

**Joint Legislative Committee on Performance
Evaluation and Expenditure Review (PEER)**

Report to
the Mississippi Legislature



A Review of the State Tax Commission's Methods for Evaluating the Accuracy of Property Appraisals

Property taxes are calculated based on assessed value of property, which is a function of that property's appraised value. The state's system of property taxation involves estimation of a property's value and taxation of equal proportion for all taxpayers within a taxing district based on the estimated value of their properties.

The Mississippi State Tax Commission (MSTC) is responsible for the equalization of land rolls between counties. MSTC's duty is to examine the assessed valuations of each county in order to determine whether the assessed valuation of any class of property in one county is not equal to or uniform with the assessed valuation of the same class of property in the other counties and to determine whether any class of property in any county is assessed contrary to law.

According to the State Tax Commission's most recent determination, seventy-seven of the state's eighty-two counties appraise Class I property (i. e., single-family, owner-occupied, residential real property) accurately and these property values are equalized. However, if the commission were to adopt more stringent standards for appraisal accuracy and equalization, such as those suggested by the International Association of Assessing Officers, nearly half of Mississippi's counties would not be in compliance and thus property values are not equalized according to industry norms.

Each real property audit consists of a review of close inspections of real property parcels, a cost index study, and a sales ratio study, which is the principal tool for measuring the appraisal performance of a county. The reliability of sales ratio studies is vulnerable due to necessary reliance on sales files, which may contain very limited sales data, may include inappropriate or unethical selection of sales data, and base compliance on very broad parameters.

PEER: The Mississippi Legislature's Oversight Agency

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A joint committee, the PEER Committee is composed of seven members of the House of Representatives appointed by the Speaker and seven members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms with one Senator and one Representative appointed from each of the U. S. Congressional Districts. Committee officers are elected by the membership with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of four Representatives and four Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues that may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, special investigations, briefings to individual legislators, testimony, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, and the agency examined.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.

PEER Committee
Post Office Box 1204
Jackson, MS 39215-1204

(Tel.) 601-359-1226
(Fax) 601-359-1420
(Website) <http://www.peer.state.ms.us>

The Mississippi Legislature

Joint Committee on Performance Evaluation and Expenditure Review

PEER Committee

SENATORS
GARY JACKSON
Vice Chair
CINDY HYDE-SMITH
Secretary
SIDNEY ALBRITTON
TERRY BROWN
MERLE FLOWERS
SAMPSON JACKSON
NOLAN METTETAL



Post Office Box 1204
Jackson, Mississippi 39215-1204

Max K. Arinder, Ph. D.
Executive Director

www.peer.state.ms.us

REPRESENTATIVES
HARVEY MOSS
Chair
WILLIE BAILEY
ALYCE CLARKE
DIRK DEDEAUX
WALTER ROBINSON
RAY ROGERS
GREG WARD

OFFICES:
Woolfolk Building, Suite 301-A
501 North West Street
Jackson, Mississippi 39201

TELEPHONE:
(601) 359-1226

FAX:
(601) 359-1420

September 8, 2009

Honorable Haley Barbour, Governor
Honorable Phil Bryant, Lieutenant Governor
Honorable Billy McCoy, Speaker of the House
Members of the Mississippi State Legislature

On September 8, 2009, the PEER Committee authorized release of the report entitled **A Review of the State Tax Commission's Methods for Evaluating the Accuracy of Property Appraisals.**

A handwritten signature in cursive script that reads "Harvey Moss". The signature is written in black ink and is positioned above a horizontal line.

Representative Harvey Moss, Chair

This report does not recommend increased funding or additional staff.

Table of Contents

Letter of Transmittali

List of Exhibitsv

Executive Summary vii

Introduction1

Authority1

Problem Statement1

Scope and Purpose2

Method2

Background: Legal Requirements for Uniformity and Equality
of Property Taxation3

Constitution Requires Equalization of Property Taxation
throughout the State.....3

State Supreme Court Rules that State Tax Commission is
Responsible for Equalization of Land Rolls Between Counties3

The MISSISSIPPI CODE Requires the State Tax Commission to Evaluate
the Accuracy of Property Assessments4

The *Mississippi Administrative Code* Sets Out Requirements
for Updating Property Values and Methods, Standards,
and Parameters for Assessing the Accuracy of Property Appraisals5

How the State Tax Commission Evaluates the Accuracy of Property Appraisals7

Counties' Real Property Audits Performed by the Property
Assessment Division of the MSTC7

Individual Objections to Property Appraisals 11

Unintended Consequences of Property Assessment in the
Update Cycle 12

Conclusions 13

Dependency of Ratio Studies on Sales Files 14

Inappropriate or Unethical Selection of Sales..... 15

Wide Ranges of Acceptable Summary Assessment Figures..... 16

Equalization Not Based on Industry Norms..... 17

Proper Emphasis Not Placed on Ratio Studies..... 17

Recommendations 19

Table of Contents (continued)

Appendix A:	Glossary of Terms and Concepts Related to Property Appraisals	23
Appendix B:	Classes of Property for Purposes of Taxation.....	27
Appendix C:	Detailed Review of Ratio Study Tests of Assessment Level, Assessment Uniformity, and Assessment Equity.....	28
Appendix D:	Computation of an Individual's Property Tax.....	33
Appendix E:	Performance of Mississippi Counties on Assessment Level Based on IAAO Standards	34
Appendix F:	Performance of Mississippi Counties on Assessment Uniformity Based on IAAO Standards	35
Appendix G:	Performance of Mississippi Counties on Assessment Equity Based on IAAO Standards.....	36
Agency Response	37

List of Exhibits

1. Example of the Calculation of a Sales Ratio used in
Ratio Study Assessment Tests9

2. Standards for Statistical Tests for Class I Property..... 16

3. Example of the Calculation of the Assessment Level (Median Ratio) 29

4. Example of the Calculation of the Assessment Uniformity
Level (Coefficient of Dispersion)..... 30

5. Example of the Calculation of Assessment Equity (Price-Related Differential) 32

A Review of the State Tax Commission's Methods for Evaluating the Accuracy of Property Appraisals

Executive Summary

Introduction

A resident of Lauderdale County raised concerns regarding the accuracy of property taxes levied in that county following an increase in the individual's property tax bill that occurred during a perceived decline in property values due to a falling housing market. The resident was concerned not only about the accuracy of his own property tax bill, but also about the accuracy of property tax bills throughout the county.

PEER performed the review to answer this question: *Are there unjustified differences in owners' property tax bills resulting from differing appraised values for comparable properties?*

Background

Counties rely on property taxes to fund the operating budgets of local governments, and public works and school districts. Property taxes are calculated based on assessed value of property, which is a function of that property's appraised value. The state's system of property taxation involves estimation of a property's value and taxation of equal proportion for all taxpayers within a taxing district based on the estimated value of their properties.

Section 112 of the MISSISSIPPI CONSTITUTION states that "taxation shall be uniform and equal throughout the state." Section 112 also states that residential property shall be assessed at 10% of its true value (or market value for the purposes of this report and as defined by MISS. CODE ANN. Section 27-35-50 [1972]).

In 1977, the Mississippi Supreme Court heard a case that involved an owner of multiple commercial properties of the same use and physical characteristics located in

multiple counties that were valued and taxed differently¹ in each county. That case, *Fondren v. State Tax Commission*, 350 So. 2d 1329 (Miss. 1977), eventually resulted in the ruling that the Mississippi State Tax Commission (MSTC) is responsible for the equalization of land rolls between counties per Section 112 of the MISSISSIPPI CONSTITUTION.

Thus it is the duty of MSTC to examine the assessed valuations of each county in order to determine whether the assessed valuation of any class of property in one county is not equal to or uniform with the assessed valuation of the same class of property in the other counties and to determine if any class of property in any county is assessed contrary to law. The *Mississippi Administrative Code* sets out requirements for updating property values and methods, standards, and parameters for assessing the accuracy of property appraisals.

How the State Tax Commission Evaluates the Accuracy of Property Appraisals

The Mississippi State Tax Commission's Property Assessment Division has methods, standards, and parameters in place for measuring the accuracy of a county's appraisal efforts. These methods, standards, and parameters were designed to measure how well property is appraised within a county and how county appraisal efforts compare with each other.

The MSTC's Property Assessment Division audits each county to determine whether that county is in compliance with requirements of the *Mississippi Administrative Code*. Each real property audit consists of a review of close inspections of real property parcels, a cost index study, and a ratio study.² (Pages 7 through 10 of this report contain discussions of these processes.)

The ratio study is the principal tool for measuring the appraisal performance of a county. Two values are needed to construct a sales ratio for a parcel: the appraised value of the parcel, which is obtained from the county assessor's records, and the sales price of the parcel, which is obtained from buyers' responses to questionnaires. Provided that a ratio study is based on reliable sales price information, it is the most objective tool for measuring the appraisal performance of a county. Without a ratio study, it is not possible to quantify appraisal accuracy.

Any county that fails its real property audit must adopt and submit to MSTC for approval a plan for achieving compliance with standards. Also, the county must begin

¹ The properties were valued and taxed differently than expected even when taking into consideration local millage rates that differ from location to location.

² The sales ratio of a parcel of real estate is equal to its appraised value divided by its sales price multiplied by 100. If an appraisal is accurate, the sales ratio equals 100%-i. e., the appraised value is equal to the sales price.

implementation of the approved plan so that compliance will be achieved by the second succeeding year's assessments following the year in which the county is not in compliance. Failure either to adopt or to submit an approved plan for achieving compliance or failure either to implement or to follow an approved plan will cause MSTC to withhold the county's homestead exemption reimbursement monies until such time as the county has complied with the audit standards. In the event the county does not comply with audit standards by the end of the state's fiscal year, the MSTC will place the monies so held in an escrow account. Any interest on the account accrues to the benefit of the county.

As of May 2009, five Mississippi counties had failed their real property audits and were in the process of coming into compliance with MSTC requirements. Those counties are Tishomingo, Prentiss, Desoto, Pontotoc, and Leake.

Individual Objections to Property Appraisals

The three tests included in ratio studies serve as checks on the process of appraising groups of properties. Individual concerns about property values and taxation are addressed in a county-level appeals process. MISS. CODE ANN. Section 27-35-83 and Section 27-35-89 (1972) provide a procedure for this appeals process.

Conclusions

According to the State Tax Commission's most recent determination, seventy-seven of the state's eighty-two counties appraise Class I property accurately and these property values are equalized. However, if the commission were to adopt more stringent standards for appraisal accuracy and equalization, such as those suggested by the International Association of Assessing Officers, nearly half of Mississippi's counties would not be in compliance and thus property values are not equalized according to industry norms.

According to the MSTC staff, seventy-seven of the eighty-two counties were in compliance with its standards and parameters as of 2008 and thus it would appear that most counties are appraising Class I property accurately and that the values are equalized throughout the state.

However, if more stringent standards were applied, fewer counties would meet the standard for accurate Class I property appraisal and equalization. For example, if the State Tax Commission used the standards suggested by the International Association of Assessing Officers³ for the

³ The International Association of Assessing Officers (IAAO) is a nonprofit educational and research association of individuals in the assessment profession and others with an interest in property valuation. Membership includes individuals working in government, private industry, and academia, as well as members of the general public.

evaluation, nearly half of Mississippi's eighty-two counties would not be in compliance with those standards. This suggests that, according to industry standards, property values in Mississippi counties are not equalized and taxation is not uniform throughout the state.

Also, ratio study reliability is vulnerable due to necessary reliance on sales files, inappropriate or unethical selection of sales, and wide ranges of acceptable summary assessment figures. The State Tax Commission lacks a direct equalization mechanism that would equalize assessment levels for those counties that fail to meet assessment level performance standards. While the ratio study process is flawed, it remains the best tool that the industry and counties have available to carry out an important aspect of meeting the constitutional requirements of uniformity and equity.

Recommendations

1. The Legislature should adopt general law containing language similar to that found in Senate Bill 2045, Second Extraordinary Session of 2009 (i. e., the State Tax Commission's appropriation) that requires formal action and public knowledge of windfall receipts gained without the adjustment of millage rates by the governing boards. Senate Bill 2045 states in Section 8 that county homestead reimbursement fund monies should not be distributed to counties in which assessed values of the taxing area increased as a result of reappraisal of the property unless a notice is published in a newspaper explaining that the previous year's revenue could be reached at a lower millage rate.

The public notice would, in effect, make county citizens aware that, but for the decision of the boards of supervisors to maintain the bonus revenues, taxpayers would not be subject to increased taxation over the previous year's bill and still fully cover the cost of local government. Not realizing the bonus revenue would require the lowering of millage rates by the boards of supervisors. This policy would require boards of supervisors to acknowledge publicly their allowance of and responsibility for an increased taxation through means other than those established in law and practice.

2. PEER has identified four mechanisms for increasing reliability of ratio studies in Mississippi counties. They are:

- *Enact a law requiring all warranty deeds recorded to include the actual sales prices of sold properties, with a penalty for those who falsely report.* The disclosure of property sales prices on deeds would enable county tax assessors to form more complete and statistically sound sales files on which to base ratio studies. Mississippi is one of fourteen states that are currently non-disclosure states.⁴ Current Mississippi custom allows for the withholding of sales values of sold properties on property deeds. Return rates for sales questionnaires are often quite low and questionnaires are often incomplete upon return. Disclosure laws allow for the inclusion of sales prices on the property deed exchanged at time of sale. Were Mississippi assessors to have access to sales data on the deed, the volume of sales for the sales file could increase substantially for counties with few sales. According to a review of each county's most recent sales file, more than half of counties (fifty-two) had fewer than fifty sales with which to determine the level and uniformity of assessments for the whole county. Not only would this measure be cost- and time-saving, it would strengthen the validity of ratio studies conducted on more complete sales files.
- *Develop a tracking system for sales file rejections.* The MSTC staff spot-check the sales files of counties when conducting real property audits throughout the year. Spot-checks include checking for the exclusion of ineligible sales as well as the inclusion of all eligible sales. However, the potential exists for some eligible properties to be intentionally excluded by county staff in order to maintain state ratio standards. Tracking the sales file rejections through a coding system in the MSTC-provided appraisal software could deter some degree of manipulation of sales files.
- *Extend the allowable time frame from which to include sales and look beyond county borders for appropriate and similar sales to include in sales files.* Ratio studies use sales files compiled of property sales that have occurred within the past calendar year. Counties that lack a sufficient number of sales in that time frame could benefit from additional sales if the window of time of eligible sales were widened. However, due to market fluctuations and rising construction costs, the time frame should be limited to a

⁴ In addition to Mississippi, Alaska, Idaho, Indiana, Kansas, Louisiana, Maine, Missouri, Montana, New Mexico, North Dakota, Texas, Utah, and Wyoming are the non-disclosure states.

period of eighteen months or two years to avoid the added complication of accounting for inflation and other trends. Further, county lines delineate political borders, but not necessarily market, geographic, or demographic differences. County assessors, in cases of low numbers of sales values with which to conduct a ratio study, should consider using property sales from neighboring counties of similar market, demography, and land characteristics as sales by which to assess their own performance. The IAAO suggests the practice and has established guidelines for maintaining the representativeness and validity of sales files which could be applied to such extra-county sales inclusions: (1) Extra-county parcels must be valued similarly to those in the county observing them; (2) Property characteristics must not differ substantially; (3) Extra-county sales must not come from areas of assessment levels which differ from the general assessment level of the population; and (4) Extra-county sales must be carefully screened to ensure that they provide valid market value indicators. The MSTC has encouraged this practice and has offered to provide guidance in identifying appropriate sales for such practice. This policy, rather than the total abandonment of ratio studies (as has been the case in Issaquena County, which frequently has too few sales) should be insisted upon in consideration of insufficient numbers of sales.

- *Implement IAAO standards for ratio study tests and equalization.* Several states have adopted the IAAO's standards for level of assessment, assessment uniformity, and assessment equity (see page 16). While the standards of the IAAO are advisory and compliance is voluntary, they represent a consensus among assessing professionals for achievable measures. The MSTC recently narrowed its range for the level of assessment from +/- 20% of market value to +/- 15% of market value (from 0.80-1.20 to 0.85-1.15), but still remains outside of the industry standard of +/- 10% of market value (0.90-1.10).

The IAAO also suggests that direct equalization be carried to ensure that all classes of homes are assessed at their proper tax share. As explained in the limitations to ratio studies section, equalization may be carried about between classes of homes through stratification (sorting and grouping together similar houses), but stratifying among properties in the same geographic areas or between urban and rural properties may also serve to equalize between

properties. Stratification may help to ensure that no systemic inequity exists among property taxpayers in urban areas versus property tax payers in rural areas. The stratification of classes of homes would be easiest among counties of greater population, which presumably have the widest variety in class of homes.

For More Information or Clarification, Contact:

PEER Committee
P.O. Box 1204
Jackson, MS 39215-1204
(601) 359-1226
<http://www.peer.state.ms.us>

Representative Harvey Moss, Chair
Corinth, MS 662-287-4689

Senator Gary Jackson, Vice Chair
Kilmichael, MS 662-262-9273

Senator Cindy Hyde-Smith, Secretary
Brookhaven, MS 601-835-3322

A Review of the State Tax Commission's Methods for Evaluating the Accuracy of Property Appraisals

Introduction

Authority

In accordance with MISS. CODE ANN. Section 5-3-51 et seq. (1972), the PEER Committee reviewed the methods that the Mississippi State Tax Commission's Property Assessment Division uses to evaluate the accuracy of *appraisals*¹ of Class I property in Mississippi.²

Problem Statement

A resident of Lauderdale County raised concerns regarding the accuracy of property taxes levied in that county following an increase in the individual's property tax bill that occurred during a perceived decline in property values due to a falling housing market. The resident was concerned not only about the accuracy of his own property tax bill, but also about the accuracy of property tax bills throughout the county.

The property tax due on a particular parcel of property is calculated by multiplying the appraised value of the parcel (as determined by the county tax assessor's office) by the appropriate *assessment rate* (established in the State Constitution) and the millage rate (set by each county board of supervisors). While the assessment rate is the same for all Class I property in the state and the millage rate is the same for all Class I property in a taxing district,

¹ Italicized terms are defined in the glossary in Appendix A, page 23.

² Section 112 of the MISSISSIPPI CONSTITUTION divides property in Mississippi into five classes, each with its own assessment rate, for purposes of taxation. This report will be concerned only with Class I properties. According to the Mississippi State Tax Commission's *Mississippi Appraisal Manual*, Class I property is single-family, owner-occupied residential real property. See Appendix B, page 27, for information on the five classes of property.

the appraised values of parcels vary based on their size, location, and the estimated value of improvements made thereon. Therefore, the resident's concern, which has statewide applicability, could be reframed as follows: *Are there unjustified differences in owners' property tax bills resulting from differing appraised values for comparable properties?*

Scope and Purpose

To determine the accuracy of appraisals of Class I property in Mississippi, the PEER Committee determined:

- the three tests that the Property Assessment Division uses to measure *appraisal accuracy*;
- the standards that the Property Assessment Division uses to determine whether a county appraises Class I property accurately; and,
- the standards that the Executive Board of the International Association of Assessing Officers suggests to measure appraisal accuracy.

PEER then used the above information to determine whether Class I property values are equalized (assessed at the same percentage of *true value* or *market value*) throughout the state.

Method

In conducting this review, the PEER Committee reviewed:

- the *Mississippi Appraisal Manual* published by the Property Assessment Division of the Mississippi State Tax Commission;
- Title 35, Part VI, Subpart 02 of the *Mississippi Administrative Code*, Mississippi State Tax Commission;
- MISS. CODE ANN. Section 27-35-1 through Section 27-35-711 (1972), which contains *assessment* requirements for ad valorem taxes;
- the ratio studies used by the Mississippi State Tax Commission's Property Assessment Division to judge appraisal accuracy for *update years* 2004 through 2008 (see discussion on pages 7-8 for an explanation of the update process); and,
- the *Standard on Ratio Studies* adopted by the Executive Board of the International Association of Assessing Officers.

Background: Legal Requirements for Uniformity and Equality of Property Taxation

Counties rely on property taxes to fund the operating budgets of local governments, public works, and school districts. Property taxes are calculated based on assessed value of property, which is a function of that property's appraised value.

The state's system of property taxation involves estimation of a property's value and taxation of equal proportion for all taxpayers within a county based on the estimated value of their properties. As noted on page 1 of this report, recent concerns about the appearance of inequity in tax assessment within one county led to this review of the appraisal practices of all Mississippi counties for the purpose of addressing perceived inequities.

Requirements for uniformity and equality in Mississippi's property taxation are set out in the MISSISSIPPI CONSTITUTION, the MISSISSIPPI CODE, and the *Mississippi Administrative Code*.

Constitution Requires Equalization of Property Taxation throughout the State

Section 112 of the MISSISSIPPI CONSTITUTION states that "taxation shall be uniform and equal throughout the state." Section 112 also states that residential property shall be assessed at 10% of its true value (or *market value* for the purposes of this report and as defined by MISS. CODE ANN. Section 27-35-50 [1972]). Appendix B on page 27 contains the provisions of Article 4, Section 112 of the CONSTITUTION.

State Supreme Court Rules that State Tax Commission is Responsible for Equalization of Land Rolls Between Counties

In 1977, the Mississippi Supreme Court heard a case that involved an owner of multiple commercial properties of the same use and physical characteristics located in multiple counties that were valued and taxed differently³ in each county. That case, *Fondren v. State Tax Commission*, 350 So. 2d 1329 (Miss. 1977), eventually

³ The properties were valued and taxed differently than expected even when taking into consideration local millage rates that differ from location to location.

resulted in the ruling that the Mississippi State Tax Commission (MSTC) is responsible for the *equalization* of *land rolls* between counties per Section 112 of the MISSISSIPPI CONSTITUTION.

Subsequent amendments to Section 112 were made in 1980 and 1984 establishing the definition of true value and the percentages of true value upon which properties of each class would be assessed taxes. (See Footnote 2, page 1.)

The MISSISSIPPI CODE Requires the State Tax Commission to Evaluate the Accuracy of Property Assessments

MISS. CODE ANN. Section 27-35-113 (2) (1972) provides that the State Tax Commission shall establish standards and parameters for evaluation of the accuracy of assessments. It is the duty of the MSTC to examine the assessed valuations of each county in order to determine whether the assessed valuation of any class of property in one county is not equal to or uniform with the assessed valuation of the same class of property in the other counties and to determine if any class of property in any county is assessed contrary to law.

According to this section, these standards shall include, but are not limited to, the following statistical measures of the accuracy of appraised property values within a county, based upon the relationship of the appraised value of a property to its sales price--i. e., the sales ratio:⁴

- assessment level (a measure of the median value of sales ratios for the county);
- assessment uniformity (a measure of the degree to which the sales ratios in a county vary from the median sales ratio); and,
- assessment equity (a measure of the degree to which the sales ratios of lower and higher value parcels vary).

These calculations are made using available property sales data for the past calendar year (see page 14 for a discussion of problems in obtaining adequate property sales data).

MISS. CODE ANN. Section 27-35-113 (3) (1972) provides that the MSTC conduct ratio studies of each county or utilize other means, as determined appropriate by the

⁴ See page 9 for an explanation of how sales ratios are calculated. A property with an accurate appraised value has a sales ratio of 100%--i. e., in this case, the price at which the property sold in an arm's-length transaction was equal to the appraised value of the property.

MSTC, to determine whether each county's assessment valuations comply with the aforementioned standards.

The Mississippi Administrative Code Sets Out Requirements for Updating Property Values and Methods, Standards, and Parameters for Assessing the Accuracy of Property Appraisals

Requirements for Updating Property Values

Title 35, Part VI, Subpart 02, Chapter 06, Section 400 of the *Mississippi Administrative Code* requires each county to update its parcel values at least once every four years. To satisfy this requirement, most counties closely inspect approximately twenty-five percent of real property parcels each year so that 100 percent of all real property parcels are inspected every four years. This is what is known as the real property update.

As part of the update process, each county must complete a *cost index study* and submit it to the MSTC's Property Assessment Division by April 1 of the update year, provided that an adequate number of sales exist, as determined by the State Tax Commission (see discussion of cost index study on page 8). If a county does not have an adequate number of sales to complete a cost index study, the county must use the *state index* as a substitute for the cost index study (see page 24).

At the end of the four-year update cycle, each county must have equalized values within the county so that properties of similar characteristics (i. e., age, size, materials and location) have been assigned similar values and that the relationships among all property values are correct.

Methods, Standards, and Parameters for Evaluating the Accuracy of Property Appraisals

Title 35, Part VI, Subpart 02, Chapter 06, *Mississippi Administrative Code*, sets out the methods, standards, and parameters used by the State Tax Commission to evaluate the accuracy of appraisal valuations, as required by MISS. CODE ANN. Section 27-35-113 (2) (1972). This chapter of the administrative code details the ratio study and real property audit procedures used by MSTC to evaluate appraisal accuracy.

Sales ratios must fall within the parameters set by the MSTC in order for the parcel values to be accepted for taxation purposes (see page 9). Compliance is determined for the assessment level test by a median ratio of eighty-

five percent to 115 percent of market value. Passing the assessment uniformity test requires a coefficient of dispersion about the median of twenty percent or less, and passing the assessment equity test requires an index range of 0.92 to 1.08.

How the State Tax Commission Evaluates the Accuracy of Property Appraisals

The Mississippi State Tax Commission's Property Assessment Division has methods, standards, and parameters in place for measuring the accuracy of a county's appraisal efforts. These methods, standards, and parameters were designed to measure how well property is appraised within a county and how county appraisal efforts compare with each other.

As noted previously, the State Tax Commission has established methods, standards, and parameters (located in Title 35, Part VI, Subpart 02, Chapter 06 of the *Mississippi Administrative Code*) for evaluation of the accuracy of property tax assessments (which are based on property appraisals) and to help ensure the equalization of property values by class throughout the state.

The following sections describe the procedures the MSTC uses to determine whether counties have complied with these standards.

Counties' Real Property Audits Performed by the Property Assessment Division of the MSTC

The MSTC's Property Assessment Division audits each county to determine whether that county is in compliance with requirements of the Mississippi Administrative Code. Each real property audit consists of a review of close inspections of real property parcels, a cost index study, and a ratio study.

The Property Assessment Division uses real property audits to determine whether the counties are in compliance with Title 35, Part VI, Subpart 02, Chapter 06 of the *Mississippi Administrative Code*. These audits consist of:

- a review of close inspections of real property parcels;
- a cost index study; and,
- a ratio study.

The following sections describe each of the components of the counties' real property audits.

Review of Close Inspections

A *close inspection* of a real property parcel occurs when the county's staff physically inspect a real property parcel with that parcel's property record card in hand in order to

compare existing improvements on the parcel to the information on the card. The purpose of such an inspection is to note any improvement changes that have occurred on the parcel, such as new structures, new construction added to an existing structure, or deletion of a formerly existing structure. Any errors, such as omissions, deletions, or additions that reflect the true value of the parcel are noted on the parcel's property record card. Thus, the card serves as a record of the improvements on a parcel and allows county staff to place an appraised value using *mass appraisal* methods (see page 25).

Title 35, Part VI, Subpart 02, Chapter 06 of the *Mississippi Administrative Code* requires the Property Assessment Division to review annually at least 250 closely inspected real property parcels with improvements or fifteen percent of the improved parcels on the twenty-five percent list, whichever is fewer. The Property Assessment Division inspects additional parcels as it deems necessary.⁵

Upon completion of the review of the 250 closely inspected real property parcels, the Property Assessment Division staff provides a list of errors to the county tax assessor for review. The Property Assessment Division then considers any objections that the county tax assessor might have. If agreement is not reached, the county board of supervisors may petition the MSTC for a hearing on the matter.

Cost Index Study

Because the cost of construction is not uniform throughout the state, each tax assessor must develop a location factor for each county at least every four years. This location factor is based on a survey of local material and labor costs and on an investigation of new structures of known costs. The location factor is then used to determine the local cost per square foot used by that county to value the improvements on parcels in that county.

Ratio Study

The Property Assessment Division uses a *ratio study* to determine whether that county has satisfied the established standards for the assessment level test, the assessment uniformity test, and the assessment equity test (see Appendix C, page 28, for an explanation of these statistical tests).

⁵ No more than ten percent, or twenty-five parcels with mobile homes, are considered as part of that year's review.

A ratio study is the principal tool for measuring the appraisal performance of a county. Two values are needed to construct a sales ratio for a parcel. The first value is the appraised value of the parcel, which is obtained from the county assessor's records. The second value is the sales price of the parcel, which is obtained from buyers' responses to questionnaires (see page 14).

To illustrate a ratio study, consider the example in Exhibit 1, below. This exhibit lists five parcels that have recently sold, with each parcel's appraised value and each parcel's sales price. The sales ratio of each parcel is calculated by dividing the appraised value of the parcel by the sales price of the parcel. This ratio is then multiplied by 100 to express it as a percentage. The derived number, or sales ratio, is used in the three statistical tests of the ratio study.

Exhibit 1: Example of the Calculation of a Sales Ratio used in Ratio Study Assessment Tests

$$\text{Sales Ratio} = (\text{Appraised Value} \div \text{Sales Price}) \times 100$$

Parcel	Appraised Value	Sales Price	Sales Ratio
1	\$88,000	\$101,000	87%
2	67,000	63,000	106%
3	59,000	58,000	102%
4	72,000	72,500	99%
5	52,000	54,000	96%

SOURCE: PEER analysis.

The standard for passing the assessment level test is a median ratio of eighty-five percent to 115 percent of market value. The standard for passing the assessment uniformity test is a coefficient of dispersion about the median of twenty percent or less. The standard for passing the assessment equity test is an index range of 0.92 to 1.08.

Provided that a ratio study is based on reliable sales price information, it is the most objective tool for measuring the appraisal performance of a county. This method compares the appraised values of parcels made for assessment purposes against the sales prices of those parcels. Without a ratio study, it is not possible to quantify appraisal accuracy.

To illustrate the importance of the ratio, consider an example of two parcels with a market value of \$100,000. Assume that one parcel is appraised at eighty-five percent of market value (\$85,000) and that the other parcel is appraised at 115 percent of market value (\$115,000). At a hypothetical millage rate of 100 mills, the first parcel

would have a tax bill of \$850 and the second parcel would have a tax bill of \$1,150—a difference of more than thirty-five percent for two properties of the same market value.

Failing a Real Property Audit

If any of the following conditions is present during a county's real property audit, that county fails the audit:

- the county does not submit the real property twenty-five percent list by the first Monday in July or the extension due date;
- the review of the 250 closely inspected real property parcels indicates errors that exceed twenty-five points.⁶ However, if on parcels with errors, the calculation of value by the county does not exceed fifteen percent from the value calculated by the Property Assessment Division, the county will be deemed to have passed the review regardless of the number of error points;
- the county does not submit the cost index study by the first Monday in July or the extension due date of the update year;
- the county does not pass the assessment level test;
- the county does not pass the assessment uniformity test;
- the county does not pass the assessment equity test; or,
- the county does not value agricultural lands using the current rates provided by the Property Assessment Division.

Any county that fails a real property audit must adopt and submit to MSTC for approval a plan for achieving compliance with standards. Also, the county must begin implementation of the approved plan so that compliance will be achieved by the second succeeding year's assessments following the year in which the county is not in compliance.

Failure either to adopt or to submit an approved plan for achieving compliance or failure either to implement or to

⁶ Error points are used to determine whether a county fails an audit. They are assigned to a category based on the seriousness of the error, with Category I errors being the most serious and Category III being the least serious.

follow an approved plan will cause MSTC to withhold the county's homestead exemption reimbursement monies until such time as the county has complied with the audit standards. In the event the county does not comply with audit standards by the end of the state's fiscal year, the MSTC will place the monies so held in an escrow account. Any interest on the account accrues to the benefit of the county.

Relationship Between Staffing and County Success in Counties' Real Property Audits

As of May 2009, five counties had failed their real property audits and were in the process of coming into compliance with MSTC requirements. Those counties are Tishomingo, Prentiss, Desoto, Pontotoc, and Leake counties. Of those five counties, two counties relied fully on outside contractors for updating land rolls, two relied fully on certified appraisers on county staff for updating land rolls, and one county relied on both certified appraisers on county staff and outside contractors to update land rolls. Existing data limit PEER's ability to report definitively on the role that private or public staffing has in the performance on counties' real property audits.

Individual Objections to Property Appraisals

The three tests included in ratio studies serve as checks on the process of appraising groups of properties. Individual concerns about property values and taxation are addressed in a county-level appeals process.

The statistical tests discussed in this review are intended to discover systematic problems that result in groups of properties being appraised differently. The statistical tests are not designed to discover whether a single parcel of property is appraised accurately. A single parcel of property may indeed be valued above its market value, resulting in a higher property tax for that parcel. Individuals who believe that their property tax is too high--and thus that their property was appraised above market value--have remedies at their disposal.

The county board of supervisors is required by MISS. CODE ANN. Section 27-35-83 (1972) to give notice in the newspaper that rolls are open for inspection ten days prior to the first Monday in August. The board meets on that day to hear objections to assessments (see MISS. CODE ANN. Section 27-35-89 [1972]). It is at this meeting that an individual may present evidence supporting the claim that property was unfairly valued. The board must enter an order on the objection on or before the first Monday in

September. (See Appendix D, page 33, for an illustration of the calculation of individual tax bills.)

Unintended Consequences of Property Assessment in the Update Cycle

Property assessment, occurring at the end of a four-year appraisal update cycle, may have the unintended consequence of increasing individual taxes during periods of housing market fluctuations.

Property taxation is dependent on the estimated value of a property. Property values frequently change over time due to the appreciation of land value, the depreciation of a structure, or the appreciation of a structure. The housing market, or the supply and demand for housing in an area, also affects the estimated value of residential property.

At times of high sales volume, housing prices tend to increase, which affects the appraised values of homes. As appraisal values increase, taxes owed on a property increase if the assessment ratio (10%) and millage rate remain the same. In this way, a county may receive additional revenue beyond what the county's government may require or budget for without formally voting to increase millage rates.

Conclusions

According to the State Tax Commission's most recent determination, seventy-seven of the state's eighty-two counties appraise Class I property accurately and these property values are equalized. However, if the commission were to adopt more stringent standards for appraisal accuracy and equalization, such as those suggested by the International Association of Assessing Officers, nearly half of Mississippi's counties would not be in compliance and thus property values would not be equalized according to industry norms.

According to the MSTC staff, seventy-seven of the eighty-two counties were in compliance with its standards and parameters as of 2008 and thus it would appear that most counties are appraising Class I property accurately and that the values are equalized throughout the state.⁷ However, if more stringent standards were applied, fewer counties would meet the standard for accurate Class I property appraisal and equalization. For example, if the State Tax Commission used the standards suggested by the International Association of Assessing Officers⁸ for the evaluation, nearly half of Mississippi's eighty-two counties would not be in compliance with those standards. This suggests that, according to industry standards, property values in Mississippi counties are not equalized and taxation is not uniform throughout the state.

Also, ratio study reliability is vulnerable due to necessary reliance on sales files, inappropriate or unethical selection of sales, and wide ranges of acceptable summary assessment figures. The State Tax Commission lacks a direct equalization mechanism that would equalize assessment levels for those counties that fail to meet assessment level performance standards. While the ratio study process is flawed, it remains the best tool that the industry and counties have available to carry out an important aspect of meeting the constitutional requirements of uniformity and equity.

⁷ The five counties not in compliance at the time of the State Tax Commission's most recent determination were Desoto, Leake, Pontotoc, Prentiss, and Tishomingo.

⁸ The International Association of Assessing Officers (IAAO) is a nonprofit educational and research association of individuals in the assessment profession and others with an interest in property valuation. Membership includes individuals working in government, private industry, and academia, as well as members of the general public.

Dependency of Ratio Studies on Sales Files

Ratio study accuracy is dependent on the quality of sales files maintained by the county.

The completeness and quality of the sales files are of utmost importance in ratio studies. However, the quality of sales files is vulnerable in several respects:

- *Low numbers of sales weaken the quality of a sales file.* The lack of a substantial number of property sales (in counties of mostly large-parceled, agricultural property) and low sales turnover result in sales files that may not be truly representative. Because ratio studies are used to ascertain the degree of accuracy of the entire mass appraisal procedure for all parcels by running statistical tests on a subset of all parcels, a significant number of sales is required in order to make reasonable conclusions about the accuracy of the far greater number of parcels not examined statistically. According to the *Standard on Ratio Studies*, the IAAO considers sales files of less than five sales to have “exceptionally poor reliability.” In practice, the MSTC staff do not accept ratio studies in counties with less than eight sales in the sales file.
- *Meager numbers of responses to sales questionnaires weaken the quality of a sales file.* Deeds for new properties or sold properties are provided to tax assessors by chancery clerks as a way of signaling the need to update land rolls to include newly formed parcels (through division of larger parcels) and current owner information for tax purposes. At that time, tax assessors mail questionnaires to the buyer and seller of each sold property to collect sales information including the conditions under which a property was sold. The completion of the sales questionnaire is voluntary.

Most counties rely on these sales questionnaires to learn the sales prices that will be used in the county’s ratio study. Low response rates from sales questionnaires and limited source data (restricted sales data on property deeds) severely reduce what might already be low numbers of sales and thus the reliability of data that ratio studies generate. Few counties receive a significant volume of returns. The median number of sales in a Mississippi county sales file is thirty-six, while the median number of improved residential parcels is 9,163. Low numbers of property sales in the counties coupled with low response rates can

produce a less than robust sales file, but all sales must be carefully analyzed for acceptability as arm's-length sales. Any sale that does not qualify as an arm's-length sale—generally considered to be what a motivated buyer will pay and a willing seller will accept—may not be included in the sales file (e. g., a foreclosure). Upon consideration of low sales numbers, low returns on questionnaires from the sales that do occur, and the exclusion of disqualifying sales, it is understandable that some counties have modest numbers of sales.

- *Multiple listing services are an unreliable source of sales price information for use in ratio studies. A handful of Mississippi counties with a high volume of yearly sales rely on the real estate industry's Multiple Listing Service (MLS) for sales information. While the MLS does provide high numbers of sales in what is probably the most efficient form, the sales figures are accompanied with too little information to qualify those sales unquestionably as arm's-length sales eligible for inclusion in a sales file.*

Inappropriate or Unethical Selection of Sales

Inappropriate selection of sales included in the sales file can influence the summary statistics generated in the three tests.

The *Mississippi Appraisal Manual* (as well as the IAAO *Standards on Ratio Studies*) requires the inclusion of all eligible sales in the sales file. However, the current system of performance evaluation requires the achievement of a score in a particular range for the land rolls to be accepted. Such a system could provide motivation to county staff to manipulate sales files through the purposeful inclusion or exclusion of properties with a particular appraisal to sales ratio in order to reach a passing score. Such inclusion and exclusion are called “sales chasing” and “cherry picking.” Infrequent spot-checks, as currently conducted by the MSTC, may be insufficient to monitor sales files so closely as to discourage this unethical behavior. PEER has observed evidence that this behavior is practiced in at least one county.

Wide Ranges of Acceptable Summary Assessment Figures

Wide ranges used as standards for the results of the three statistical tests of the ratio study mean that only the very worst-performing counties—in terms of appraisal—fail a performance review.

A test that all counties may easily pass begs the question, “Is the test appropriate?”

The industry standards for these tests, as established and maintained by the IAAO, are an assessment level between ninety percent and 110 percent; assessment uniformity, as indicated by the coefficient of dispersion about the median of between five percent and ten percent (or between five percent and fifteen percent,⁹ depending on the age and variety of local housing); and a price-related differential between 0.98 and 1.03.

Although the MSTC adopted more rigorous standards in 2006, those standards remain wider, or more lenient, than those prescribed by the IAAO (see Exhibit 2, below). If held to the industry standard, twenty-six Mississippi counties would fail the assessment level test, twenty-one counties would fail the assessment uniformity test, and fifteen counties would fail the assessment equity test. In the last update cycle for each county (completed in years 2004-2008, depending on the county), half of all Mississippi counties (forty of eighty-one included in the study) would fail one or more of these tests while five would fail on all three.¹⁰ This suggests that, according to industry standards, Mississippi counties are not equalized and taxation is not uniform throughout the state. See Appendices E, F, and G, pages 34, 35, and 36, to see how Mississippi’s counties performed on these tests.

Exhibit 2: Standards for Statistical Tests for Class I Property

Statistical Test		Mississippi	IAAO
Assessment level	Median ratio between	85% and 115%	90% and 110%
Assessment uniformity	Coefficient of dispersion	Less than 20%	5% and 15%
Assessment equity	Index range between	0.92 and 1.08	0.98 and 1.03

SOURCE: PEER analysis.

⁹ A coefficient of dispersion less than 5% may indicate a sales file that is not representative of the properties in a county. Under such circumstances, a review of the sales file is suggested.

¹⁰ These figures are derived from analysis of each county’s most recent update (depending on the county, from 2004-2008). This figure excludes Issaquena County, for which no ratio study was conducted due to an inadequate number of sales (less than eight).

Equalization Not Based on Industry Norms

The State Tax Commission does not implement equalization by industry norms.

The MSTC carries out equalization across all counties of the state by requiring that counties maintain the appropriate level of assessment, assessment uniformity, and assessment equity. However, thorough equalization should take place at the county level through analysis of levels of assessment across different kinds of Class I properties (this is referred to as stratification).¹¹

Direct equalization should be accomplished by the adjustment of local appraisals to market value or state-required levels for counties that failed to fall within certain parameters for appraisal accuracy. According to industry standards, equalization should occur after ratio studies are conducted and before taxation. Immediate correction does not currently occur when a Mississippi county fails to appraise within the acceptable ranges of the three tests carried out in ratio studies. As explained previously, counties have two years to implement a plan that would bring them into compliance with current legal requirements. The result of this is taxation based on unequalized assessment levels.

Proper Emphasis Not Placed on Ratio Studies

Ratio studies are the only objective checks on appraisals in the MSTC's real property audit process. The MSTC does not place proper emphasis on ratio studies to ensure equity and uniformity.

According to interviews with MSTC staff, the staff emphasizes correcting errors noted during the review of each county's close inspection of real property and on ensuring the accuracy of each county's cost index study. It is the opinion of MSTC staff that if these two components of the real property audit process are performed correctly, then property appraisals will be accurate. However, the most objective way to measure the accuracy of property appraisals is to use a ratio study. In fact, the *Mississippi Appraisal Manual* clearly states that "[w]ithout a sales ratio study, it is impossible to determine the level and uniformity of appraisal values."

Ratio studies are useful to the appraisal process for judging the degree to which constitutional uniformity requirements are satisfied and evaluating mass appraisals

¹¹ Class I properties may be subdivided into classes of homes (S and A-F). Stratification can be applied to classes of homes to ensure that, for example, all C-class homes are appraised at the same level of true value.

to ensure that property values meet attainable standards of accuracy. However, the ratio study process may be made less effective by inadequate and unreliable sales data, unethical practices, or lenient performance measurements.

Addressing the issues that lead to an unreliable sales file-- low number of sales for inclusion, lack of access to sales data, and inappropriate data selection--would strengthen the sales file and thus the ratio studies would be improved and equalization based on reliable ratio studies could be carried out.

Recommendations

Unintended Consequences of Update Cycle on Individuals' Taxes

1. The Legislature should adopt general law containing language similar to that found in Senate Bill 2045, Second Extraordinary Session of 2009 (i. e., the Mississippi State Tax Commission's appropriation) that requires formal action and public notification of windfall receipts gained without the adjustment of millage rates by the governing boards. Senate Bill 2045 states in Section 8 that county homestead reimbursement fund monies should not be distributed to counties in which assessed values of the taxing area increased as a result of reappraisal of the property unless a notice is published in a newspaper explaining that the previous year's revenue could be reached at a lower millage rate.

The public notice would, in effect, make county citizens aware that, but for the decision of the board of supervisors to maintain the bonus revenues, taxpayers would not be subject to increased taxation over the previous year's bill and still fully cover the cost of local government. Not realizing the bonus revenue would require the lowering of millage rates by the board of supervisors. This policy would require the board of supervisors to acknowledge publicly their allowance of and responsibility for an increased taxation through means other than those established in law and practice.

Ratio Studies

2. PEER has identified four mechanisms for increasing reliability of ratio studies in Mississippi counties. They are:
 - *Enact a law requiring all warranty deeds recorded to include the actual sales prices of sold properties, with a penalty for those who falsely report.* The disclosure of property sales prices on deeds would enable county tax assessors to form more complete and statistically sound sales files on which to base ratio studies. Mississippi

is one of fourteen states that are currently non-disclosure states.¹² Current Mississippi practice allows for the withholding of sales prices of sold properties on property deeds. Return rates for sales questionnaires are often quite low and questionnaires are often incomplete upon return. Disclosure laws allow for the inclusion of sales prices on the property deed exchanged at time of sale. Were Mississippi assessors to have access to sales data on the deed, the volume of sales for the sales file could increase substantially for counties with few sales. According to a review of each county's most recent sales file, more than half of the counties (fifty-two) had fewer than fifty sales with which to determine the level and uniformity of assessments for the whole county.¹³ Not only would this measure be cost- and time-saving, it would strengthen the validity of ratio studies conducted on more complete sales files.

- *Develop a tracking system for sales file rejections.* The MSTC staff spot-check the sales files of counties when conducting real property audits throughout the year. Spot-checks include checking for the exclusion of ineligible sales as well as the inclusion of all eligible sales. However, potential exists for some eligible properties to be excluded intentionally by county staff in order to maintain state ratio standards. Tracking the sales file rejections through a coding system in the MSTC-provided appraisal software could deter some degree of manipulation of sales files.
- *Extend the allowable time frame from which to include sales and look beyond county borders for appropriate and similar sales to include in sales files.* Ratio studies use sales files compiled of property sales that have occurred within the past calendar year. Counties that lack a sufficient number of sales in that time frame could benefit from additional sales if the window of time of eligible sales were widened. However, due to market fluctuations and rising construction costs, the time frame should be limited to a period of eighteen months or two years to avoid the added complication of accounting for inflation and other trends. Further, county lines

¹² In addition to Mississippi, Alaska, Idaho, Indiana, Kansas, Louisiana, Maine, Missouri, Montana, New Mexico, North Dakota, Texas, Utah, and Wyoming are the non-disclosure states.

¹³ This figure does not include Issaquena County, for which no ratio study has been conducted due to an inadequate number of sales.

delineate political borders, but not necessarily market, geographic, or demographic differences. County assessors, in cases of low numbers of sales values with which to conduct a ratio study, should consider using property sales from neighboring counties of similar market, demography, and land characteristics as sales by which to assess their own performance. The IAAO suggests the practice and has established guidelines for maintaining the representativeness and validity of sales files that could be applied to such extra-county sales inclusions: (1) Extra-county parcels must be valued similarly to those in the county observing them; (2) Property characteristics must not differ substantially; (3) Extra-county sales must not come from areas of assessment levels that differ from the general assessment level of the population; and (4) Extra-county sales must be carefully screened to ensure that they provide valid market value indicators. The MSTC has encouraged this practice and has offered to provide guidance in identifying appropriate sales for such practice. This policy, rather than the total abandonment of ratio studies (as has been the case in Issaquena County, which frequently has too few sales) should be insisted upon in consideration of insufficient numbers of sales.

- *Implement IAAO standards for ratio study tests and equalization.* Several states have adopted the IAAO's standards for level of assessment, assessment uniformity, and assessment equity (see page 16). While the standards of the IAAO are advisory and compliance is voluntary, they represent a consensus among assessing professionals for achievable measures. The MSTC recently narrowed its range for the level of assessment from +/- 20% of market value to +/- 15% of market value (from 0.80-1.20 to 0.85-1.15), but still remains outside of the industry standard of +/- 10% of market value (0.90-1.10).

The IAAO also suggests that direct equalization be carried out to ensure that all classes of homes are assessed at their proper tax share. As explained in the limitations to ratio studies section, equalization may be carried out between classes of homes through stratification (sorting and grouping together similar houses), but stratifying among properties in the same geographic areas or between urban and rural properties may also serve to equalize between properties. Stratification may help to ensure that no systematic inequity exists among property taxpayers in urban areas versus property tax

payers in rural areas. The stratification of classes of homes would be easiest among counties of greater population, which presumably have the widest variety in class of homes.

Appendix A: Glossary of Terms and Concepts Related to Property Appraisals

The following terms are used throughout this report to describe the State Tax Commission's evaluation of the appraisal process at the county level. These definitions are taken from the State Tax Commission's Appraisal Manual, Chapter 6 Standards of Acceptance of the *Mississippi Administrative Code*, and the International Association of Assessing Officers' *Standard on Property Tax Policy* and *Standard on Ratio Studies*.

Appraisal is the act of estimating the money value of property. (IAAO) The appraisal process is the technique used by appraisers and tax assessors in formulating opinions of property values. (MSTC) Also, the **appraised value** is the value set on property before the application of any fractional assessment ratio. (IAAO)

Appraisal accuracy refers to the degree to which properties are appraised at market value as defined by professional standards and legal requirements. (IAAO)

Arm's-length sale is a sale between a knowledgeable buyer and a knowledgeable seller, neither acting under duress. (MSTC)

Assessment is (1) the official act[s] of determining the amount of the tax base; (2) the official act of discovering, listing, and appraising property, whether performed by an assessor, a board of review, or a court; (3) the value placed on property in the course of such act. (IAAO) Also, the **assessed value** is the monetary amount [the assessment ratio having been applied], at which a property is placed on the assessment roll for purposes of computing the tax levy (IAAO).

The terms *appraisal* and *assessment* are often used interchangeably, which can cause confusion. For the purposes of this report, the assignment of value to a property by a county tax assessor's office will be referred to as the appraised value or property value, or an appraisal. Throughout the MISSISSIPPI CODE and in the *Mississippi Administrative Code*, the term assessment is often used where industry norms, as described in the IAAO standards, use the term appraisal. For example, the MISSISSIPPI CODE refers to the "assessment level" test for which the IAAO standards use the term "appraisal level." This report will adhere to the example of the MISSISSIPPI CODE and the State Tax Commission. It should be noted, however, that the *Mississippi Appraisal Manual* developed

by the State Tax Commission used the word “appraisal” for the estimation of the value of a property.

Assessment rate or ratio is the percentage of true value at which real property is taxed. (MSTC)

Section 112 of the MISSISSIPPI CONSTITUTION establishes assessment ratios by class of property. (See Appendix B, page 27, for a complete list of assessment ratios by class of property.)

Cost Index (see also *State Index*) A cost index is a location factor based on a survey of local material and labor costs and by investigation of new buildings of known costs. It is calculated annually to reflect local costs of construction since construction costs are not uniform throughout the country. (MSTC)

Class is (1) a set of property defined by common characteristics such as residential, agricultural, or industrial. (2) In assessment, building classification systems based on type of building design, quality of construction, or structural type are common. (IAAO)

Section 112 of the MISSISSIPPI CONSTITUTION establishes five different classes of property for purposes of taxation (see Appendix B, page 27, for a complete list of property classes). The State Tax Commission divides homes into seven classes of homes for appraisal purposes.

Equalization is the process of ensuring that all properties within a given jurisdiction are assessed by the governing body of that jurisdiction at the same ratio required by law. (IAAO)

In Mississippi, equalization is carried out at the state and county levels. According to the Tax Commission, equalization throughout the state is achieved once the determination is made that all counties have valued the properties on the land rolls (i. e., entire listings of 25% of county properties and corresponding values) at established parameters. By establishing a range of acceptable scores in performance measures for all counties to achieve, the MSTC attempts to assure equalization throughout the state. (See page 9 for performance measures and scores.) Boards of supervisors at the county level carry out a process of equalization in the formal hearing of individual complaints regarding property appraisal and subsequent taxation.

Equity in assessment refers to the degree to which assessments (the appraised value with the assessment ratio applied=assessment) bear a consistent relationship to market value. (IAAO)

Improvement is any structure built on a parcel of land such a residential structure or a barn or shed. (MSTC)

Land roll is the roster of all parcels in a county listed numerically with the property values listed. (MSTC)

Market value is the most probable price which a property should bring in a competitive and open market under all conditions requisite to fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. (IAAO)

Mass appraisal is a process that applies standardized methods to the whole body of a particular class of property to be appraised using common data in such a way that allows for statistical testing for uniformity and equity. (IAAO)

Regularly updating a large number of parcels does not allow time for meticulous examination. Rather, mass appraisal is conducted over the entire cycle (for most counties, this means 25% of residential parcels per year for four years; see page 8).

Ratio Study (also called sales ratio study) is the study of the relationship between appraised values and market values. A **sales ratio** is the ratio of an appraisal value to the sale price or a property. (IAAO)

State Index is a calculated number that represents a multiplier used to bring costs in the appraisal manual to the actual cost of constructing an improvement. (MSTC)

True Value refers to market value or cash value. (MSTC)

Update is the process that each county must complete every four years in which every parcel is closely inspected to determine whether changes have occurred. All parcels must be revalued during the update cycle. The **Update Year** is the last year of a county's four-year update cycle when all properties must be revalued. (Most counties

closely inspect 25% of parcels per year of the cycle.)
(MSTC)

Appendix B: Classes of Property for Purposes of Taxation

MISSISSIPPI CONSTITUTION, Article 4, Section 112. Equal taxation; property tax assessments.

Taxation shall be uniform and equal throughout the state. All property not exempt from ad valorem taxation shall be taxed at its assessed value. Property shall be assessed for taxes under general laws, and by uniform rules, and in proportion to its true value according to the classes defined herein. The Legislature may, by general laws, exempt particular species of property from taxation, in whole or in part.

The Legislature shall provide, by general laws, the method by which the true value of taxable property shall be ascertained; provided, however, in arriving at the true value of Class I and Class II property, the appraisal shall be made according to current use, regardless of location. The Legislature may provide for a special mode of valuation and assessment for railroads, and railroad and other corporate property, or for particular species of property belonging to persons, corporations or associations not situated wholly in one (1) county.

All such property shall be assessed in proportion to its value according to its class, and no county, or other taxing authority, shall be denied the right to levy county and/or special taxes upon such assessment as in other cases of property situated and assessed in the county, except that the Legislature, by general law, may deny or limit a county or other taxing authority the right to levy county and/or special taxes on nuclear-powered electrical generating plants. In addition to or in lieu of any such county and/or special taxes on nuclear-powered electrical generating plants, the Legislature, by general law enacted by a majority vote of the members of each house present and voting, may provide for a special mode of valuation, assessment and levy upon nuclear-powered electrical generating plants and provide for the distribution of the revenue derived therefrom. The Legislature may provide a special mode of assessment, fixing the taxable year, date of the tax lien, and method and date of assessing and collecting taxes on all motor vehicles.

The assessed value of property shall be a percentage of its true value, which shall be known as its assessment ratio. The assessment ratio on each class of property as defined herein shall be uniform throughout the state upon the same class of property, provided that the assessment ratio of any one (1) class of property shall not be more than three (3) times the assessment ratio on any other class of property. For purposes of assessment for ad valorem taxes, taxable property shall be divided into five (5) classes and shall be assessed at a percentage of its true value as follows:

Class I. Single-family, owner-occupied, residential real property, at ten percent (10%) of true value.

Class II. All other real property, except for real property included in Class I or IV, at fifteen percent (15%) of true value.

Class III. Personal property, except for motor vehicles and for personal property included in Class IV, at fifteen percent (15%) of true value.

Class IV. Public utility property, which is property owned or used by public service corporations required by general laws to be appraised and assessed by the state or the county, excluding railroad and airline property and motor vehicles, at thirty percent (30%) of true value.

Class V. Motor vehicles, at thirty percent (30%) of true value.

The Legislature may, by general law, establish acreage limitations on Class I property.

Appendix C: Detailed Review of Ratio Study Tests of Assessment Level, Assessment Uniformity, and Assessment Equity

Assessment Level

Estimates of assessment level are based on measures of central tendency. Some common measures of central tendency calculated in a ratio study are a median ratio, a mean ratio, and a weighted mean ratio. Thus, an estimate of assessment level is a measure of the overall ratio at which a group of parcels is appraised in a county. Title 35, Part VI, Subpart 02, Chapter 06 of the *Mississippi Administrative Code* states that the standard for passing the assessment level test for Class I properties is a *median ratio* between 85 percent of market value and 115 percent of market value.

Use of the median ratio in a ratio study has several advantages. The median ratio is less affected by extreme ratios than the other measures of central tendency. Also, the median is the base from which the *coefficient of dispersion*, which is the primary measure of assessment uniformity, is calculated. Therefore, the median is the preferred measure of central tendency used to measure assessment level.

The median is the middle ratio in a sorted list of sales ratios. It divides the sorted list into two groups, each group containing an equal number of sales ratios. As an example of calculating the median ratio, PEER used the sales ratios in Exhibit 1, page 9, and sorted them from lowest to highest in Exhibit 3, page 29. Because the number of sales ratios is an odd number, the middle ratio of 99 is the median.¹⁴

¹⁴ If the number of sales ratios in the sorted list is even, the median ratio is obtained by summing the two middle sales ratios and dividing the sum by two.

Exhibit 3: Example of the Calculation of the Assessment Level (Median Ratio)

Median Ratio = Middle Ratio in a Sorted List of Ratios

Parcel	Appraised Value	Sales Price	Sales Ratio
1	\$88,000	\$101,000	87
5	52,000	54,000	96
4	72,000	72,500	99
3	59,000	58,000	102
2	67,000	63,000	106

In this example, the assessment level (i. e., median ratio) is 99. The standard for an assessment level for Class I properties is a median ratio within the range of 85 percent of market value and 115 percent of market value.

SOURCE: PEER analysis.

Therefore, the measure of the assessment level of the parcels in this example is 99 percent of market value--within the standard of 85 percent of market value to 115 percent of market value required by the *Mississippi Administrative Code* for passing the assessment level test for Class I properties in Mississippi.

Assessment Uniformity

Title 35, Part VI, Subpart 02, Chapter 06 of the *Mississippi Administrative Code* states that the standard for passing the assessment uniformity test for Class I properties is a coefficient of dispersion about the median sales ratio of 20 percent or less.

Assessment uniformity refers to the degree of equity among individual parcels. Achievement of an assessment level in compliance with the standards (85 percent of market value to 115 percent of market value, from above) does little to help achieve uniformity if some parcels are appraised at 150 percent of market value while other parcels are appraised at 50 percent of market value--that is, if the range for an acceptable median ratio is already wide, the coefficient of dispersion around that median ratio must be wide.

The primary measure of assessment uniformity is the coefficient of dispersion. It measures the average percentage deviation of individual sales ratios from the

median ratio. Thus, the coefficient of dispersion provides a measure of assessment uniformity that is independent of the assessment level.

For example, a coefficient of dispersion of 10 percent would mean that individual sales ratios differ, on average, by 10 percent from the median sales ratio. Therefore, lower coefficients of dispersion imply more equitable assessments.

The coefficient of dispersion is calculated as follows:

1. Subtract the median sales ratio from each sales ratio;
2. Take the absolute value of the differences;
3. Sum the absolute values;
4. Divide by the number of sales ratios to obtain the average absolute deviation;
5. Divide by the median sales ratio;
6. Multiply by 100.

An example of a calculation of the coefficient of dispersion for the sales ratios in Exhibit 1, page 9, is shown in Exhibit 4, below.

Exhibit 4: Example of Calculation of the Assessment Uniformity Level (Coefficient of Dispersion)

$$\text{Sum of the Absolute Values} \div \text{Number of Sales Ratios} = \text{Average Absolute Deviation}$$

$$25 \div 5 = 5$$

$$\text{Average Absolute Deviation} \div \text{Median Sales Ratio} = \text{Coefficient of Dispersion}$$

$$(5 \div 99) \times 100 = 5.05$$

Parcel	Sales Ratio	Median Ratio	Difference	Absolute Value
1	87	99	- 12	12
5	96	99	- 3	3
4	99	99	0	0
3	102	99	3	3
2	106	99	7	7
				25

In this example, the measure of assessment uniformity (i. e., coefficient of dispersion) is 5.05 percent. The standard for assessment uniformity for Class 1 properties is 20 percent or below.

SOURCE: PEER analysis.

Therefore, the measure of the assessment uniformity of the parcels in this example is 5.05 percent--below the standard of 20 percent required by Chapter 06 of the *Mississippi Administrative Code* for passing the assessment uniformity test for Class I properties in Mississippi.

Assessment Equity

Systematic differences between the appraisals of lower-value parcels and the appraisals of higher-value parcels are known as vertical inequity. When lower-value parcels are appraised at smaller percentages of market value than higher-value parcels, assessment progressivity is indicated. When lower-value parcels are appraised at greater percentages of market value than higher-value parcels, assessment regressivity is indicated. Appraisals made for assessment purposes should be neither progressive nor regressive. Appraisals of lower-value and higher-value parcels should be at the same percentage of market value.

The most common measure of assessment equity is the *price-related differential*, which is calculated by dividing the mean sales ratio by the weighted mean sales ratio. The closer the price-related differential is to 1.00, the more equitable the appraisals. If the price-related differential is greater than 1.00, the appraisals are regressive and if the price-related differential is less than 1.00, the appraisals are progressive.

Title 35, Part VI, Subpart 02, Chapter 06 of the *Mississippi Administrative Code* states that the standard for passing the assessment equity test for Class I properties is an index range between 0.92 and 1.08.

The mean sales ratio is the average of the sales ratios. It is calculated by summing the sales ratios and dividing the sum by the number of sales ratios. The weighted mean sales ratio is calculated by dividing the sum of the assessed values of the parcels by the sum of the sales prices of the parcels. The weighted mean sales ratio does not give equal weight to each ratio; rather, it gives weight to each sales dollar and therefore is more affected by ratios with high sales prices.

An example of the calculations needed to determine assessment equity is shown in Exhibit 5, page 32.

Exhibit 5: Example of Calculation of Assessment Equity (Price-Related Differential)

$$\text{Total Sales Ratios} \div \text{Number of Sales Ratios} = \text{Mean Sales Ratio}$$

$$490 \div 5 = 98$$

$$\text{Total Appraised Value} \div \text{Total Sales Price} = \text{Dollar Weighted Mean Sales Ratio}$$

$$338,000 \div 348,500 = 97$$

$$\text{Mean Sales Ratio} \div \text{Weighted Mean Sales Ratio} = \text{Price-Related Differential}$$

$$98 \div 97 = 1.01$$

Parcel	Appraised Value	Sales Price	Sales Ratio
1	\$88,000	\$101,000	87
2	67,000	63,000	106
3	59,000	58,000	102
4	72,000	72,500	99
5	52,000	54,000	96
	\$338,000	\$348,500	490

In this example, the measure of assessment equity (i. e., price-related differential) is 1.01 percent. The standard for assessment equity for Class I properties is within the range of 0.92 percent to 1.08 percent.

SOURCE: PEER analysis.

Therefore, the measure of the assessment equity of the parcels in this example is 1.01 percent--within the standard of 0.92 to 1.08 required by Chapter 06 of the *Mississippi Administrative Code* for passing the assessment equity test for Class I properties in Mississippi.

SOURCE: PEER analysis of information from *Mississippi Tax Commission Appraisal Manual*.

Appendix D: Computation of an Individual's Property Tax

In arriving at true value, MISS. CODE ANN. Section 27-35-50 (1) (1972) states "true value shall mean and include, but shall not be limited to, market value, cash value, actual cash value, proper value and value for the purposes of appraisal for ad valorem taxation." Section 27-35-50 (2) states "the tax assessor shall, in ascertaining true value, consider whenever possible the income capitalization approach to value, the cost approach to value, and the market data approach to value." Mass appraisal, which is the procedure for valuing a group of properties that is used in Mississippi, estimates the market value of properties based on accepted appraisal methods as outlined in the *Mississippi Appraisal Manual*. Thus market value and appraised value mean the same thing.

All real property in Mississippi is taxed at a percentage of its market value (which is the appraised value) creating what is known as its assessed value. To determine the assessed value of a parcel of property, multiply the market value of the parcel by the assessment rate for that parcel. For Class I property, the assessment rate is ten percent. The tax is calculated by multiplying the assessed value of the parcel by the millage rate set by the county. A mill is 1/1000 of \$1.00, or in decimal use 0.001.

Thus, the equations for the property tax on an improved parcel are:

$$\text{Market Value} \times \text{Assessment Rate} = \text{Assessed Value}$$

$$\text{Assessed Value} \times \text{Millage Rate} = \text{Property Tax}$$

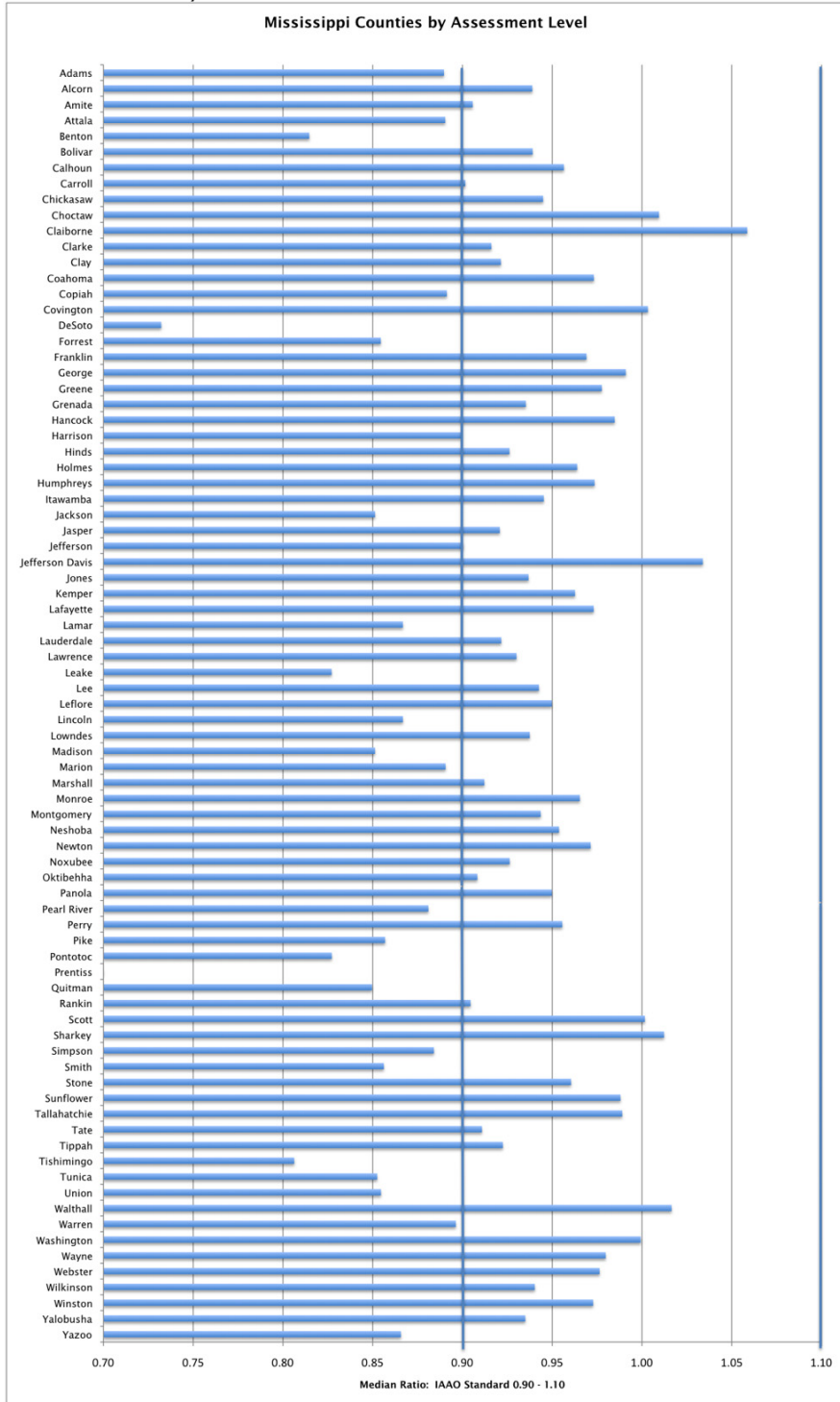
Market Value (Appraised Value)	\$100,000
Assessment Rate for Class I Property	multiplied by .10
Assessed Value	\$10,000
Millage Rate of 100 mills (100/1000)	multiplied by .100
Property Tax	\$1,000

SOURCE: PEER analysis.

Appendix E: Performance of Mississippi Counties on Assessment Level Based on IAAO Standards

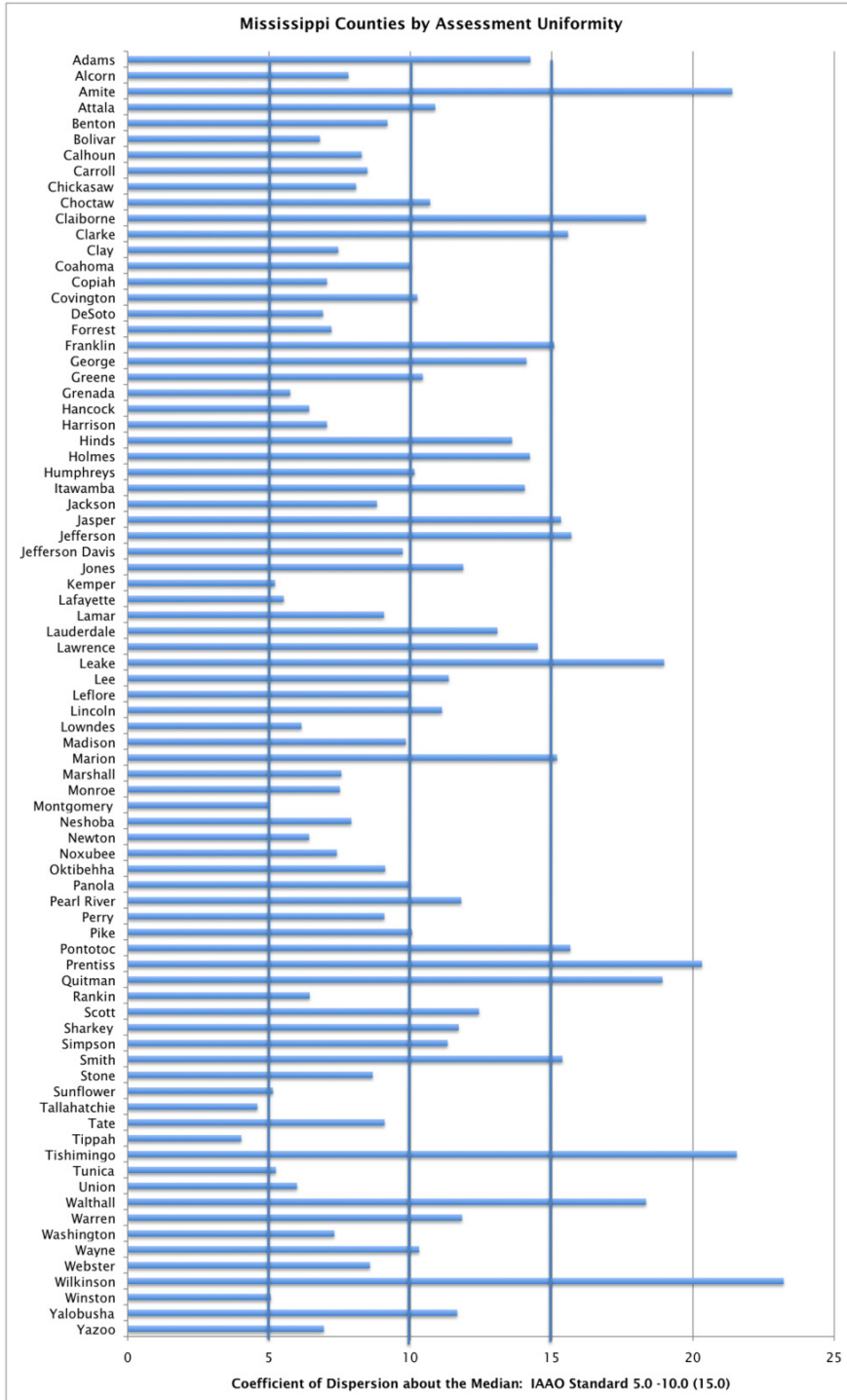
The darkened vertical bars in the graph at 0.9 and 1.10 mark the industry standard per IAAO. Counties with bars to the left of 0.9, such as Jackson County, would fail a real property audit if these standards were adopted in Mississippi. In the chart below, Prentiss County has a median ratio of 0.69.

SOURCE: PEER analysis



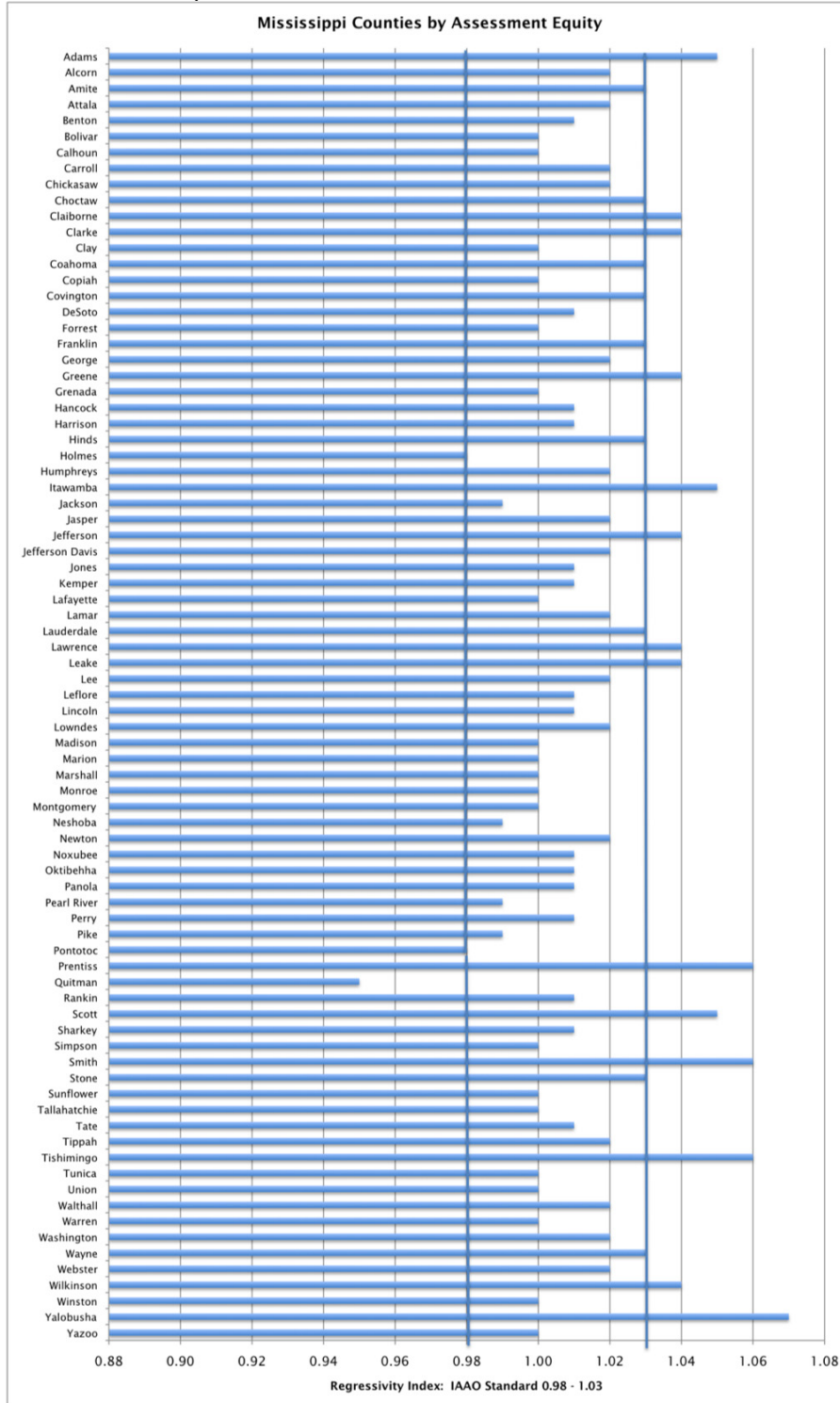
Appendix F: Performance of Mississippi Counties on Assessment Uniformity Based on IAAO Standards

The darkened vertical bars in the graph at 5.0 and 10.0 (or 15.0 in areas of much variety in housing class), mark the industry standard per IAAO. Counties having bars to the left of 5.0, such as Tallahatchie County, could demonstrate a need for closer inspection of sales files. Counties with bars to the right of 10.0 (or 15.0), such as Amite County, would fail a real property audit if these standards were adopted in Mississippi. SOURCE: PEER analysis



Appendix G: Performance of Mississippi Counties on Assessment Equity Based on IAAO Standards

The darkened vertical bars in the graph at 0.98 and 1.03 mark the industry standard per IAAO. Counties with bars to the left of 0.98, such as Quitman County, and counties with bars to the right of 1.03, such as Prentiss County, would fail a real property audit if these standards were adopted in Mississippi. SOURCE: PEER analysis



Agency Response

Office of Property Tax
Street Address:
1577 Springridge Road
Raymond, Mississippi 39154

www.mstc.state.ms.us



MISSISSIPPI

STATE TAX COMMISSION

Mailing Address:
Post Office Box 1033
Jackson, Mississippi 39215

Telephone: 601-923-7631
FAX: 601-923-7637

August 31, 2009

Dr. Max K. Arinder
Executive Director
PEER Committee
Post Office Box 1204
Jackson, MS 39215



Dear Dr. Arinder:

The Tax Commission appreciates the interest the PEER Committee has shown in the proper taxation of property in the counties of the State of Mississippi. We commend the staff of the PEER Committee who worked with us on this report. They exhibited a high degree of professionalism and competency, and made the task of gathering information more pleasant.

In its report, the PEER Committee concluded that nearly half of the counties would have failed the real property audits if IAAO standards had been adopted by the Tax Commission. Surely, some additional counties would have failed their real property audit had this been done. However, if the assessors were aware of the more stringent regulation, we are confident that many would have raised their values to comply with it. As a preponderance of the ratio studies indicate a median of less than 100%, until proved otherwise, the indication is that appraised values are less than market values.

Additionally, the Tax Commission in 2006 raised the standard to pass the ratio study for Class I property to a median value from 80% to 120%, to 85% to 115%. The Commission is aware that the level of expertise of county appraisers may very well not be conducive to passing a ratio study with more severe requirements. To raise competence levels of county appraisers, appraisal contractors and their staffs, as well as appraisers for the Tax Commission would require more extensive training, and perhaps higher education requirements, thus costing all of the entities more money.

The Committee concluded that values may not be equalized in Mississippi because the Tax Commission does not require IAAO standards be met in testing for assessment level, assessment uniformity and assessment equity. The Tax Commission has set different standards than IAAO. However, that does not necessarily mean that values are not equalized within the state. It only speaks to the level of equalization.

The Committee suggests stratification as a proper process for equalizing Class I properties and we agree. However, the sales are so few in many counties that the opportunity to stratify is non-existent.

Another concern of the Committee was that taxation does not occur subsequent to the ratio study. While the Committee is correct in its assertion, the Property Tax Office has made suggestions to the counties to first complete an index study and then do a ratio study to verify the accuracy of the index study. By putting the proper index on properties, the counties should find their values more closely resemble market values.

The Committee concluded that the Commission should place more emphasis on ratio studies. While it is true that the Property Tax Office has relied upon the county audit more than ratio studies, it is our goal to review the ratio studies in sufficient detail to ensure their accuracy. While we are reasonably sure such detailed review has not occurred in all instances, we are committed to verifying the accuracy to the level we can under the current constraints of personnel and travel resources.

With respect to the recommendations included in the report, the PEER Committee recommends that the legislature enact legislation that requires counties to publish information similar to that required in Senate Bill 2045 passed in the Second Extraordinary Session of 2009. The Tax Commission supports the taxpayers' right to be acquainted with and understand any taxes that may be levied against them, though there are a multitude of methods to accomplish such aims. We will comply with any change mandated by the Mississippi Legislature.

Recommendation Two in the report contains four parts which we will address individually. The Committee identifies four mechanisms for increasing the reliability of ratio studies. They are, along with our responses:

1. *Enact a law requiring the sales prices of property be put on all warranty deeds.* This recommendation is under the Mississippi Legislature's purview. We will comply with any change mandated by this body.

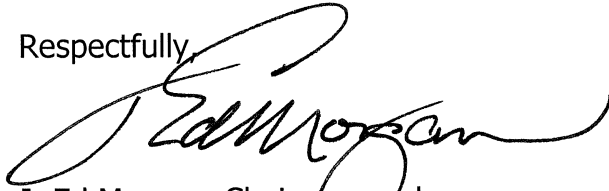
2. *Develop a tracking system for sales file rejections.* A tracking system for sales files would be advantageous for audit purposes. Serious consideration will be given to implementing one.

3. *Extend the allowable time frame from which to include sales and look beyond county borders for appropriate and similar sales to include in sales files.* Looking beyond county borders for sales that compare to given properties would create serious logistical problems.

4. *Implement IAAO standards for ratio study tests and equalization.* The Tax Commission has set different standards than IAAO. However, that does not necessarily mean that values are not equalized within the state. It only speaks to the level of equalization.

Our staff is available to provide additional information on the taxation of property in Mississippi, or to discuss these issues further.

Respectfully,

A handwritten signature in black ink, appearing to read "J. Ed Morgan". The signature is fluid and cursive, with a large initial "J" and "E".

J. Ed Morgan, Chairman and
Commissioner of Revenue

PEER Committee Staff

Max Arinder, Executive Director
James Barber, Deputy Director
Ted Booth, General Counsel

Evaluation

David Pray, Division Manager
Linda Triplett, Division Manager
Larry Whiting, Division Manager
Chad Allen
Kim Cummins
Brian Dickerson
Lonnie Edgar
Barbara Hamilton
Eden Hegwood
Matthew Holmes
Natalie Lick
Kevin Mayes
Angela Norwood
Jennifer Sebren
Charles Sledge, Jr.
Corey Wiggins

Editing and Records

Ava Welborn, Chief Editor/Archivist and Executive Assistant
Tracy Bobo

Administration

Mary McNeill, Accounting and Office Manager
Amber Ruffin
Rosana Slawson
Gale Taylor

Data Processing

Larry Landrum, Systems Analyst

Corrections Audit

Louwill Davis, Corrections Auditor