next preceding each return.



Georgia Department of Revenue

48-5-15. Returns of taxable real property

- (a) All improved and unimproved real property in this state which is subject to taxation shall be returned by the person owning the real property or by his or her agent or attorney to the tax receiver or tax commissioner of the county where the real property is located.



Georgia Department of Revenue

48-5-18. Time for making tax returns.

Each tax commissioner and tax receiver shall open his or her books for the return of real or personal property ad valorem taxes on January 1 and shall close those books on April 1 of each year.



Georgia Department of Revenue

48-5-20. Effect of failure to return taxable property

- Returned or paid taxes for the preceding tax year.
- PT-61 (Real estate transfer tax form) filed when property is purchased.



Georgia Department of Revenue

48-5-261. Classification of counties for administration of part

- *Counties are classed by their number of real parcels to determine minimum staff requirements.
- 8 classes



Georgia Department of Revenue

DOR Appraisal Designations

- Appraiser I
- Appraiser II
- Appraiser III
- Appraiser IV
- Appraisers are required to attend a minimum of 40 hrs of CE training during each two years of employment.



Georgia Department of Revenue

48-5-264. Duties of the Chief Appraiser.

4 DOR Appraisal Designations

- The board of tax assessors in each county shall designate an Appraiser IV or, in those counties not having an Appraiser IV, an Appraiser III as the chief appraiser of the county.



Georgia Department of Revenue

48-5-264.1. Right of chief appraiser and others to inspect property

- ...shall carry identification
- Such representative shall not enter upon the property unless **reasonable notice** has been provided to the owner **and** to the occupant of the property regarding the purpose for which such person is entering upon such property.



Georgia Department of Revenue

48-5-268.

The chief appraiser shall designate at least one person on the county appraisal staff to be responsible for the appraisal of tangible personal property.



Georgia Department of Revenue

48-5-306. Notice of changes made in taxpayer's return; contents; posting notice; new assessment description.

- The board shall see that all taxable property within the county is assessed and returned at its fair market value and that fair market values as between the individual taxpayers are fairly and justly equalized so that each taxpayer shall pay as nearly as possible only such taxpayer's proportionate share of taxes.



Georgia Department of Revenue

48-5-306. Continued

- The board shall give annual notice to the taxpayer of the current assessment of taxable real property.



Georgia Department of Revenue

48-5-306. Continued

- When any corrections or changes, including valuation increases or decreases, or equalizations have been made by the board to personal property tax returns, the board shall give written notice to the taxpayer of any such changes made in such taxpayer's returns.



Georgia Department of Revenue

48-5-306(b)(1). Continued

- The annual notice shall conform with the state-wide uniform assessment notice which shall be established by the commissioner by rule and regulation and shall contain:



Georgia Department of Revenue

48-5-2(e)

- (e) Each notice of ad valorem taxes due sent to taxpayers of counties and municipalities shall include both the fair market value of the property of the taxpayer which is subject to taxation and the assessed value of the property after being reduced as provided by this Code section



Georgia Department of Revenue

ANNUAL NOTICE OF ASSESSMENT

Notice Date: <insert date>
This is not a tax bill Do not send payment
Last Date To File Appeal: <insert date>
County property records are available online at: <insert county website address>
Official Tax Matter - <year> Assessment

The amount of your ad valorem tax bill for the year shown above will be based on the appraised (100%) and assessed (40%) values specified in this notice. You have the right to appeal these values to the County Board of Tax Assessors. All documents and records used to determine the current value are available upon request. Additional information on the appeal process may be obtained at <https://etax.dor.ga.gov/ptd/taxguide/appeals.aspx>

At the time of filing your appeal you must select one of the following options:

- (1) Appeal to the County Board of Equalization with appeal to the Superior Court. (value, uniformity, denial of exemption, taxability)
- (2) To arbitration without an appeal to the Superior Court (valuation is the only grounds that may be appealed to arbitration)
- (3) For a parcel of non-homestead property with a FMV in excess of \$1 million, to a hearing officer with appeal to the Superior Court.

If you wish to file an appeal, you must do so in writing no later than 45 days after the date of this notice. If you do not file an appeal by this date, your right to file an appeal will be lost. Appeal forms which may be used are available at <insert forms availability location here>

For further information on the proper method of filing an appeal, you may contact the county Board of Tax Assessors which is located at <insert physical location of BOA office here> and which may be contacted by telephone at: <insert telephone #->. Your staff contacts are <insert name> and <insert name>.

Account Number	Property ID Number	Acreage	Tax Dist	Covenant Year	Homestead
Property Description					
Property Address					
Fair Market Value	Returned Value	Previous Year Value	Current Year Value	Preferential Value	
100% Fair Market Value					
40% Assessed Value					

REASONS FOR NOTICE

The estimate of your ad valorem tax bill for the current year is based on the previous year's net millage rate and the fair market value contained in this notice. The actual tax bill you receive may be more or less than this estimate. This estimate may not include all eligible exemptions.

Taxing Authority	Other Exempt	Homestead Exempt	Net Taxable Value	Previous Millage	Estimated Tax



Georgia Department of Revenue

House Bill 202-Amends OCGA 48-5-306

Annual assessment notice to include statement indicating estimate of tax bill based on previous **or most applicable** year's millage rate.

The estimate of your ad valorem tax bill for the current year is based on the previous year's net millage rate and the fair market value contained in this notice. The actual tax bill you receive may be more or less than this estimate. This estimate may not include all eligible exemptions.

Taxing Authority	Other Exempt	Homestead Exempt	Net Taxable Value	Previous Millage	Estimated Tax
STATE	0	0	539,399	0,1000	53,94
COUNTY M&O	0	0	539,399	6.5780	3,548.17
SCHOOL M&O	0	0	539,399	13.7500	7,416.74
WAYNESBORO	0	0	539,399	11.0000	5,933.39
Total Estimated Taxes					16,952.24

January 1st, 2016



Georgia Department of Revenue

48-5-306(b)(3). Continued

- The annual notice required under this Code section shall be mailed no later than July 1; provided, however, that the annual notice required under this Code section may be sent later than July 1 for the purpose of notifying property owners of corrections and mapping changes.



Georgia Department of Revenue

48-5-311(e)(1)(A)

- Any taxpayer or property owner as of the last date for filing an appeal may elect to file an appeal from an assessment by the county board of tax assessors
- Page 46



Georgia Department of Revenue

OCGA 48-5-306

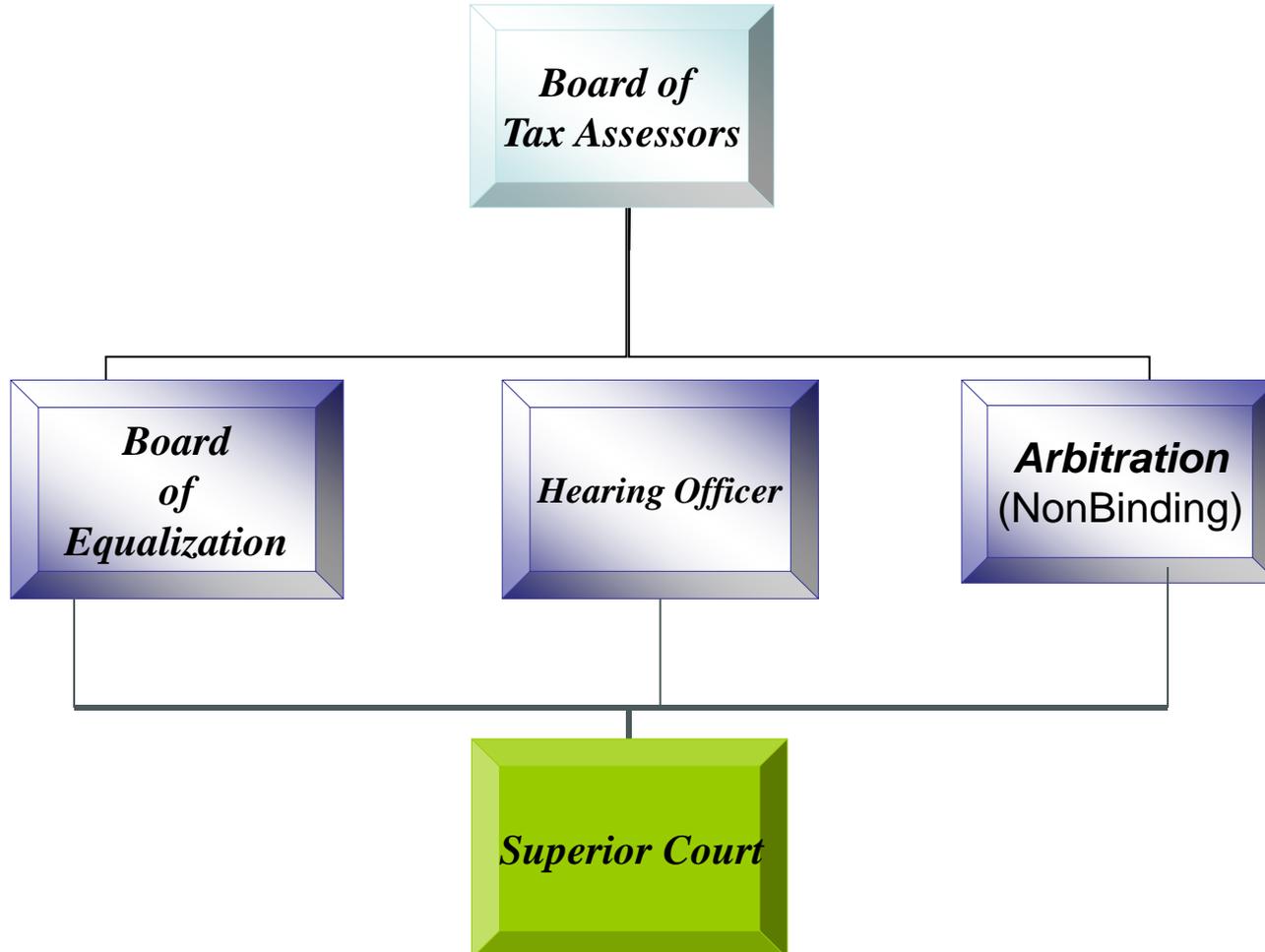
At the time of filing your appeal you must select one of the following:

- (1) Appeal to the County Board of Equalization with appeal to Superior Court
- (2) To arbitration with an appeal to Superior Court
- (3) For a parcel of nonhomestead property with a fair market value in excess of \$750,000.00, or for one or more account numbers of wireless property as defined in subparagraph (e.1)(1)(B) of Code Section 48-5-311 with an aggregate fair market value in excess of \$750,000.00, to a hearing officer with appeal to the Superior Court.



Georgia Department of Revenue

APPEALS PROCESS





Georgia Department of Revenue

48-5-311(e)(2)(A)

Page 48

- An appeal shall be effected by e-mailing, if the county board of tax assessors has adopted a written policy consenting to electronic service, or by mailing to or filing with the county board of tax assessors a notice of appeal within 45 days from the date of mailing the notice ...



Georgia Department of Revenue

24-1-1. Definitions

- (5) "Preponderance of evidence" means that superior weight of evidence upon the issues involved, which, while not enough to free the mind wholly from a reasonable doubt, is yet sufficient to incline a reasonable and impartial mind to one side of the issue rather than to the other.



Georgia Department of Revenue

Hearing Officer - OCGA 48-5-311(e.1)

Disputes Involving

- **Value** - 48-5-2(3) "Fair market value of property" means the amount a knowledgeable buyer would pay for the property and a willing seller would accept for the property at an arm's length, bona fide sale.
- **Uniformity** - The uniformity provision of the Georgia constitution, Article VII Sections par III, requires that all real and personal property within the county be taxed on a uniform basis based on the fair market value of such property, and that the valuations as between owners of real property and owners of personal property be fairly and justly equalized.



Georgia Department of Revenue

House Bill 202

OCGA 48-5-311(e)(1)(B)

- (B) In addition to the grounds enumerated in subparagraph (A) of this paragraph, any taxpayer having property that is located within a municipality, the boundaries of which municipality extend into more than one county, may also appeal from an assessment on such property by the county board of tax assessors to the county board of equalization, to a hearing officer, or to arbitration as to matters of uniformity of assessment of such property with other properties located within such municipality, and any uniformity adjustments to the assessment that may result from such appeal shall only apply for municipal ad valorem tax purposes.



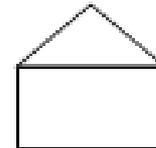
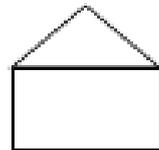
Georgia Department of Revenue

County A

County B

30%

40%



House that should be 100,000
valued at 75,000

House that should be 100,000
valued at 100,000



Georgia Department of Revenue

Most Recent Arms Length Sale 48-5-2(3)

- Transactions must occur prior to statutory date of valuation
- Value of exchanged real estate components (land+improvements) shall not exceed the saleprice adjusted for non-real estate values such as timber, personal property, etc
- Referred to as “SB346 Value”



Georgia Department of Revenue

Page 110

**560-11-10-.02 (n)
Most Recent Arms Length Sale.**



Georgia Department of Revenue

Most Recent Arms Length Sale

- the sum of the value of the exchanged real estate property components, land and improvements, in the year following the property exchange shall not exceed the transaction's sale price
- adjusted for non-real estate values such as but not limited to, timber, personal property, etc.
- The adjustment to the value of the real estate shall remain in effect for at least the digest year following the transaction.



Georgia Department of Revenue

Most Recent Arms Length Sale

- With respect to changes in the exchanged real estate components since the time of exchange (sale date)
- The value of following are added to saleprice
 - new improvements,
 - additions to existing improvements (footprint of structure has changed),
 - Adjustments to land due to tract consolidation, new surveys, zoning changes, land use changes, etc
 - Major remodeling/renovations to existing structures



Georgia Department of Revenue

Most Recent Arms Length Sale

- Major Remodeling or Renovations
 - The term major shall be construed such that both the property owner and BOA would reasonably conclude a major remodel/renovation has occurred.
 - If either party, acting reasonably, could debate that the renovation/remodel was not major in nature, the renovation/remodel does not qualify and shall not be added to the sales price



Georgia Department of Revenue

Most Recent ALT

- 2014 digest value = 200,000
- June 2014
 - FM qualified sale
 - SP = 150,000
- What is the 2015 Digest value?

.5 acre lots with 1,100 to 1,200 sq ft houses

<p>2014 - 100,000</p> <p>05/11/2014 sold for 89,000</p> <p>2015 Value ? - 1</p>	<p>2014 - 100,000</p> <p>07/31/2014 sold for 104,000</p> <p>2015 Value ? - 2</p>	<p>2014 - 100,000</p> <p>01/10/2014 sold for 70,000</p> <p>2015 Value ? - 3</p>
<p>Easy Street</p>		
<p>2014 - 100,000 4</p> <p>2015 Value ? -</p>	<p>2014 - 200,000 5</p> <p>12/05/2014 sold for 89,000</p> <p>2015 Value ? -</p>	

1 acre with 2,000 sq ft house, swimming pool, pool house



Georgia Department of Revenue

Most Recent ALT

- 2014 digest value = 200,000
 - House = 150,000
 - Land = 50,000
- June 2014
 - FM ALT qualified sale
 - SP = 150,000
- What is the 2015 Digest value for house and land?



Georgia Department of Revenue

Most Recent ALT - Allocation

- Previous slide has a total property value of \$200,000 consisting of \$150,000 house and \$50,000 land
- One method of allocation for the most recent ALT is a percentage allocation.



Georgia Department of Revenue

ALT: Allocation

- First step is to calculate the % the house represents of the total property.
 - House value / Total Value = % that is house
 - $150,000 / 200,000 = 75\%$
- Land value procedure is same
 - Land Value / Total Value = % that is land
 - $50,000 / 200,000 = 25\%$



Georgia Department of Revenue

ALT: Allocation

- Now that we have the % for building and land, we can allocate the ALT saleprice
- SP = 150,000
- Bldg = 75%
- Land = 25%
- Allocated Building Value
 - $150,000 * 75\% = 112,500$
 - $150,000 * 25\% = 37,500$



Georgia Department of Revenue

Most Recent ALT: Allocation

- 2014 Digest Value = 400,000
 - House Value = 275,000
 - Land Value = 100,000
 - Accessory Buildings = 25,000
- August 2014 ALT Saleprice = 325,000
- What are the allocation values for the:
 - House
 - Land
 - Accessory buildings



Georgia Department of Revenue

Solution

	2014 Digest	Percentage	ALT Allocation
House	275,000	69%	223,438
Land	100,000	25%	81,250
Accy	25,000	6%	20,313
	400,000	100%	325,000
Saleprice	325,000		



Georgia Department of Revenue

Most Recent ALT

- 2015 Digest Value = \$1,100,000
- April 2014 ALT SP = \$995,000
- November 2014 Affiliated Parties Sale = 1,375,000
- 2015 Digest Value?



Georgia Department of Revenue

Final Value Considerations

- All value considerations must be considered simultaneously where appropriate
 - True FMV
 - Most Recent Arms Length Sale



Georgia Department of Revenue

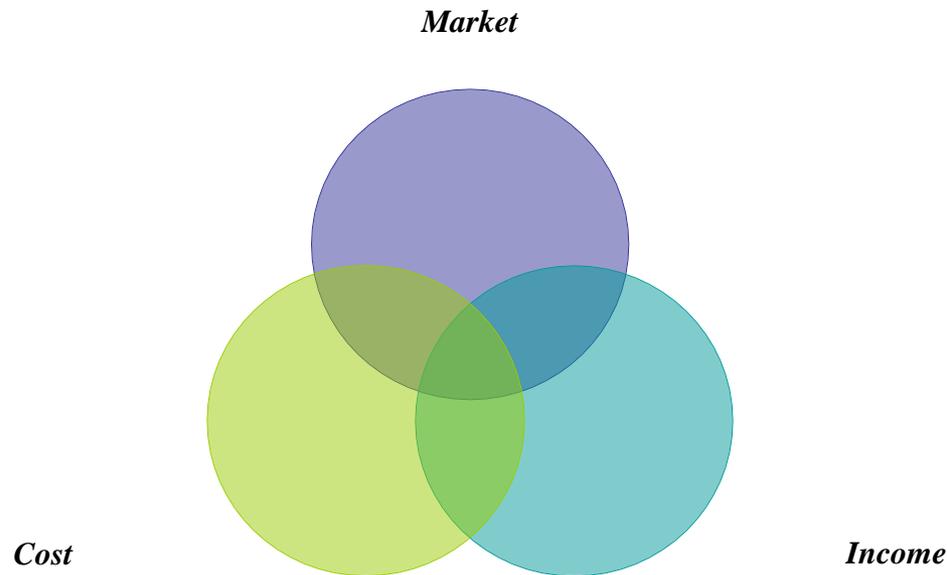
Mass Appraisal Process

- Mass appraisal
 - Systematic appraisal of groups of properties as of a given date using standardized procedures and statistical testing.
- BOA can't always use a single approach to value to appraise the universe of properties



Georgia Department of Revenue

Mass Appraisal - Mixed usage of Cost, Market, Income





Georgia Department of Revenue

Mass Appraisal Process

- Using Computer Assisted Mass Appraisal (CAMA) software, TAO will create a variety of appraisal valuation models (BOA Term = schedules) to appraisal the different properties
- CAMA models are generally flexible enough to range from very general to very specific



Georgia Department of Revenue

Mass Appraisal Process

- For example, each of you are familiar with Marshall & Swift
 - M&S allows a generic approach of \$ per square foot by building type
 - M&S also allows very characteristic and component 'quantity survey' approach
- County CAMA models may also range from general to specific



Georgia Department of Revenue

Mass Appraisal Process

- Many models become, effectively, market adjusted cost approach models.
- Appraisal is appraisal, be it fee or mass, its an opinion of value.
- Nothing in law says there is any difference between the two values ... however ...
- Mass appraisal target of FMV includes additional required considerations and restrictions



Georgia Department of Revenue

Mass Appraisal Process

- Ultimately, CAMA models accuracy is tested using sales ratio analysis which will be discussed later.
- **Uniformity of Valuation** as tested by ratio analysis + **Uniformity of Methodology** = Fair, Balanced, Uniform appraisals.



Georgia Department of Revenue

APM – Specific Procedures

- designed to arrive at a basic appraisal value
- designed to provide fair market value under normal circumstances.
- When unusual circumstances are affecting value, they should be considered.
- In all instances, the appraisal staff will apply Georgia law and generally accepted appraisal practices ... and make any further valuation adjustments necessary to arrive at the fair market values.



Georgia Department of Revenue

APM – Board of Tax Assessors

- The county board of tax assessors may not adopt local procedures that are in conflict with Georgia law or the procedures required by this manual.



Georgia Department of Revenue

APM – Board of Tax Assessors

- **Real property - Introduction.** The appraisal staff shall follow the provisions of this Rule when performing their appraisals of real property. Irrespective of the valuation approach used, the result of any appraisal of real property by the appraisal staff shall conform to the definition of fair market value.



Georgia Department of Revenue

General Valuation Procedures

- TAO **shall** consider all three approaches to value
 - Sales Comparison
 - Cost
 - Income
- Degree of dependence on any one approach will change with the availability of reliable data and type of property appraised.



Georgia Department of Revenue

APM – Other Appraisal Procedures

- The appraisal staff may use those generally accepted appraisal practices set forth in the USPAP, as they may be amended from time to time, to the extent such practices do not conflict with this manual and Georgia law.



Georgia Department of Revenue

Valuations on Digest

- FMV, SB346 >> all fall under the general term “Fair Market Value” as BOA’s target.
- Res Trans, Historic, Brownfield, Cons Use, Env Sens, FLPA, Enterprise Zones, Preferential
- Timberland – valuation is underlying land only



Georgia Department of Revenue

Consideration of Values

- When considering properties as comparables and applicability of evidence, it is important to keep in mind the impact of FMV and Most Recent Arms Length Transactions on the TAO's appraised values.
- Take the following table of comps for example:



Georgia Department of Revenue

Consideration of Values

Parcel	Sale Date	Sale Price	Warehouse Sqft
1	1/5/14	2,000,000	85,000
2	2/2/14	4,200,000	85,000
3	3/4/14	4,000,000	85,000
4	5/6/14	2,200,000	85,000
5	6/3/14	3,890,000	85,000
6	4/4/14	3,950,000	85,000



Georgia Department of Revenue

Consideration of Values

- All six samples are arms length transactions.
- Sales 1 and 4 are bank sales,
- under current law, bank sales are still considered arms length transactions and must be included in the sales-comparison approach to value in the TAO estimate of fair market value.



Georgia Department of Revenue

Consideration of Values

- You must be aware of the statutory requirements for the TAO to use the sale price as the maximum allowable value for the next digest year when determining the applicability of sales 1 and 4 in the sales comparison approach as well as how specifically the individual appraisal values of sales 1 and 4 apply to the appealed subject property.



Georgia Department of Revenue

Consideration of Values

- ***What if:*** owner of parcel #4 appeals and proposes the value of their property is 1,500,000?
 - *After you (CHO) review the sales evidence, your review of the market might reveal a value of \$3,000,000, due to statutory requirements that the most recent arms length transaction set the maximum allowable value for the next digest year, the TAO cannot apply your decision value of \$3,000,000, the digest value is capped at the sale price of \$2,200,000.*



Georgia Department of Revenue

Consideration of Values

- **What if:** owner of parcel #6 appeals and proposes is property value should be 2,000,000 based on sales #1 and #4?
 - *Simple and direct usage of sales #1 and #4 as the true fair market value would be no more appropriate than declaring the value is \$4,200,000 as determined by sale #2. The fee appraiser might reasonably conclude that the true market is set by the predominantly indicated value range of 3,890,000 to 4,200,000. The TAO is forced to apply the bank sales in their appraisals rather than following the purest theory of appraisal.*



Georgia Department of Revenue

Class / Strat

- TC of each county shall list real & personal property using these codes
- Property will be listed by use of a two-digit code
 - The first character will designate the classification
 - The second character will designate the stratum



Georgia Department of Revenue

Digest Classifications

- A – Agricultural
- B – Brownfield
- C – Commercial
- H – Historic
- I – Industrial
- P – Preferential
- R – Residential
- T – Res. Transitional
- U – Utility
- V – Conservation use
- W – Envir. Sensitive
- F – FLPA MV Asmt
- J – FLPA CU Prop



Georgia Department of Revenue

Digest Strata – Real Property

- 1 – Improvements
- 2 – Operating Utility
- 3 – Lots
- 4 – Small Tracts
- 5 – Large Tracts
- 6 – Production / Storage / Auxillary
- 9 – Other Real



Georgia Department of Revenue

Digest Strata – Personal Property

- A – Aircraft
- B – Boats
- I – Inventory
- P – Freeport Inventory
- F - Furniture / Fixture / Machinery / Equipment
- Z – Other Personal



Georgia Department of Revenue

Digest Classes and a Word of Caution

Some classes appear as value exemptions, be careful when making comparison and using comps. For example ...



Georgia Department of Revenue

Samples

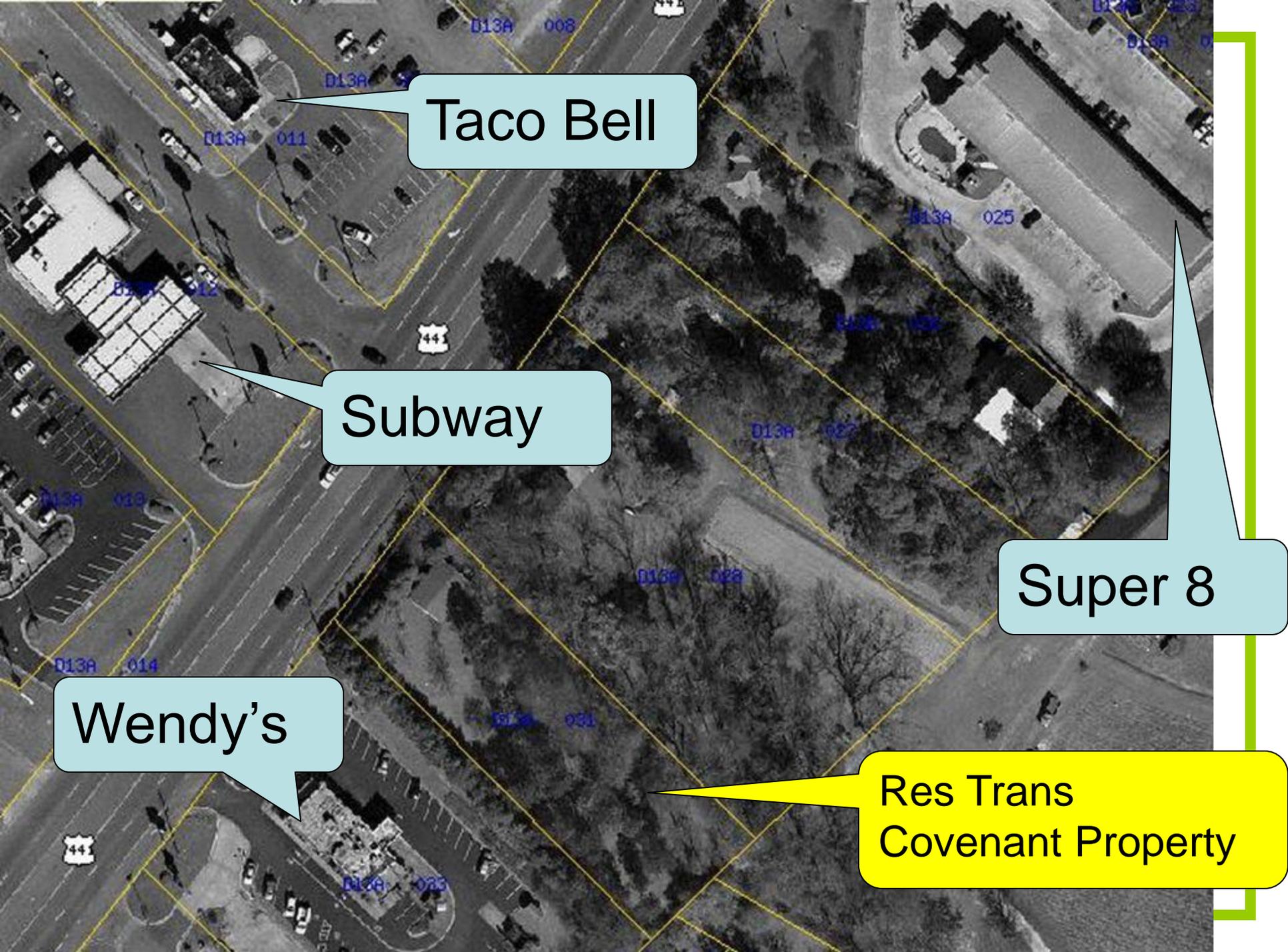
Property Record Card
Notice of Assessment Form



Georgia Department of Revenue

Residential Transitional

- This classification shall apply to the residential improvement and up to no more than five acres of land underneath the improvement and comprising the homesite the value of which is influenced by its proximity to or location in a transitional area and which is receiving a current use assessment under O.C.G.A. Sec. 48-5-7.4



Taco Bell

Subway

Wendy's

Super 8

Res Trans
Covenant Property



Georgia Department of Revenue

Residential Transitional

- ***What if:*** property owner presents a comparable property that is in the Residential Transitional covenant as evidence to their value.
 - Subject Valuation = 1,200,000
 - Comp Res Trans Value = 400,000
 - *CHO must recognize the Res Trans value is not comparable to the subject property as the \$400,000 is a statutory tax shelter program – not fair market value*
 - *Appears on digest as an exemption*



Georgia Department of Revenue

Conservation Use

- This classification shall apply to all land and improvements primarily used in the good faith production of agriculture products or timber and receiving current use assessment under O.C.G.A. Sec. 48-5-7.4.



Georgia Department of Revenue

Conservation Use Value Impact

Type of Property	FMV Class / Strat	CU Class / Strat	FMV	CUV
200 Acres	A5	V5	400,000	100,000
Residence	A1	A1	200,000	NA
Poultry House	A6	V6	900,000	900,000

- The FMV of the property in the covenant is unaffected, the impact is found in the CUV column
- This valuation reduction appears on the tax bill as an **exemption**



Georgia Department of Revenue

Environmentally Sensitive

- This classification shall apply to all land certified as environmentally sensitive property by the Georgia Department of Natural Resources and receiving current use assessment under O.C.G.A. Sec. 48-5-7.4
- Value impact similar to CUV (***exemption***)



Georgia Department of Revenue

Historic

- This classification shall apply to up to two acres of land and improvements thereon designated as rehabilitated historic property or landmark historic property and receiving preferential assessment under O.C.G.A. Sec. 48-5-7.2 or O.C.G.A. Sec. 48-5-7.3



Georgia Department of Revenue

Historic Value Impact

- Year 1 through 8 value is frozen at higher of acquisition cost and the TAO value at the time of Historic certification
- Year 9 value is frozen value and half the difference between frozen and FMV
- Year 10 – full FMV
- Value impact similar to CUV (***exemption***)



Georgia Department of Revenue

Brownfield

- This classification shall apply to all land certified “Brownfield Property” by the Environmental Protection Division of the Department of Natural Resources and receiving preferential assessment under O.C.G.A. Sec. 48-5-7.6



Georgia Department of Revenue

Brownfield Value Impact

- the value equal to the **lesser** of the acquisition cost or the TAO FMV at the time application was made to the EPD of the DNR
- (ii) Unless sooner disqualified, for the eleventh and following years, the TAO FMV
- Value impact similar to CUV (***exemption***)



Georgia Department of Revenue

Forest Land Protection Act

- This classification shall apply to all land and improvements primarily used in the good faith production of timber receiving current use assessment under O.C.G.A. Sec. 48-5-7.7
- Value impact similar to CUV (***exemption***)



Georgia Department of Revenue

Preferential Agricultural Assessment

- This classification shall apply to land and improvements primarily used for bona fide agricultural purposes and receiving preferential assessment under O.C.G.A. Sec. 48-5-7.1
- Value impact similar to CUV (***exemption***)



Georgia Department of Revenue

Timberland

- Appraisal of timberland for ad-valorem purposes does not include an valuation for timber.
- Timber is taxed at time of sale or harvest – it is not included on the land appraisal.
- However, there are certainly possible valuation considerations and differences between open land and timberland.



Georgia Department of Revenue

Timberland

- 200 acres pine plantation
- Digest value
 - A5
 - \$750 / ac
 - $750 * 200$
 - \$150,000
 - Represents only the land value





Georgia Department of Revenue

Timberland

- Timber value is taxed at the time of harvest or sale





Georgia Department of Revenue

Valuation / Uniformity / Equalization

- Constitution – Highest Calling
- Measure of Central Tendency
- Uniformity of Assessment
- Assessment Bias
- DOAA Study
- Statistical Standards for statutory compliance
- Blending 'TrueBlue' & 'BankSales'



Georgia Department of Revenue

Georgia Constitution

- Paragraph III. **Uniformity; classification of property; assessment of agricultural land; utilities.** (a) All taxes shall be levied and collected under general laws and for public purposes only. Except as otherwise provided in subparagraphs (b), (c), (d), (e), and (f) of this Paragraph, all taxation shall be uniform upon the same class of subjects within the territorial limits of the authority levying the tax



Georgia Department of Revenue

Georgia Constitution

- The very constitution of Georgia references and requires uniformity.
- The higher calling, higher requirement, on TAO is to achieve and maintain **uniformity.**



Georgia Department of Revenue

Sales-Assessment Ratio Analysis

- FMV is defined as what a property would bring at cash **sale** when sold in a typical manner.
- Georgia law states the assessed value shall be 40% of FMV
- Sales Ratio Analysis is the statistical mechanism by which an appraisers' work is judged



Georgia Department of Revenue

What is a ratio?

- A sales-assessment ratio is expressing a given assessment as a percentage of a sales price.
- Formula:
 - 40% Assessed Value / Sales Price
- Example:
 - Property sold for 27,500 and the assessed value is 11,000, the sales assessment ratio would be $11,000/27,500 = .4000$ or 40.00%
 - Using the same sales price of 27,500 and the assessed value was 9,075, what would the ratio be?



Georgia Department of Revenue

Calculating a Ratio

- January 1, 2015 FMV as determined by appraiser
 - 950,000
- Property is sold in March 2015 for 915,000
- Sales Assessment Ratio?



Georgia Department of Revenue

Steps in Ratio

1. Is property value stated as FMV or Assessed value? If FMV, convert to Asmt
 - $450,000 * 40\% = 180,000$
2. Ratio Formula: Asmt Value / Sale Price
 - $180,000 / 515,000$
 - .3495



Georgia Department of Revenue

What is the ratio telling us?

- First, the assessment is low (less than 40%)
 - COULD mean
 - There were unusual conditions in the sale, or ...
 - The property needs to be reappraised
 - IF sale is a bona fide sale, the reason for the low ratio rests on the appraisal.
 - Low ratios often result from old appraisals.



Georgia Department of Revenue

What is the ratio telling us?

- Studying sales as they occur is the best way to determine exactly what the ratio is telling you and the best way to maintain assessments that reasonably reflect Fair Market Value
- 48-5-343:
 - *“Reasonably practicable”*
 - 36-44



Georgia Department of Revenue

Sales Ratios to Measure Equity

- A group of ratios gives us equally, if not more, valuable information than a single ratio on a single property
- An appraiser can study a group of ratios to measure equity within a street, neighborhood, city, or entire county



Georgia Department of Revenue

Sales Ratios Statistics

- Once we calculate the single ratio for each sale included in our sample
- We then ***measure the central tendency*** of our sample.
- The ***uniformity*** of our sample is an indication of our equity
- Last, ***assessment bias*** is measured and evaluated.



Georgia Department of Revenue

Legal Definitions

- **assessment bias**
 - any tendency or trend of assessment ratios, when analyzed by an appropriate statistical method, which reveals assessment progressivity or assessment regressivity
- **assessment progressivity**
 - any systematic pattern of assessment in which higher value properties are generally assessed at a larger percentage of fair market value than properties of lower value



Georgia Department of Revenue

Legal Definitions

- **assessment ratio**
 - the fractional relationship the assessed value of property bears to the fair market value of the property
- **assessment regressivity**
 - any systematic pattern of assessment in which lower value properties are generally assessed at a larger percentage of fair market value than properties of higher value



Georgia Department of Revenue

Legal Definitions

- **assessment variance**
 - the absolute value of the difference between the assessment ratio for each parcel of property within each class of property and the average assessment ratio for that class and expressed as a percentage of the average assessment ratio



Georgia Department of Revenue

Legal Definitions

- **class of property**
 - any reasonable divisions of homogeneous groups of property that the Revenue Commissioner determines are necessary to examine digests for uniformity and equalization



Georgia Department of Revenue

Legal Definitions

- **digest evaluation cycle**
 - a recurring period of three years beginning initially on January 1 of the first year, as so designated by the Revenue Commissioner for each county, and ending on December 31 of the third year thereafter
- **digest review year**
 - the first year of each evaluation cycle for each county



Georgia Department of Revenue

Terms

- Range
- Median (*measure of central tendency*)
- Mean
- Aggregate (*measure of central tendency*)
- Deviation
- Mean Deviation
- COD (*measure of uniformity*)
- PRD (*measure of assessment bias*)



Georgia Department of Revenue

Measures of Central Tendency

- Median
- Mean
- Weighted Mean (aka: Aggregate)



Georgia Department of Revenue

Median

- Physical middle sample in the study
- Not influenced by extreme values

— .23	.1	
— .33	.2	
— .34	.30	
— .44	.44	<i>Median Ratio</i>
— .56	.88	
— .65	1.23	
— .77	1.50	



Georgia Department of Revenue

Steps to Calculate Median

- Calculate the assessment-sales ratio for each sample by dividing the assessment by the sale price
- Build an “array” of the ratios
- Array is a listing from smallest to highest.
- Median is the middle ratio!



Georgia Department of Revenue

- Median Ratio – Build Array
- ~~.3544~~
 - ~~.3250~~
 - ~~.4125~~
 - ~~.3845~~
 - ~~.3675~~
 - ~~.3945~~
 - ~~.4000~~



Georgia Department of Revenue

Mean

- is the arithmetic average of the sample.
- Calculate the ratios
- Calculated by adding together the ratios of each sample and divide by the total number of samples.



Georgia Department of Revenue

Mean Ratio Calculation

- .3250
 - .3544
 - .3675
 - .3845
 - .3945
 - .4000
 - .4125
- Once the assessment-sales ratio has been determined, add up the ratios



Georgia Department of Revenue

Mean Ratio Calculation

- .3250
 - .3544
 - .3845
 - .3675
 - .3945
 - .4000
 - .4125
- 2.6384**
- Once the assessment-sales ratio has been determined, add up the ratios
 - Divided by the number of samples ($2.6384 / 7$) to find the **Mean Ratio**



Georgia Department of Revenue

Mean Ratio Calculation

- .3250
 - .3544
 - .3675
 - .3845
 - .3945
 - .4000
 - .4125
- $2.6384/7 = 0.3769$**
- Once the assessment-sales ratio has been determined, add up the ratios
 - Divide this number by the number of samples ($2.6384 / 7$) to find the **Mean**



Georgia Department of Revenue

Aggregate

- “Weighted Average” or “weighted mean”
- Add all Sale prices together
- Add all Assessments together
- Divide the total of Assessments by the total of Sale prices.



Georgia Department of Revenue

Aggregate Ratio Calculation

Assmt Sale price

- 8,125 / 25,000 = .3250
- 3,190 / 9,000 = .3544
- 24,255 / 66,000 = .3675
- 5,383 / 14,000 = .3845
- 11,835 / 30,000 = .3945
- 1,000 / 2,500 = .4000
- 18,564 / 45,000 = .4125

- To calculate the aggregate ratio, we must add the sales prices and assessments to this listing



Georgia Department of Revenue

Aggregate Ratio Calculation

Assmt Sale price

- 8,125 / 25,000
- 3,190 / 9,000
- 24,255 / 66,000
- 5,383 / 14,000
- 11,835 / 30,000
- 1,000 / 2,500
- 18,564 / 45,000

- To calculate the aggregate ratio, we must add the sales prices and assessments to this listing



Georgia Department of Revenue

Aggregate Ratio Calculation

<u>Assmt</u>	<u>Sale price</u>
• 8,125	/ 25,000
• 3,190	/ 9,000
• 24,255	/ 66,000
• 5,383	/ 14,000
• 11,835	/ 30,000
• 1,000	/ 2,500
• <u>18,564</u>	/ <u>45,000</u>
72,352	191,500

- To calculate the aggregate ratio, we must add the sales prices and assessments to this listing
- Now Total the Assessments and Sale prices



Georgia Department of Revenue

Aggregate Ratio Calculation

- | <u>Assmt</u> | <u>Sale price</u> |
|-----------------|-------------------|
| • 8,125 | / 25,000 |
| • 3,190 | / 9,000 |
| • 24,255 | / 66,000 |
| • 5,383 | / 14,000 |
| • 11,835 | / 30,000 |
| • 1,000 | / 2,500 |
| • <u>18,564</u> | / <u>45,000</u> |

72,352 / 191,500

= .3778

- To calculate the aggregate ratio, we must add the sales prices and assessments to this listing
- Now Total the Assessments and Sale prices
- Divide for Agg



Georgia Department of Revenue

Confidence Intervals (C.I.)





Confidence Intervals

- 95% confidence interval
- Used in determining deficiencies within the level of assessment as determined in the ratio study



Georgia Department of Revenue

Median Confidence Intervals

- N = Number of Samples
- $.98 \times \text{Square Root } (N)$
- If N is odd, add 1
- If N is even, add $.5$
- Truncate (ignore any decimals)
- CI Interval; count up for upper limit, count down for lower limit



Georgia Department of Revenue

Median CI Examples

- Interval = $.98 * \text{Sqrt}(N) + (1 \text{ if } N \text{ is odd, } .5 \text{ if } N \text{ is even})$
- $N = 25$
- $\text{Sqrt}(N) = \text{Sqrt}(25) = 5$
- $.98 * 5 = 4.9$
- $N = 25$ (Odd: so we add 1)
- $4.9 + 1 = 5.9$



Georgia Department of Revenue

Median CI Examples

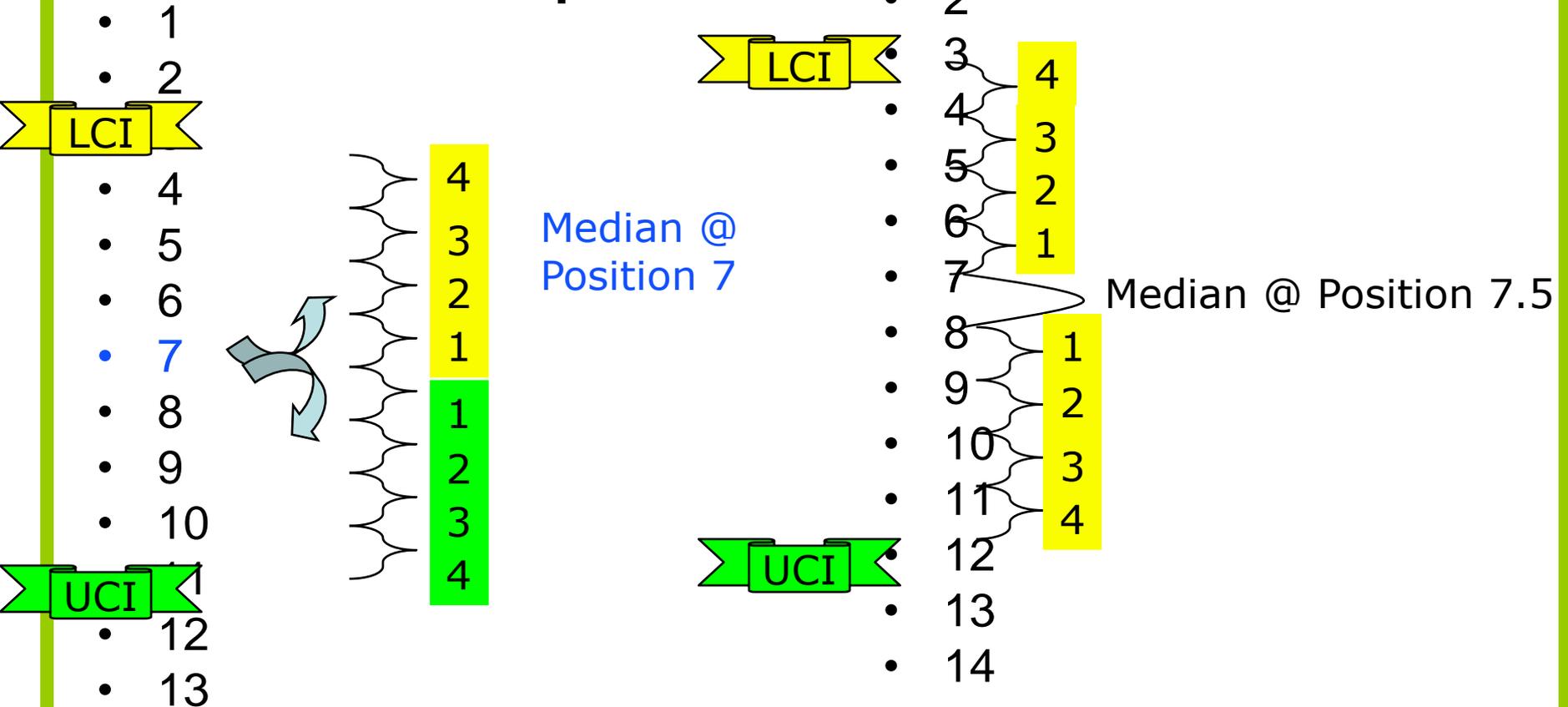
- Truncate 5.9 = 5
- Median Position = $N / 2 + .5 = 25 / 2 + .5 = 13$
- Lower CI position is $13 - 5 = 8$
- Upper CI position is $13 + 5 = 18$



Georgia Department of Revenue

Median CI – counting interval

Given: interval = 4





Georgia Department of Revenue

Aggregate Confidence Intervals

- Calculating the CI about the Aggregate requires the calculation of the standard deviation of the sample.
- Standard deviation is represented by the lowercase “s”



Georgia Department of Revenue

Aggregate CI

- 95% CI about the Aggregate
- Agg +/- (1.96 x Std Dev)

Square Root(N)

- “+” if seeking Upper Confidence Interval (UCI)
- “-” if seeking Lower Confidence Interval (LCI)



Georgia Department of Revenue

Aggregate CI Example

- AGG = .3850
- s = .55
- N = 150
- Agg +/- (1.96 x Std Dev)
Square Root(N)
- .3850 +/- (1.96 X .55)
Square Root(150)



Georgia Department of Revenue

Aggregate CI Example

- $UCI = .3850 + \frac{(1.96 \times .55)}{\text{Sqrt}(150)}$
- $UCI = .3850 + \frac{1.078}{12.25}$
- $UCI = .3850 + .0880$
- $UCI = .4730$



Georgia Department of Revenue

Aggregate CI Example

- $LCI = .3850 - \frac{(1.96 \times .55)}{\text{Sqrt}(150)}$
- $LCI = .3850 - \frac{1.078}{12.25}$
- $LCI = .3850 - .0880$
- $LCI = .2970$



Georgia Department of Revenue

Using Confidence Intervals

- The statute requires usage of a 95% confidence interval when determining ratio compliance
- Acceptable range for level of assessment is 36% to 44%
- If the 95% confidence interval about the measure of central tendency falls within the 36% to 44% range, the level of assessment test will be deemed compliant.



Georgia Department of Revenue

Level of Assessment Test

Lower Confidence Interval	Measure of Central Tendency	Upper Confidence Interval	Pass / Fail
0.3234	0.3654	0.3778	
0.3340	0.3401	0.3580	
0.3600	0.3800	0.4000	
0.4000	0.4200	0.4400	
0.3300	0.3500	0.3800	
0.4412	0.4540	0.4780	



Georgia Department of Revenue

Level of Assessment Test

Lower Confidence Interval	Measure of Central Tendency	Upper Confidence Interval	Pass / Fail
0.3234	0.3654	0.3778	√
0.3340	0.3401	0.3580	X
0.3600	0.3800	0.4000	√
0.4000	0.4200	0.4400	√
0.3300	0.3500	0.3800	√
0.4412	0.4540	0.4780	X



Georgia Department of Revenue

Uniformity - COD





Georgia Department of Revenue

Uniformity

- Measured using the Coefficient of Dispersion (COD)
- **Residential** Homogeneous groups must be **15%** or less to pass
- **Non-Residential (CIA)** Homogeneous groups must be **20%** or less to pass.



Georgia Department of Revenue

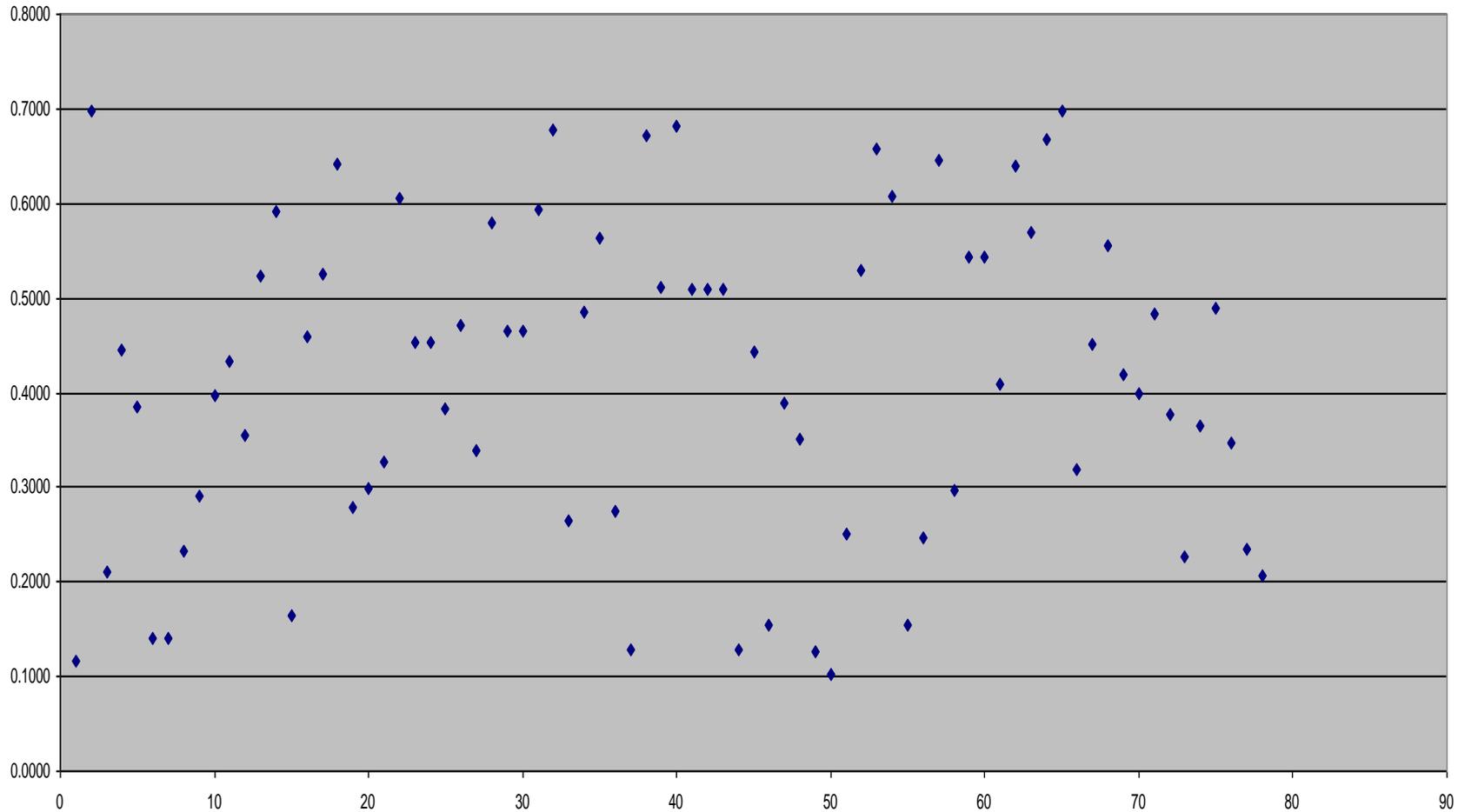
Uniformity

- If **Residential** Homogeneous group of property is combined with **Non-Residential** Homogenous group(s) of property, COD must be **20%** or less to pass.



Georgia Department of Revenue

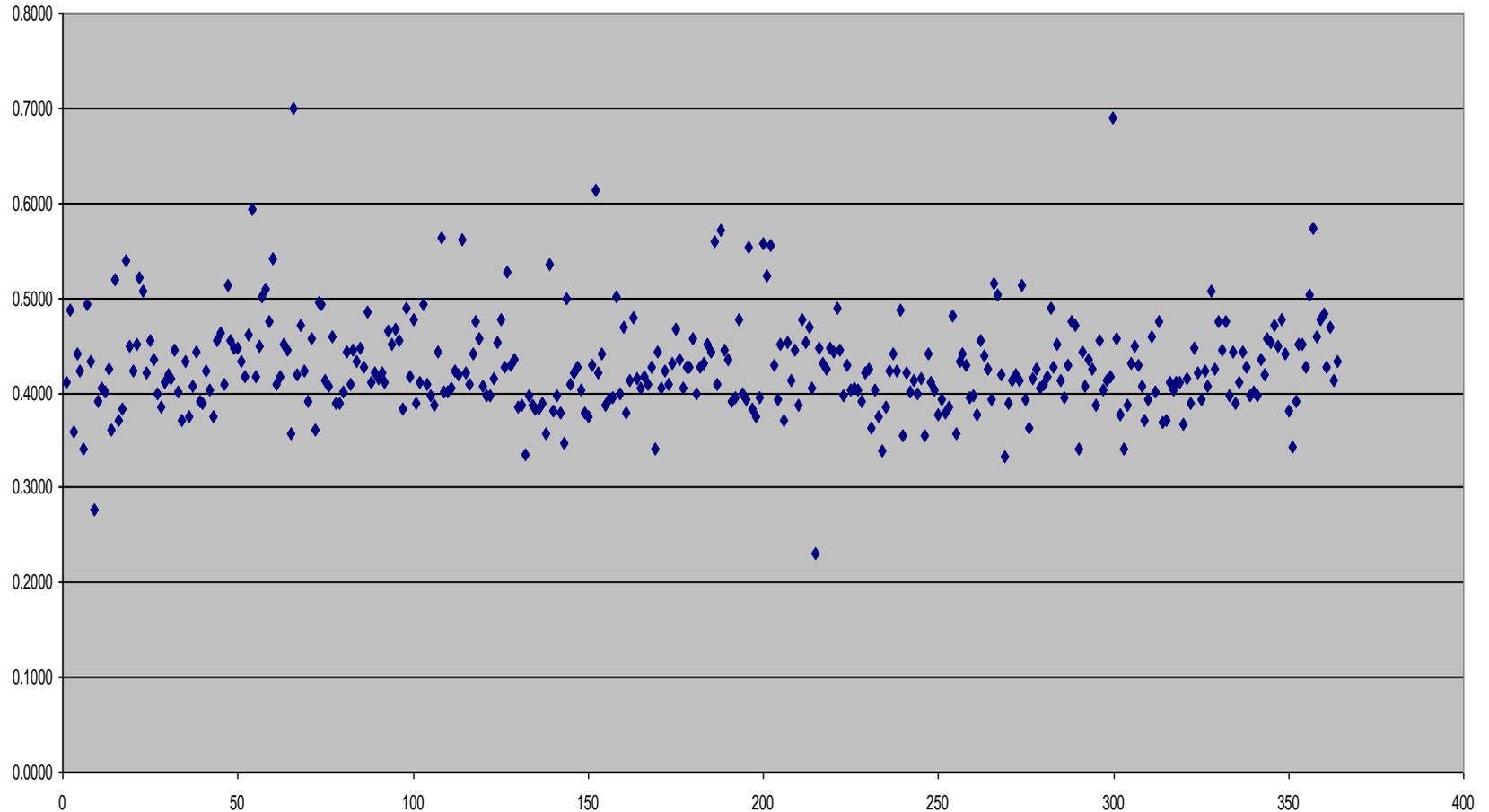
COD = 32.03





Georgia Department of Revenue

COD = 8.55





Calculating COD

- Build Array
- Calculate Median
- Calculate Absolute (*ignore sign*) Deviation from **Median**
- Calculate the **Mean Deviation** (*aka Absolute Average Deviation (AAD)*)
- Divide the “**mean deviation**” (AAD) by the “**median**” to find the **COD**



Georgia Department of Revenue

Build Array

- .3544
- .3250
- .4125
- .3845
- .3675
- .3945
- .4000
- .3250
- .3544
- .3675
- .3845
- .3945
- .4000
- .4125



Georgia Department of Revenue

Find Median Ratio

- .3250
- .3544
- .3675
- .3845
- .3945
- .4000
- .4125



Georgia Department of Revenue

Find Median Ratio

- .3250
- .3544
- .3675
- **.3845**
- .3945
- .4000
- .4125





Georgia Department of Revenue

Calculate Deviation from Median

- $.3250 - .3845 = - 0.0595$
- $.3544 - .3845 = - 0.0301$
- $.3675 - .3845 = - 0.0170$
- $.3845 - .3845 = 0.0000$
- $.3945 - .3845 = + 0.0100$
- $.4000 - .3845 = + 0.0155$
- $.4125 - .3845 = + 0.0280$



Georgia Department of Revenue

Calculate *Absolute* Deviation from Median

- $.3250 - .3845 = 0.0595$
- $.3544 - .3845 = 0.0301$
- $.3675 - .3845 = 0.0170$
- $.3845 - .3845 = 0.0000$
- $.3945 - .3845 = 0.0100$
- $.4000 - .3845 = 0.0155$
- $.4125 - .3845 = 0.0280$



Georgia Department of Revenue

COD - Sum Deviations

- $.3250 - .3845 = 0.0595$
 - $.3544 - .3845 = 0.0301$
 - $.3675 - .3845 = 0.0170$
 - $.3845 - .3845 = 0.0000$
 - $.3945 - .3845 = 0.0100$
 - $.4000 - .3845 = 0.0155$
 - $.4125 - .3845 = \underline{0.0280}$
- 0.1601**



Georgia Department of Revenue

COD - Mean Deviation

- $.3250 - .3845 = 0.0595$
- $.3544 - .3845 = 0.0301$
- $.3675 - .3845 = 0.0170$
- $.3845 - .3845 = 0.0000$
- $.3945 - .3845 = 0.0100$
- $.4000 - .3845 = 0.0155$
- $.4125 - .3845 = \underline{0.0280}$

**Mean
Deviation**

$$0.1601 / 7 = .02287$$



Georgia Department of Revenue

Calculate COD

- $\text{COD} = \frac{\text{Mean Deviation}}{\text{Median Ratio}}$
- $\text{COD} = \frac{0.02287}{0.3845} = 0.0595 = 5.95\%$



Assessment Bias

- Measured using the Price Related Differential - PRD
- $PRD > 1.00$ = “Assessment Regressivity”
 - Lower valued properties are assessed at a higher rate than higher valued properties.
- $PRD < 1.00$ = “Assessment Progressivity”
 - Higher valued properties are assessed at a higher rate than lower valued properties.



Georgia Department of Revenue

Price Related Differential

- A PRD of 1.13, the higher valued properties might be assessed at 23% while the lower valued properties are assessed at 35%
- Note: both types of properties are assessed at *less than 40%*, yet the higher valued properties are valued at a lower rate **RELATIVE** to the lower valued properties



Georgia Department of Revenue

PRD

- Example 1

- Parcel A

- Value=1,000
- Asmt Ratio: .23

- Parcel B

- Value=500,000
- Asmt Ratio: 13

- $PRD > 1.00$

- Regressivity

- Example 2

- Parcel A

- Value=1,000
- Asmt Ratio: .23

- Parcel B

- Value=500,000
- Asmt Ratio: 33

- $PRD < 1.00$

- Progressivity



Georgia Department of Revenue

Calculating the PRD

- Find the Mean Ratio
- Find the Aggregate Ratio
- Divide the Mean Ratio by the Aggregate Ratio



Georgia Department of Revenue

Calculating PRD

- Mean = .3769
- Aggregate = .3778
- PRD = $\frac{\text{Mean}}{\text{Aggregate}}$
- PRD = $\frac{.3769}{.3778}$
- PRD = .9976 = 99.7%
- Calculate **Mean** Ratio
- Calculate **Aggregate** Ratio
- Divide the **Mean** Ratio by the **Aggregate** Ratio



Georgia Department of Revenue

Digest Reviews

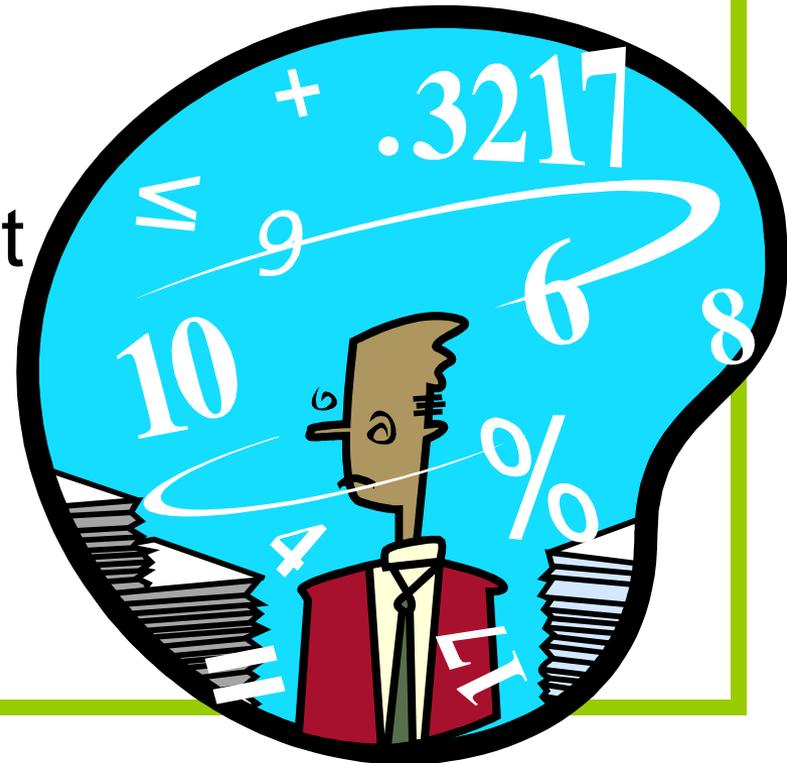
- DOR uses statistics from Department of Audits
- Property grouped into five homogeneous groups
 - RES (includes Res Trans and Historic)
 - AGR (includes Pref, CUV, Env.Sens, FLPA)
 - COM
 - IND (includes Brownfield)
 - UTILITY



Georgia Department of Revenue

Basic Stats for Digest Compliance

- Level of Assessment
 - Measure of Central Tendency
 - 36% - 44%
 - 95% Confidence Intervals
- Uniformity of Assessment
 - Coefficient of Dispersion
 - RES = 15% or less
 - Non-RES = 20% or less

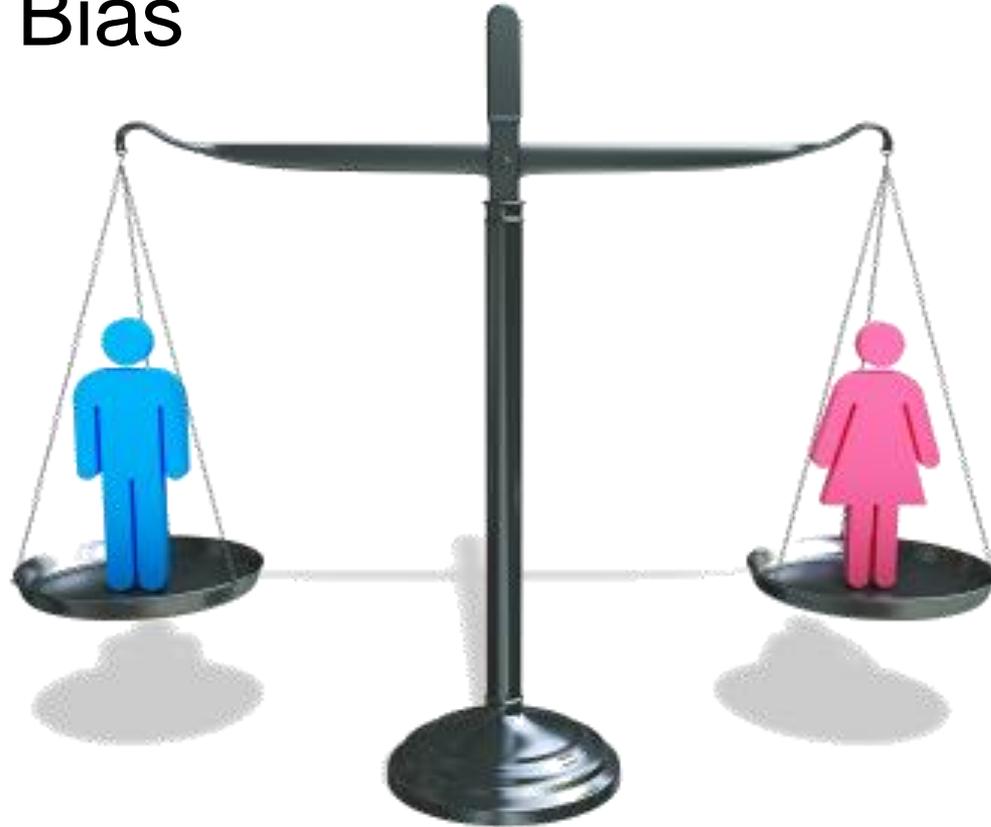




Georgia Department of Revenue

Basic Stats for Digest Compliance

- Assessment Bias
- 95% - 110%





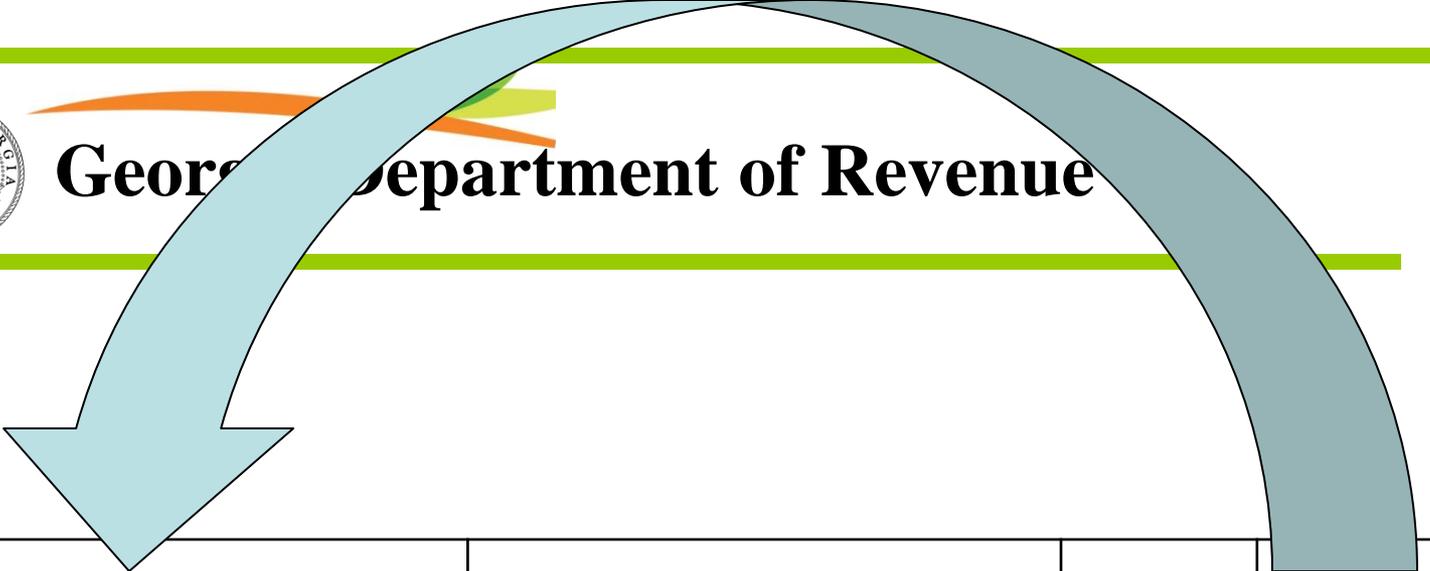
Georgia Department of Revenue

Measure of Central Tendency

- DOR uses the Median Ratio when assessment bias is determined to be insignificant
 - Insignificant = PRD between 0.95 and 1.10, inclusive
- DOR uses Aggregate Ratio when assessment bias is significant.
 - $PRD > 1.10$ or $PRD < .95$



Georgia Department of Revenue



Class	Med	LCI	UCI	Agg	LCI	UCI	COD	PRD
Agr	0.3445	0.3200	0.3700	0.3400	0.2940	0.3601	0.2230	1.0500

Level of Assessment

M/A

P/F

Uniformity of Assmt

P/F

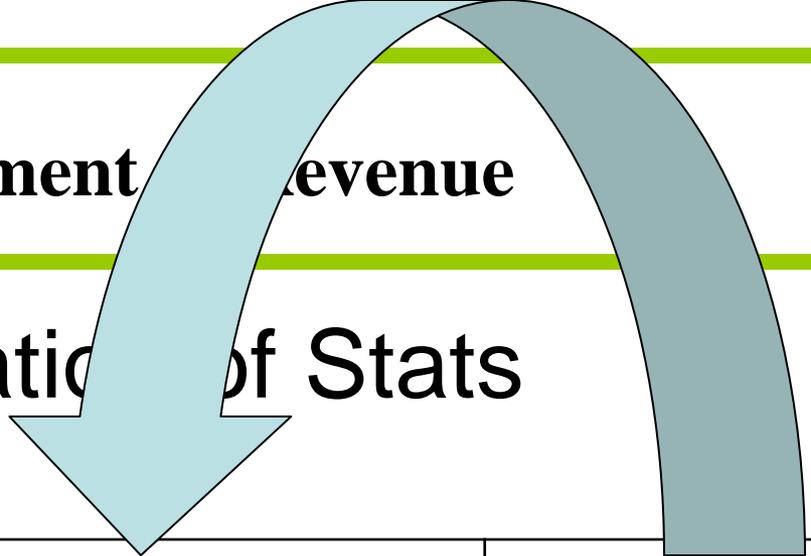
Assessment Bias

P/F



Georgia Department of Revenue

Total Evaluation of Stats



Class	Med	LCI	UCI	Agg	LCI	UCI	COD	PRD
Res	0.3445	0.3200	0.3700	0.3100	0.2800	0.3400	0.1500	1.1500

Level of Assessment

M/A

P/F

Uniformity of Assmt

P/F

Assessment Bias

P/F



Georgia Department of Revenue

Evaluation of Statistics

Exercise in Book



Georgia Department of Revenue

Questions

