

Louisiana Tax Commission  
Ratio Studies

February 2002

# Report Highlights

**Louisiana Legislative Auditor**

The **Louisiana Tax Commission's** ratio study function measures the level and uniformity of property tax assessments in each parish. The audit objectives were to determine if the commission's annual ratio studies help to ensure that residential and commercial property taxes are equitably assessed and to determine whether there were administrative changes the commission could make to improve its oversight of assessors. The oversight functions are important because residential and commercial properties comprise the largest category of property subject to tax. These property taxes affect school funding.

## AUDIT RESULTS

Each year, the Louisiana Tax Commission measures property tax assessments in Louisiana's parishes using ratio studies. These ratio studies evaluate the parish-wide relationship between assessed values and market values. Ratio studies measure two things:

- Assessment **level**, which is a comparison of assessed value to market value
- Assessment **uniformity**, which is the degree to which different properties are assessed at market value

In other words, the commission is responsible for determining if property is assessed correctly and fairly in each parish. If it is not, the commission orders the parish assessor to reassess all property within a class of properties.

We found that the ratio studies do not ensure that residential and commercial property taxes are equitably assessed for several reasons, including the following:

- ✓ The commission does not determine whether residential properties that have recently sold are assessed differently than properties that have not sold. Assessors should treat both groups of properties the same to be fair to all taxpayers. The commission's administrative rule does not provide adequate guidance on how to assess residential properties that sell.
- ✓ The commission does not determine the underlying cause of problems it identifies in ratio studies. Doing so would help assessors correct these problems.
- ✓ The commission does not ensure that the sample properties it uses in ratio studies are representative of all properties in the parish. If properties are not representative, then ratio study results may not be valid.
- ✓ The commission arbitrarily discarded some sample items and changed others, which could have biased some of the ratio studies.
- ✓ The commission's measure of assessment fairness for non-rural residential properties is not as strict as is recommended by the International Association of Assessing Officers (IAAO). Thus the commission may not identify all parishes that are assessing residential properties unfairly.

In addition, the commission could make several administrative improvements to enhance its oversight of assessors. In particular, the commission should pursue implementation of a statewide tax roll database.

DANIEL G.  
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LEGISLATIVE  
AUDITOR

## DO THE LOUISIANA TAX COMMISSION'S ANNUAL RATIO STUDIES ENSURE THAT RESIDENTIAL AND COMMERCIAL PROPERTY TAXES ARE EQUITABLY ASSESSED?

We found that the Louisiana Tax Commission's ratio studies do not ensure that residential and commercial property taxes are equitably assessed for several reasons.

### The commission:

- Does not determine whether residential properties that have recently sold are assessed differently than properties that have not sold. Assessors should treat both groups of properties the same to be fair to all taxpayers. In addition, the commission's administrative rule does not provide adequate guidance for assessors on how to assess residential properties that sell.
- Does not attempt to determine the underlying cause of problems it identifies in ratio studies. Doing so would help assessors correct these problems.
- Does not ensure that the sample properties it uses in ratio studies are representative of all properties in the parish. If the properties are not representative, then ratio study results may not be valid.
- Arbitrarily discarded some sample items and changed others, which could have biased some of the ratio studies. In at least two cases, discarding or altering samples changed parish results from failing to passing.
- Does not measure each sample neighborhood's level of assessment against the parish-wide level, which could show assessors where pockets of over- or under-assessment are occurring.
- Does not use as strict a measure of assessment fairness for non-rural residential properties as is recommended by the IAAO. Thus the commission may not identify all parishes that are assessing residential properties unfairly.
- Does not calculate a simple statistic that could indicate whether a parish's assessments may be biased in favor of high-valued or low-valued properties.

- Could include better descriptions of the way it conducts its ratio studies in its appraisal division report. Doing so would help the report to be more readily understood by a wider audience.

### Recommendations

The Louisiana Tax Commission should:

- ✓ Annually test for selective reappraisal of sold properties. The commission can compare changes in sold and unsold parcels to discern whether sold parcels have been selectively reappraised. Alternatively, it could choose other statistical sampling techniques. If the commission finds that properties have been selectively reappraised, then it should adjust ratio studies before it tells the parish assessor to reappraise property.
- ✓ Rewrite its Administrative Rule 303 to clarify whether property transfers (sales) should be captured on the tax rolls immediately. The rule should also clarify whether the assessor must:
  - Reappraise the entire geographic area within the same year. The rule should also provide guidelines to determine:
    - The boundaries of such a geographic area
    - What level of sales activity would trigger the reappraisal of an entire area
  - If reappraisal is not possible, index the newly captured values back to the date of the last reappraisal. The rule should define precisely:
    - Who is responsible for formulating the index
    - How the index should be developed and applied
- ✓ Attempt to determine and document the cause of any significant assessment problems it identifies in ratio studies. The commission should consider conducting procedural audits of parish assessors to determine why any assessment problems exist. The commission's methods for conducting such audits should be formally documented. In addition, the commission should consider conducting formal training for parish assessors regarding ratio studies.



- ✓ Institute and document a sampling procedure for its ratio studies. The commission should draft a procedure that ensures that properties selected will represent the property values in the parish.
- ✓ Use only the original assessments provided by the parish assessor in the year of the study. While it is the commission’s right and responsibility to ask assessors to correct assessments that do not reflect fair market value, it should not use revised assessments in ratio studies.
- ✓ Promulgate a procedure for researching, then trimming statistical outliers. The procedure should be formally documented and should not be arbitrary. The commission should keep records documenting which properties in any sample were pulled and why.
- ✓ Calculate the median ratio of each neighborhood sample, then compare that ratio to the parish median. Commission representatives should point out to parish assessors areas or neighborhoods whose level of assessment differs by more than 5% from the parish level.
- ✓ Lower the requirement for the measure of fairness it uses—the coefficient of dispersion (COD)—for non-rural residential property from 20% to 15% in accordance with the IAAO’s recommendations. The commission should also promulgate administrative rules setting up benchmark COD levels to satisfy uniformity requirements in order to clarify what these fairness standards are.
- ✓ Calculate the price-related differential (PRD). Because this statistic indicates only that bias toward low- or high-valued properties may exist, the commission should follow up on any indications of bias by using more powerful statistical tests.
- ✓ Include, in addition to the information it publishes already, the following in the annual reports of its appraisal division:
  - Definitions of key terms such as appraisal level and uniformity
  - An objective statement of results
  - The procedural steps used in conducting the studies

- Its sampling methodology, particularly the period selected for sales samples, the number of properties in each neighborhood, the number of sales in the parish in the period selected, and the number of sales actually used in the study
- The rules for eliminating outlier ratios
- The PRD
- A comparison of results with previous studies
- Data displays such as frequency distributions, histograms, line charts, schematics and maps to illustrate study results

**ARE THERE ADMINISTRATIVE CHANGES THE TAX COMMISSION COULD MAKE TO IMPROVE ITS OVERSIGHT OF ASSESSORS?**

**We found that the Louisiana Tax Commission could improve its oversight of assessors by making some administrative changes.**

- ➔ The commission is not using available computer data. It could eventually establish a statewide database for parish tax roll data, as it has purchased a software program to accommodate such a database. Doing so would help the commission’s appraisers to perform ratio studies more quickly and efficiently. However, the commission lacks the funding and information systems personnel it would need. Also, parish assessors may not be willing or financially able to send tax roll databases to the commission.
- ➔ If the commission had a centralized tax roll database, it could detect some duplicate homestead exemptions using a homeowner’s social security number. However, state law would have to be amended to require that homeowners furnish social security numbers when they apply for homestead exemptions. Only about one-fourth of the state’s homeowners pay any property tax. Seventy-two percent of homesteads were completely exempt from property taxes in 1999, according to a report published by the commission.
- ➔ Because the commission may allow its appraisers more time than they really need to complete their fieldwork, it should re-evaluate what it expects from its staff. Some of the appraisers may benefit from more computer training and access to information systems personnel.

➔ Because the commission has not formally documented its ratio study procedures, it cannot communicate them consistently to assessors and its own staff. Thus the commission should produce an appraisal and ratio study procedure manual.

### Recommendations

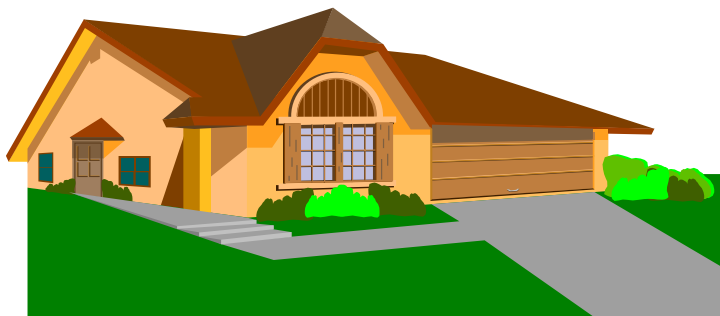
The Louisiana Tax Commission should:

- ✓ Pursue implementation of its electronic tax roll database. When it is fully implemented, the commission should use this database to conduct its annual ratio studies. If the commission plans to receive and maintain assessor tax roll databases, it should establish some procedures and practices common to standard management information systems. These may include a systems manual, data security procedures, program documentation, and properly trained personnel.
- ✓ Evaluate whether its expectation of 30 appraisals per week allows its appraisers more time than they actually need.
- ✓ Require that all field appraisers have the basic and intermediate computer skills necessary to complete all work assignments. The commission should provide adequate training for the appraisers on any software programs it expects its appraisers to use.
- ✓ Prepare and continually update, as necessary, a formal manual of its policies and procedures that can be distributed to all field appraisers and assessors. Such documentation should at a minimum describe ratio study

procedures and design. For its field appraisers, the Tax Commission should document all ratio study procedures it expects its appraisers to follow, including software instructions and record retention. The commission may wish to publish this manual on-line for the benefit of assessors and its own staff.

### Matters for Legislative Consideration

- ✓ The legislature may wish to amend R.S. 47:1956 to specifically require that parish assessors submit electronic tax roll databases to the Tax Commission. If such a requirement is enacted, the legislature should consider a funding mechanism for the information systems.
- ✓ The legislature may wish to amend R.S. 47:1703 or R.S. 47:1703.1 to require that all applicants for homestead exemptions in all parishes furnish their social security numbers.



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# STATE OF LOUISIANA LEGISLATIVE AUDITOR

Louisiana Tax Commission Ratio Studies  
Baton Rouge, Louisiana

February 6, 2002



**Performance Audit**

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**Daniel G. Kyle, Ph.D., CPA, CFE**  
**Legislative Auditor**

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# **Louisiana Tax Commission Ratio Studies**

February 2002



**Performance Audit  
Office of the Legislative Auditor  
State of Louisiana**

**Daniel G. Kyle, Ph.D., CPA, CFE  
Legislative Auditor**

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February 6, 2002

The Honorable John J. Hainkel, Jr.,  
President of the Senate  
The Honorable Charles W. DeWitt,  
Speaker of the House of Representatives

Dear Senator Hainkel and Representative DeWitt:

This report gives the results of our performance audit of Louisiana Tax Commission's ratio studies. The audit was conducted under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended.

This performance audit report contains our findings, conclusions, and recommendations. Appendix H contains the Louisiana Tax Commission's response. I hope this report will benefit you in your legislative decision-making process.

Sincerely,

Daniel G. Kyle, CPA, CFE  
Legislative Auditor

DGK/dl

[LTCRS]



# Office of Legislative Auditor

## Louisiana Tax Commission Ratio Studies

### Executive Summary

We focused our audit efforts on the Louisiana Tax Commission's ratio study function, which measures the level and uniformity of property tax assessments in each parish. The audit objectives were to determine if the Louisiana Tax Commission's annual ratio studies help to ensure that residential and commercial property taxes are equitably assessed and to determine whether there were administrative changes the Tax Commission could make to improve its oversight of assessors. The commission's oversight functions are important because residential and commercial properties are the largest category of property subject to tax in Louisiana's parishes. These property taxes affect school funding.

**We found that the Louisiana Tax Commission's ratio studies do not ensure that residential and commercial property taxes are equitably assessed for several reasons.** (*See pages 9 through 25 of the report.*)

- The commission does not determine whether residential properties that have recently sold are assessed differently than properties that have not sold. Assessors should treat both groups of properties the same to be fair to all taxpayers. In addition, the commission's administrative rule is not clear regarding the treatment of recently sold properties.
- The commission does not attempt to determine the underlying cause of problems it identifies in ratio studies. Doing so would help assessors correct these problems.
- The commission does not ensure that the sample properties it uses in ratio studies are representative of all properties in the parish. If the properties are not representative, then ratio study results may not be valid.
- The commission arbitrarily discarded some sample items and changed others, which could have biased some of the ratio studies.
- The commission does not measure each sample neighborhood's level of assessment against the parish-wide level, which could show assessors where pockets of over- or under-assessment are.
- The commission's measure of assessment fairness for non-rural residential properties is not as strict as is recommended by the International Association of Assessing Officers. Thus the commission may not identify all parishes that are assessing residential properties unfairly.
- The commission does not calculate a simple statistic that could indicate whether a parish's assessments may be biased in favor of high-valued or low-valued properties.
- The commission could include better descriptions of the way it conducts its ratio studies in its appraisal division report. Doing so would help the report to be more readily understood by a wider audience.

**We found that the Louisiana Tax Commission could improve its oversight of assessors by making some administrative changes.** *(See pages 27 through 36 of the report.)*

- The commission could eventually establish a statewide database for parish tax roll data, as it has purchased a software program to accommodate such a database. Doing so would help the commission's appraisers to perform ratio studies more quickly and efficiently. However, the commission lacks the funding and information systems personnel it would need. Also, parish assessors may not be willing or financially able to send tax roll databases to the commission.
- If the commission had a centralized tax roll database, it could detect some duplicate homestead exemptions using a homeowner's social security number. However, state law would have to be amended to require that homeowners furnish social security numbers when they apply for homestead exemptions. Only about one-fourth of the state's homeowners pay any property tax. Seventy-two percent of homesteads were completely exempt from property taxes in 1999, according to a report published by the commission.
- Because the commission may allow its appraisers more time than they really need to complete their fieldwork, the commission should re-evaluate what it expects from its staff. Some of the appraisers may benefit from more computer training and access to information systems personnel.
- Because the commission has not formally documented its ratio study procedures, it cannot communicate them consistently to assessors and its own staff. Thus the commission should produce an appraisal and ratio study procedure manual.

# Introduction

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## Audit Initiation and Objectives

State law directs the Office of the Legislative Auditor to conduct at least one performance audit of one program in each of the twenty executive branch departments over a seven-year period. The Department of Revenue was selected based on the predetermined schedule of audits of the Performance Audit Division.

We focused our efforts on the Louisiana Tax Commission. Specifically, we concentrated our audit on the Tax Commission's ratio study function, which measures the level and uniformity of property tax assessments in each parish. **Appendix A** describes the scope and methodology for this audit. The audit objectives were:

- **Do the Louisiana Tax Commission's annual ratio studies ensure that residential and commercial property taxes are equitably assessed?**
- **Are there administrative changes the Tax Commission could make to improve its oversight of assessors?**

---

## About the Louisiana Tax Commission and Its Ratio Studies

**Creation and duties.** The body now known as the Louisiana Tax Commission was created by Act 140 of 1916 and transferred to the Louisiana Department of Revenue in 1981 by Louisiana Revised Statute (R.S.) 36:459. The Tax Commission is a budget unit of the Department of Revenue, which performs the commission's accounting functions. However, the Tax Commission is not physically located with the rest of the department and operates independently with respect to its rulemaking, regulation, enforcement, and adjudication functions. The Tax Commission's primary duties are listed in Exhibit 1 on page 3.

The commission is the state's oversight body for ad valorem property taxation. State law (R.S. 47: 1837 A.) empowers the Tax Commission to administer and enforce all laws related to the state supervision of local property tax assessments and the assessment of public service properties. To accomplish this work, the Tax Commission's appropriation was about \$2.4 million for fiscal year 2001-2002. The commission has three appointed members including its chair and is currently authorized to have 36 employees. Fifteen of these employees are assigned to the appraisal function we examined.

**Property taxation in Louisiana.** Each year, assessors in 63 parishes and the seven metropolitan districts of New Orleans assess property on the basis of its condition as of the first day of the prior year. Assessors make the property tax rolls available to the public and taxpayers are allowed to appeal property assessments. Property taxes are due and payable on January 31 in Orleans Parish and on December 31 for the remaining 63 parishes.

According to the state's constitution (Art. 7, Sec. 18), the 70 parish assessors should assess residential property and vacant land at 10% of its fair market value and commercial property at 15% of its fair market value. State law (R.S. 47:2321) defines fair market value as the price for property which would be agreed upon between a willing and informed buyer and a willing and informed seller under usual and ordinary circumstances. Ratio studies are the tool the Tax Commission uses to make sure the 70 assessors value the state's residential and commercial property accurately and fairly.

**Ratio studies.** A ratio study evaluates the relationship between appraised or assessed values and market values. This definition comes from the International Association of Assessing Officers (IAAO), an international organization that provides guidance to property tax assessment and oversight agencies. Property tax oversight bodies use ratio studies to measure two things:

- **Assessment level**, which is a comparison of assessed values to market values
- **Assessment uniformity**, which is the degree to which different properties are assessed at market value

Per state law (R.S. 47:1837 B.), the Tax Commission is responsible for measuring the level and uniformity of property tax assessments statewide and enforcing the level of assessment.

**The Tax Commission's enforcement powers.** State law provides that the appraisal level of any parish or taxing district should not deviate more than 10% from the percentage of value required by the constitution (10% of fair market value for residential and 15% for commercial). This means that a parish-wide appraisal level between 9% and 11% is acceptable for residential studies and between 13.5% and 16.5% is acceptable for commercial studies. If a parish's appraisal level falls outside these ranges, it fails the ratio study. By law, the Tax Commission must then order the assessor to reassess residential or commercial property within one year. If the level of assessment is still not adequate after one year, then the commission cannot certify the tax rolls.

The Tax Commission can also require assessors to reassess if property taxation is not uniform. Though neither the constitution nor the laws specify uniformity requirements, R.S. 47:2323 A. and the constitution state that the criteria for determining fair market value shall apply uniformly throughout the state. The commission can enforce this provision since state law (R.S. 47:1957 G.) allows it to publicly reprimand or even institute removal proceedings for an assessor who has been willfully negligent and unfair.

**Exhibit 1****Some Primary Duties of the Louisiana Tax Commission***Studies:*

- Measure the uniformity of assessments for each major class and type of property in each parish (ratio studies) and notify assessors of results
- Order reappraisal for any parish whose level of assessment is inadequate
- Conduct studies relative to just and equal taxation and report to the governor and legislature

*Direct Appraisal:*

- Appraise public service properties and allocate the assessed value to local taxing units
- Assess insurers and financial institutions
- Collect fees for direct appraisal/assessment activities

*Assessment Procedure:*

- Hold public hearings for taxpayer appeals
- Certify and return tax rolls to the assessors
- Change or correct property assessments
- Examine allegations of evasion or violation of assessment and taxation laws and determine if there was any negligence

*Administration:*

- Administer and enforce laws related to state supervision of local property tax and public service property assessments
- Develop, maintain, and enforce a uniform system for the preparation of assessment lists, tax rolls, and necessary forms

**Source:** Developed by legislative auditor's staff from state laws.

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## How the Tax Commission Performs Ratio Studies

Each year, the Tax Commission performs a different type of ratio study. The ratio study work begins in January and continues through October. Each of the commission's appraisers does about 10 parish studies and is given about 30 days to complete each study. When appraisers are not performing ratio studies, they are involved with the tax appeals process or are otherwise assisting parish assessors with determining correct property valuations.

For each ratio study, the commission's appraisers select a sample of properties and establish market values for them. They then compare these values to the assessed values on the tax rolls. Exhibit 2 on the following page lists the types of studies they performed in recent years and what the appraisers must do to establish market values for each type of study.

Once market values are established, the Tax Commission prepares parish ratio studies as follows:

- They compare each sample property's market value to its assessed value on the assessor's tax rolls, which results in a ratio measuring the **level** of assessment for each sample property.
- For each parish, they calculate an overall level of assessment based on the middle value in the sample they studied. This is called the *median*. They also calculate a *mean* (average) ratio.
- For each parish, they calculate how close the sample property ratios are to each other. To do this, they use a statistic called the *coefficient of dispersion (COD)*. The COD measures the **uniformity** (equity) of property tax assessment within a parish.

**Appendix E** illustrates a sample parish ratio study. In the box at the upper right hand corner, one can see the mean, median, and COD. The parish's percentages for the median and COD determine whether it passes or fails its ratio study. In the four years we studied, only five parishes failed based on their medians. Four of these also had unacceptable CODs. Passing levels for the ratio studies are:

- Median: 9% - 11% for residential and vacant land, 13.5% - 16.5% for commercial
- COD: 20% or lower



<b>Exhibit 2</b>			
<b>Types of Ratio Studies Conducted by Tax Commission in Recent Years</b>			
<b>Year</b>	<b>Type of Study</b>	<b>What It Measures</b>	<b>How Tax Commission Appraisers Determine Market Values</b>
<b>1997</b>	<b>Residential Whole Property Ratio Study</b>	Whether residential property including land has been assessed at its fair market value.	Develop market value estimates for unsold property based on square footage prices for property sold at the four-year reassessment window* (if no sold property available, estimate using commercial software).
<b>1998</b>	<b>Residential Whole Property Sales Ratio Study</b>	Whether residential property that sold is assessed at its fair market value based on what it sold for.	Obtain selling price for residential property sold at the four-year reassessment window.*
<b>1999</b>	<b>Vacant Land Ratio Study</b>	Whether residential land has been assessed at its fair market value.	Develop market value estimates for unsold property based on square footage prices for property sold at the four-year reassessment window.*
<b>2000</b>	<b>Commercial Building Ratio Study</b>	Whether commercial buildings have been assessed at their fair market values.	Estimate market value using commercial software.
<b>2001</b>	<b>Residential Improvements Ratio Study (Without Land) (not included in the sample we tested)</b>	Whether residential property minus the land it is on has been assessed at its fair market value.	Develop market value estimates for unsold property based on square footage prices for property sold at the four-year reassessment window* (if no sold property available, estimate using commercial software).
<p>*Taxes are reassessed at least once every four years at regular intervals established by the Tax Commission. The four-year reassessment window refers to assessed values at the time of the four-year reassessment established by the Tax Commission.</p> <p><b>Source:</b> Developed by legislative auditor's staff from information provided by the Louisiana Tax Commission.</p>			

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## Statewide Effects of Ratio Studies

Ratio studies are important to Louisiana for two reasons. One, they measure whether parish assessors have been accurate and fair to a large portion of the state's taxpayers. And two, property taxes help determine funding for local schools and other services. But before one considers those reasons, we should point out that ratio studies can cause a parish assessor to reassess property taxes in a parish. The Tax Commission might order the reassessment because a parish's overall assessment level is too low. Even so, such a reassessment would not necessarily raise taxes right away.

**Increases in assessment levels do not necessarily mean higher parish property taxes in the immediate future.** Suppose that the Tax Commission found that a parish assessor significantly under-assessed residential or commercial property and ordered a reassessment in the parish. Even if the local assessor were to increase assessed values, it does not necessarily mean that taxpayers will pay more property tax in the immediate future. State law provides that when assessors increase property assessments, taxpayers pay a lower tax rate (called millage rate for property tax) so that they end up paying the same total amount as before. However, any taxing district can vote to roll forward to a higher millage rate previously in effect so that more taxes are collected.

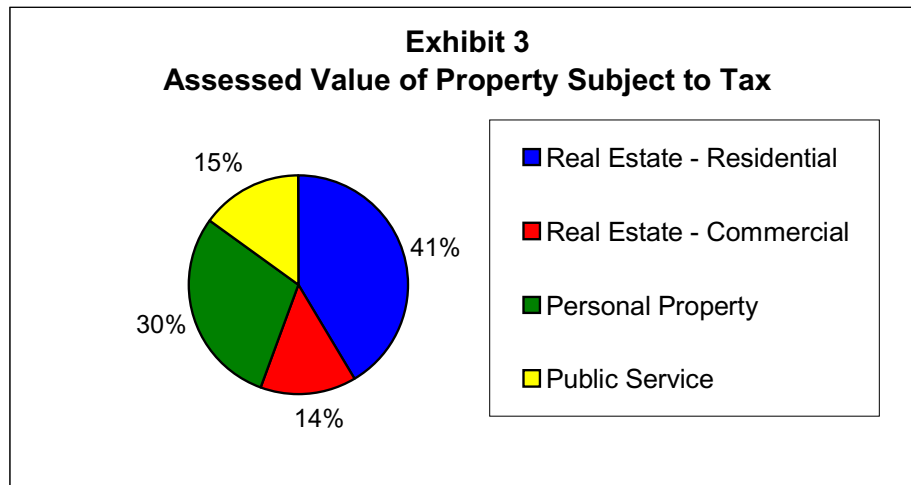
If property values have increased, members of a taxing authority may choose, by a two-thirds majority vote and after a public hearing, to apply the millage rate that was in effect before reassessment. This process is called increasing the millage rate or "rolling forward." If property values have risen, rolling forward will result in higher tax collections for the parish. If property values have decreased, the authority may increase the millage rate for any tax to the point at which it gives the taxing authority the same amount of money it collected the previous year.

Over time, the taxes collected in most taxing districts increase for a number of reasons. Districts may roll millages forward, as described above. In addition, new property is usually added to the rolls. Finally, voters can impose new property taxes. If property assessments have increased, the new taxes will be calculated based on the higher assessment levels. These higher assessment levels will ultimately bring in more revenue for the parish.

**Residential and commercial property taxes are the largest category of property subject to tax in Louisiana's parishes.** The Tax Commission's ratio studies concentrate on residential and commercial property, as Exhibit 2 demonstrates. Real estate is the largest category of ad valorem taxes. According to the Tax Commission's *1998-99 Biennial Report*, which is the latest published edition:

- Real estate is the largest category of property subject to tax with an assessed value of approximately **\$11.7 billion** (more than 55% of the total), followed by personal property at \$6.2 billion (almost 30%) and public service at \$3.18 billion (about 15%).
- In the real estate category, residential improvements and land represent the largest proportion at almost 81%, while commercial/industrial properties represent about 19%.

- The 1999 assessed value (at 10%) of homesteads including the associated land statewide was about \$6.68 billion. However, approximately \$5.2 billion of this amount was not taxed because of the homestead exemption.
- The 1999 assessed value (at 15%) of commercial/industrial improvements statewide was about \$2.18 billion.
- Total property subject to tax in 1999 was more than \$21 billion.



**Source:** Created by legislative auditor's staff from Louisiana Tax Commission 1998-99 Biennial Report.

Approximately 37% of local property taxes are dedicated to schools. The next largest category is general parish taxes at 33%, which are dedicated on a parish-wide basis to purposes such as law enforcement, libraries, and other miscellaneous local uses.

**Property taxes have a statewide effect on school funding.** Though property taxes are collected locally and are used to benefit local schools and governments, they also have a statewide effect. What one parish collects affects other parishes' school funding through the Minimum Foundation Program (MFP) formula. This formula determines state funding to public schools based on parishes' student populations and wealth relative to other parishes as measured by sales and property tax collections. Thus, any parish whose properties are under-assessed might be collecting less property tax revenue than it could. As a result, not only would that parish receive less revenue, but also another parish in another part of the state might receive fewer state matching dollars from the MFP.

To test whether property tax collections in one parish affect other parishes' school funding, we asked legislative staff to run an MFP simulation. This simulation illustrated what would happen if one parish, East Baton Rouge, collected less property tax revenue than it could have. When property tax collections in this simulation were reduced by \$5.9 million (about 8%), other parishes lost an average of more than 1/100<sup>th</sup> of one percent of their state funding. The results by parish were uneven: Depending on the parishes' tax structure and student populations, some parishes lost funding while others gained. For example, Caddo Parish would lose more

than \$39,000, while Cameron Parish would gain almost \$28,000. The amounts gained or lost may not have been significant across the board but were in cases such as these enough to pay the salary of one teacher.

Local property taxes are an important component of school funding, contributing an average of \$668 per pupil in fiscal year 2001. Yet in many parishes, businesses and industry primarily pay these property taxes because the majority of homesteads—72% in 1999—are valued below the homestead exemption level of \$75,000, according to the Tax Commission's own report. In fact, only 22% of the assessed value of all homesteads was taxed in 1999. The rest fell under the homestead exemption level. Thus many residents are paying no property taxes to support schools and other parish services. **Appendix B** lists each parish and the percentage of homesteads below the exemption level.

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## Issues for Further Study

In the course of our fieldwork, we found one area for further study:

- ◆ *Assessor practices.* A centralized statewide tax roll database is possible only if each parish assessor's office has sufficient information systems resources. Thus the extent of computerization in each parish should be determined through a survey of parish assessors.

# Ratio Studies

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## Do the Louisiana Tax Commission's annual ratio studies ensure that residential and commercial property taxes are equitably assessed?

The Tax Commission's ratio studies do not ensure that property taxes are equitably assessed for several reasons. First, the ratio studies do not test to see if some homeowners are being taxed at different rates from others and the commission's administrative rules do not prevent this from happening. Second, the commission does not follow up on problem items in the ratio studies to determine why they occurred or if they are parish-wide problems. Third, the commission's methodology can lead to biased samples in its ratio studies. Although the commission regularly conducts and publishes the ratio studies, it could improve several aspects of these studies to provide more effective oversight.

First, the Tax Commission does not test for selective reappraisal (sales chasing). Such tests would determine if residential properties that were recently sold were valued differently than those that did not sell. The commission is responsible for promulgating administrative rules regarding this issue. It did so, but these rules are confusing and do not reflect the commission's intent.

Second, we found that a parish's overall ratio study appraisal level can be within the constitutionally established range and pass the ratio study even though many of the individual assessments in the study fall outside the range. In the ratio studies we examined, we found that even though the parishes passed the studies, more than 60% of the sample items in some parishes were outside the constitutional range. The sample is intended to be a representation of all assessments in the parish. If a large number of sample property assessments fall outside the constitutional range, this means that a large number of property assessments in the parish could also fall outside the range. However, the Tax Commission does not investigate to determine why these assessments fall outside of the range or to see if the rest of the parish has the same problem. The commission also does not require the assessors to correct these assessments. Because of these problems, the commission's oversight is less effective than it could be.

Third, because the Tax Commission's appraisers do not determine whether sample items are representative and because they arbitrarily discarded or changed some items in their samples, the results might have been biased. Because their methodology is not documented, no one can be sure that the samples they selected for the ratio studies are not biased.

In addition, the Tax Commission does not calculate and report additional information that would enhance the quality of its oversight. For example, it does not measure the assessment level of individual neighborhoods or whether bias may exist in favor of low- or high-valued properties. This information should be easy for the commission to produce. Finally, the commission's standard for measuring whether residential properties have been equitably assessed is not as strict as the IAAO recommends. The commission could also enhance its annual ratio study reports by including the information discussed above.

**Recommendation 1:** To ensure that parish assessors are appraising houses that sell the same as those that do not, the Louisiana Tax Commission should annually test for selective reappraisal of sold properties. The commission can compare changes in sold and unsold parcels to discern whether sold parcels have been selectively reappraised. Alternatively, it could choose other statistical sampling techniques. If the commission finds that properties have been selectively reappraised, then it should adjust ratio studies before telling the parish assessor to reappraise property (see p. 13).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation.

**Recommendation 2:** To prevent selective reappraisal, the Louisiana Tax Commission should rewrite its Administrative Rule 303 to clarify whether property transfers (sales) should be captured on the tax rolls immediately. The rule should also clarify whether the assessor must (see p. 13):

- Reappraise the entire geographic area within the same year. The rule should also provide guidelines to determine:
  - The boundaries of such a geographic area
  - What level of sales activity would trigger the reappraisal of an entire area
- If reappraisal is not possible, index the newly captured values back to the date of the last reappraisal. The rule should define precisely:
  - Who is responsible for formulating the index
  - How the index should be developed and applied

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation. The commission's reply states that while the Administrative Rules may not say specifically who is to calculate the index value, it is certainly the assessor's responsibility as it would be too great a task for the Tax Commission to determine. The commission plans to amend its rules to make it the assessor's responsibility to calculate the indexing of properties back to the assessment date.

**Recommendation 3:** So that it can help assessors prevent inequitable assessment, the Louisiana Tax Commission should attempt to determine and document the cause of any significant assessment problems it identifies in ratio studies. It should consider conducting procedural audits of parish assessors to determine why any assessment problems exist. The commission's methods for conducting such audits should be formally documented. In addition, the commission should consider conducting formal training for parish assessors regarding ratio studies (see p. 16).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission partially agrees with this recommendation. The commission does not believe it is adequately staffed to conduct procedural audits.

**Recommendation 4:** To ensure that its ratio study samples are not biased, the Louisiana Tax Commission should institute and document a sampling procedure for its ratio studies. The commission should draft a procedure that ensures that properties selected will represent the property values that the parish contains (see p. 17).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation.

**Recommendation 5:** So that it can properly measure the overall level of assessment in a parish, the Louisiana Tax Commission should use only the original assessments provided by the parish assessor in the year of the study. While it is the commission's right and responsibility to ask assessors to correct assessments that do not reflect fair market value, it should not use revised assessments in ratio studies (see p. 18).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation. The commission will be taking an in-depth look at the entire ratio study process. The commission plans to assign a completion date to all studies. Unless it finds errors in discussions with assessors, the ratio studies will stand as first submitted.

**Recommendation 6:** To ensure that sample items that could affect whether a parish passes or fails its ratio studies are not discarded, the Louisiana Tax Commission should promulgate a procedure for researching, then trimming statistical outliers. The procedure should be formally documented and should not be arbitrary. The commission should keep records documenting which properties in any sample were pulled and why (see p. 19).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission partially agrees with this recommendation. The commission believes that it kept appropriate records but will study and comply with the recommendation.

**Legislative Auditor's Additional Comments:** The Tax Commission should document and adhere to an outlier trimming procedure, then keep careful records detailing why certain sample properties were removed from ratio studies. That way, the commission can demonstrate that it has been objective. We observed that the commission did not keep appropriate records regarding trimming outliers.

**Recommendation 7:** So that it can tell parish assessors where pockets of over-assessment or under-assessment are, the Louisiana Tax Commission should calculate the median ratio of each neighborhood sample, then compare that ratio to the parish median. Commission representatives should point out to parish assessors areas or neighborhoods whose level of assessment differs by more than 5% from the parish level (see p. 21).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation.

**Recommendation 8:** So that it can better measure whether parish assessors have been fair in assessing residential property, the Louisiana Tax Commission should lower the requirement for the measure of fairness it uses—the coefficient of dispersion (COD)—for non-rural residential property from 20% to 15% in accordance with the IAAO’s recommendations. The commission should also promulgate administrative rules setting up benchmark COD levels to satisfy uniformity requirements in order to clarify what these fairness standards are (see p. 22).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation. The commission says it will discuss and try to affirm the lowering of the COD on residential property to 15% in meetings this fall.

**Recommendation 9:** So that it can point out where bias in favor of low- or high-valued properties may exist, the Louisiana Tax Commission should calculate the price-related differential (PRD). Because this statistic indicates only that bias toward low- or high-valued properties may exist, the commission should follow up on any indications of bias by using more powerful statistical tests (see p. 23).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation.

**Recommendation 10:** So that it can better communicate its ratio study results, the Louisiana Tax Commission should include, in addition to the information it publishes already, the following in the annual reports of its appraisal division (see p. 25):

- Definitions of key terms such as appraisal level and uniformity
- An objective statement of results
- The procedural steps used in conducting the studies
- Its sampling methodology, particularly the period selected for sales samples, the number of properties in each neighborhood, the number of sales in the parish in the period selected, and the number of sales actually used in the study
- The rules for eliminating outlier ratios
- The price-related differential (PRD)



- A comparison of results with previous studies
- Data displays such as frequency distributions, histograms, line charts, schematics and maps to illustrate study results

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission partially agrees with this recommendation. The commission says it will compare the previous year's ratio study with the current year's study as time permits.

**Legislative Auditor's Additional Comments:** The Tax Commission has already published the results of previous studies. Comparison of results with a previous study could be as simple as showing two columns of numbers side by side—one from this year and one from a previous year.

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## Properties That Sell May Be Assessed Differently Than Properties That Do Not Sell

Selective reappraisal is the practice of adjusting assessed values on properties that were recently sold but not other properties. According to one parish assessor and a member of Tax Commission management, selective reappraisal does occur in Louisiana. However, the state's constitution (Art. 7 Sec. 18) requires that property be assessed at its fair market value based on criteria applied uniformly throughout the state. Furthermore, IAAO standards say that assessing officials must ensure that sold and unsold parcels are treated equally. But the state's legal framework is not structured to prevent selective reappraisal and the commission's ratio studies cannot detect it. Therefore, the commission's ratio studies do not ensure that residential property taxes are equitably assessed.

Selective reappraisal, also known as sales chasing, is a problem nationwide, according to literature we reviewed. One expert in the field called it a highly unprofessional practice that distorts ratio studies. We have some indication that this practice occurs in Louisiana. One assessor told us that assessors put sales values on the rolls as quickly as they can, but wait longer to reappraise other properties. A member of Tax Commission management told us he has made some attempts to convince assessors to adjust values of sold property back to what they were at the last four-year reassessment.

**Louisiana's legal framework does not prevent selective reappraisal.** Assessors must reappraise all property on their rolls at its fair market value at least every four years, according to the state's constitution (Art. 7 Sec. 18). The Tax Commission sets the year that the reassessments must be completed. The most recent reassessments were in 1996 and 2000. Assessors may also update property values between reassessments. The commission is responsible for writing administrative rules that interpret what assessors must do when they update

property values on the tax rolls. However, the adopted rule is confusing and does not reflect management's intent.

Administrative rule Section 303, B.2 (see **Appendix F**) gives assessors the option of appraising more often if they think the market (measured by sales and other transfers) indicates to them that property values were wrong at the last reassessment period. A member of Tax Commission management said that the rule is intended to mean that assessors can value sold properties based on their sales price. But if assessors do that, they must reappraise every parcel in a geographic area. If they cannot reappraise every parcel, then they must index the sold properties back to their market values as of the last reappraisal. The rule does not define what the commission means by a geographic area that needs to be reappraised or explain the index. A commission official stated that the assessors should calculate the index, while one assessor we spoke with indicated the index is the commission's responsibility. Consequently, it appears that no one is taking responsibility for calculating the index.

If assessors are not adjusting values of sold and unsold properties to matching time periods, then the owners of sold properties would be paying taxes at a different level than the owners of unsold properties. In a rising market, this means owners of sold properties pay higher taxes for up to four years until all properties are brought up to the level of the market at reassessment. Though the constitution says reassessment is supposed to occur every four years, Louisiana residents pay property taxes every year. Thus the inequity created by capturing sales immediately but failing to reappraise other properties increases over the four-year reassessment cycle. Although this practice emphasizes immediate revenue gain to the parish and convenience to assessors, it is not fair to taxpayers who own homes that were recently sold. Fair market value is reflected for only part of the market (sold properties), resulting in selective reappraisal.

If assessors follow the intent of the Tax Commission's rule, they would not be selectively reappraising sold properties. Nevertheless, each of the two options the rule allows has advantages and disadvantages. The assessors may choose to adjust the values of homes that sold back to what they would have been at the last reassessment date using some index based on real estate values in the area. While this choice emphasizes fairness and uniformity to all taxpayers as well as convenience to the assessors, it decreases parish revenue collection. It also reflects artificially low property values for the four years immediately following reassessment. On the other hand, if the assessors capture the fair market value from sales as quickly as possible, they must reappraise the rest of the geographic area within the same tax year. This alternative optimizes parish revenue as well as fairness and uniformity to all taxpayers. It also reflects current fair market value for a great portion of the market. However, it requires more time and resources from assessors.

**The Tax Commission's ratio studies do not detect selective reappraisal.** In its ratio studies, the Tax Commission uses sales that occur just before the four-year reassessment period. Therefore, the ratio studies tell them only whether property was properly valued just before or at the point of reassessment. The studies do not measure what happens in the next three years of the cycle. Thus, they do not detect whether selective reappraisal has occurred.

Our file reviews confirmed that the Tax Commission primarily used sales from June 1995 and earlier to establish market values for the 1997 Whole Market Residential Study, the 1999 Vacant Land Study, and as sample items for the 1998 Sales Ratio Study. Therefore, the whole market and vacant land studies measured only whether property values for unsold properties were consistent with the market established by sales in or before June 1995. The sales ratio study measured only whether assessors had captured values for all sold properties as of the 1996 reappraisal date.

According to Tax Commission management, they used only sales occurring before the reassessment date because assessors are required to change assessments only at this one time every four years. Every assessment is supposed to be updated by then. But the ratio studies included few, if any sales-based assessments put on the tax rolls in late 1995 through early 1998. If homes sold during this period were assessed based on their sales price but similar properties were left on the tax rolls at values established in 1995, then selective reappraisal occurred. The commission's ratio studies could not have detected it.

**Tests that the Tax Commission does not perform can detect selective reappraisal.** The IAAO and appraisal professionals say that where sales used in a study precede the assessment date as the Tax Commission's do, one also has to look at sales after this date to check for selective reappraisal. The IAAO recommends several different tests that detect selective reappraisal:

- Compare changes in sold and unsold parcels to discern whether sold parcels have been selectively reappraised
- Use a statistical test called the Mann-Whitney test
- Split the sample—take one sample before and one after the appraisal date
- Use mass appraisal techniques such as multiple regression, which may require sophisticated computer systems

If the Tax Commission finds that properties have been selectively reappraised, the IAAO recommends that they adjust ratio studies before they tell the parish assessor to reappraise all residential property in the parish. The preferred adjustment approach is to use sales that occur after appraised values are determined. Nearly half (48%) of the 29 respondents to a 2001 Florida Department

of Revenue survey said they took steps or conducted statistical tests to determine whether selective reappraisal occurred.

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## Tax Commission Does Not Investigate Problems Identified in Ratio Studies

Though Tax Commission management says they advise assessors about assessment problems, they do not necessarily require that individual problem assessments identified in ratio studies be changed. They also do not follow up on underlying problems they identify in ratio studies to determine why assessments were out of range or to see if the problems are parish-wide. State law provides the commission with broad powers in regulating assessors, along with oversight responsibility. Because the commission does not always follow up on problem areas or require changes in assessments when they are indicated, assistance to and oversight of local assessors is not as strong as it could be.

We found that a parish's overall ratio study appraisal level can be within the constitutionally established range and pass the ratio study even though many of the individual assessments in the study fall outside the range. As discussed in the first section of this report, passing range is 9% - 11% for residential studies and 13.5% - 16.5% for commercial studies. In the ratio studies we examined, we found that even though the median and COD were in the passing range, more than 60% of the sample items in some parishes were outside the range. The sample is intended to be a representation of all assessments in the parish. If a large number of sample properties fall outside of the range, then a large number of properties in the parish could also fall outside the range.

The Tax Commission does not necessarily follow up to determine why these out-of-range assessments occurred. Assessment problems could be caused by poor assessment practices in the parish. Because state law (R.S. 47:1837 B.) empowers the commission to enforce uniformity statewide, it could make assessors change these practices. Commission management told us they discuss any problems they find with individual sample items in ratio studies with assessors but do not always require that the problems be corrected. However, state law (R.S. 47:1990) also gives the commission the authority to change any and all assessments that do not reflect fair market value.

Detailed investigation may help the Tax Commission determine the cause of problems. IAAO standards say that assessors' documentation and procedures should be reviewed periodically. In addition, state law (R.S. 47:1837 C.4.) empowers the commission to obtain any data it requires. More than half (55%) of the 29 Florida survey respondents said they did some type of procedural audit, but the Louisiana Tax Commission does not.

The Tax Commission has another tool at its disposal: providing formal training in areas it identifies as problematic. The IAAO standards recommend that oversight bodies consider offering formal training to local assessors on ratio studies. While the commission has participated in seminars for the assessor's association, it has offered no formal training on ratio studies. Nearly three-fourths of the Florida survey respondents said they are responsible for training assessors.

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## Tax Commission Does Not Ensure Quality of Samples

Although the Tax Commission's appraisers include enough properties in their ratio studies, they did not ensure that their samples were representative as the IAAO recommends. Because the commission had no sampling procedures, selection of properties to include in the studies may have been biased. For example, we found that the studies contained a greater percentage of homes valued over \$75,000 than the parishes contained.

Tax Commission management expressed concern that they did not have time to include a sufficient number of properties in their ratio studies. In their strategic plan, they say they are eventually aiming for a 10% - 15% representative sample of residences or businesses in a parish for their ratio studies, but they say they do not have the appraisal staff to acquire such a sample. However, we tested the sample sizes they used against formulas provided by appraisal experts and found that their sample sizes were adequate. What the commission did not do was to ensure that the samples were representative.

Tax Commission appraisers told us they simply selected sample properties that were conveniently available for the type of study they were doing until they had enough to satisfy the commission's sampling requirements. They told us the commission requires 200 - 250 properties for a large parish, 100 - 150 properties for a medium-sized parish, and 60 - 75 properties for a small parish. For small parishes, they told us they sometimes have to use every sale or commercial property in the parish to fulfill this requirement. Yet for the larger parishes, they do not have a systematic procedure, nor do they document how they selected the properties and which properties were left out. According to the IAAO, sample properties used in ratio studies should reflect the mix of properties (values, locations, et cetera) in the parish to the extent possible to ensure that they are representative. The commission's appraisers told us they try to sample as many different areas as they can. However, they could produce no documentation to prove their samples were appraised at the same level as the rest of the parish.

We did not have enough information to determine whether the appraisers covered a variety of neighborhoods in their ratio studies. But we were able to test whether the ratio studies included the same proportion of high- and low-valued properties as the parish contained. Using the Tax Commission's own data in its

biennial report, we compared properties in the parish valued at up to \$75,000 (the level at which a residence is 100% homestead exempt) and above \$75,000 with properties in the study at those values. We found that in every case, the commission's appraisers used a greater proportion of higher-valued homes in their studies than the parishes contained. Studies for the two urban parishes, Ouachita and Orleans 3<sup>rd</sup>, had significantly greater proportions of higher-valued homes than the parishes contained. (See Exhibit 4 below.) Management said that there might be more information on the higher-valued properties because most sales occur at those levels. However, this means that lower-valued homes were under-represented in these studies. Consequently, the commission cannot be sure that the overall parish level of assessment applies to the lower-valued homes.

According to the Florida survey we consulted, 41% of the 29 respondents take steps or conduct statistical tests to ensure the representativeness of samples.

<b>Exhibit 4</b>			
<b>Percentage of Homesteads Valued up to \$75,000 in Tax Commission Samples Compared With Homesteads Valued up to \$75,000 in Parish</b>			
<b>Parish</b>	<b>Percentage of Residences up to \$75,000 in 1997 Ratio Study</b>	<b>Percentage of Residences up to \$75,000 in Entire Parish (or District)</b>	<b>Difference</b>
Franklin	84%	90%	6%
Iberia	72%	84%	12%
LaSalle	93%	95%	2%
Orleans 3 <sup>rd</sup>	42%	81%	39%
Ouachita	31%	77%	46%
Vernon	80%	91%	11%
<b>Source:</b> Created by legislative auditor's staff from the Tax Commission's ratio studies and biennial report.			

## Revised Assessments Allowed One Parish to Pass

According to a Tax Commission official, the commission asked an assessor in a parish that failed its ratio study to rework sample property assessments before the study was published instead of directing reassessment of all property as required by law. The commission then used the revised sample assessments in its published ratio study. Using altered assessments in a ratio study is contrary to good statistical practice. As a result of using the changed assessments, the parish that

should have failed its ratio study passed and the true parish-wide level of assessment was not published.

Specifically, the Tax Commission asked Iberia Parish to rework sample properties in at least four neighborhoods for the whole property ratio study in 1997. Sample properties were reassessed after the ratio study was done in November but before the results were published in March. The revised ratio study incorporated the results of these reassessments. The parish's median level of assessment jumped from 8.8% in November—a failing grade—to 10.0%, allowing it to pass the study. A representative of commission management said that they give assessors a year to correct assessment problems, but some assessors may finish this process sooner. Since Iberia Parish finished its corrections by March, the commission incorporated them into the previous year's ratio study.

Although the commission has the power and responsibility to correct assessments that do not reflect fair market value, using altered assessments in ratio studies biases the results. Good statistical practice requires that any samples selected should not be changed during a study. The properties used in a ratio study are samples that are supposed to represent the entire population of properties in the parish. A properly chosen sample reflects the condition of the population at the time it was taken. If someone changes characteristics of the sample based on new information, then the sample no longer represents that population. In other words, the Tax Commission selected a sample of a few properties in Iberia Parish to represent the general level of assessment in that parish in 1997. The commission pointed out that the properties in its sample were not correctly assessed. The parish assessor then changed these assessments before March 1998. When the assessor did so, these changed assessments no longer reflected the 1997 assessment level, yet the commission incorporated them into the 1997 study.

In addition, state law (R.S. 47:1837 B.1.) provides that the commission shall issue a formal reappraisal order for any class of property when its appraisal or assessment level deviates by more than 10% from constitutional requirements. Then, the commission must go back the next year to re-measure that class of property. In this case, the commission did not order a reappraisal but merely caused the assessor to correct problem neighborhoods.

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## **Tax Commission Arbitrarily Removes Some Very High and Very Low Ratios From Its Ratio Studies**

The Tax Commission has no standard method or policy for removing very high or low ratios (outliers) from its ratio studies. Instead, management arbitrarily removes some ratios from the studies. In one case, we found that removing these ratios influenced whether a parish passed or failed its ratio study. The IAAO recommends that outliers be removed only if they do not represent the market. Very high and low ratios should only be removed using standard statistical

procedures. Otherwise, sample ratios that could indicate a problem with parish property tax assessments will be thrown out of the study, allowing a parish that should have failed its ratio study to pass. Leaving outliers in ratio studies may provide a clearer picture of problem areas in the parish.

According to the IAAO, an outlier is a single property ratio in a sample that has an unusual value differing markedly from the median—either very high or very low. These ratios may differ because they do not represent the market, are calculated based on errors, or because they indicate pockets of under-assessment or over-assessment. The IAAO says outliers should be thoroughly researched, then rejected only if they are truly not representative of the market. Remaining outliers may then be trimmed according to a standardized procedure. The fact that they have been trimmed must be stated. If outliers are trimmed arbitrarily rather than systematically, then the possibility for bias exists. In other words, the Tax Commission could select some properties to trim that would cause a parish to pass its ratio study, whereas otherwise it might have failed.

Tax Commission appraisers accumulate sample properties for ratio studies, then send their work to Tax Commission management for review. At that point, management removes (trims) outliers. We did see evidence in the files that the Tax Commission trims outliers, but management does not document their procedures for doing so. Tax Commission management also said that they attempt to determine why any ratio that is on the high or low end of the sample is high or low. But we could not test this assertion because they kept little documentation in the files clearly stating which outlier ratios were removed and why.

We heard about two different outlier trimming methods from Tax Commission management and staff:

- Trimming any ratios two standard deviations above and below the median
- Removing ratios that are higher or lower than a break point in the data (explained below)

Because these methods are verbalized rather than documented, we do not know which method the Tax Commission used in most cases. However, we were able to check one 2000 commercial ratio study because the appraiser had kept the working papers electronically. We calculated what the two standard deviations method would have produced and found that they did not use this method. It appears that they used the latter method—a break point. In other words, when the individual ratios in the sample change by a large percentage from the ones that preceded them, then those ratios are considered outliers. According to IAAO standards, arbitrary trimming methods such as this should be avoided. (See **Appendix E** for an illustration of this method.)



The 2000 ratio study we reviewed showed that 19 of the 22 highest ratios were trimmed from the upper end of the sample, while only eight were trimmed from the lower end. Before trimming, the parish COD was 39.37%, which would have caused it to fail the ratio study. After trimming, the parish COD was 19.44%, which is a passing level. A handwritten note in the file appeared to say that the commission did not agree with the values assigned to the outliers. Without written documentation explaining its trimming procedures, the Tax Commission cannot assure that the outliers were trimmed systematically rather than arbitrarily.

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## **Tax Commission Did Not Measure Each Neighborhood's Level of Assessment Against the Parish-wide Level**

The Tax Commission did not test the appraisal level of each individual neighborhood it sampled as recommended by the IAAO. By measuring the appraisal level of each neighborhood against the average parish-wide level, the commission can show assessors where the pockets of under- or over-assessment are.

When Tax Commission appraisers conduct the whole market or vacant land studies as they did in 1997, 1999, and 2001, they select samples by neighborhood or other closely related groups of properties. They then fold these smaller samples into an overall parish-wide sample. According to the IAAO, the median of each neighborhood sample should be within 5% of the median of the overall parish-wide sample. The Tax Commission did not measure this, but we did. By performing a simple calculation in spreadsheets similar to the ones it uses, we concluded that many (21 of 51, or 41%) of the 1997 neighborhood samples we studied were more than 5% under- or over-assessed relative to the level of the parish (see Exhibit 5). The neighborhoods ranged from 38% below to 36% above the parish median.

<b>Exhibit 5</b>			
<b>Number of Neighborhood Samples From Tax Commission 1997 Whole Property Ratio Study Differing by More Than 5% From the Parish Median for Our Selected Parishes</b>			
<b>Parish</b>	<b># of Neighborhood Samples</b>	<b># of Neighborhood Samples More Than 5% Lower or Higher Than Parish Median</b>	<b>% of Total</b>
Franklin	5	3	60%
Iberia	6	4	67%
LaSalle	5	0	0%
Orleans 3 <sup>rd</sup>	17	7	41%
Ouachita	13	7	54%
Vernon	5	0	0%
<b>Total</b>	<b>51</b>	<b>21</b>	<b>41%</b>
<b>Source:</b> Developed by legislative auditor's staff from examination of Tax Commission files.			

**Appendix C** explains how to calculate the median.

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## Tax Commission's Measure of Fairness Is Not Strict and Is Not Set Forth in Administrative Rule

The Tax Commission's measure of assessment fairness is not as strict as the IAAO recommends for most residential taxpayers. Thus, the commission may not identify parishes with residential property assessments that are much higher or lower than they should be. Also, since this measure of fairness is not set forth in law or administrative rule, parish assessors do not have a clear benchmark for achieving uniform assessments.

As discussed in the Introductory Section, the Tax Commission measures the uniformity of parish assessments through a statistic called the coefficient of dispersion, or COD. The COD measures how much the ratios in the sample vary from one another. A high COD means many properties are at different percentages of their market value, while a low COD means most properties in the parish are assessed at a similar percentage of their market values. Even though the parish's level of assessment may be within passing range, it may have some very low and very high assessments.

The Tax Commission uses a target COD of 20% or lower for all of its studies to determine whether a parish is uniformly assessed. This percentage is in line with the IAAO's recommendations for rural residential properties and vacant land. But they recommend that non-rural residential properties be subject to a COD standard of 15% or 10% if they are very similar to each other. If the 15% COD had been in effect for non-rural residential properties for the four years we studied, four parishes statewide would have failed their ratio studies in 1997. With the 20% COD in effect, none of these parishes failed their 1997 ratio studies as Exhibit 6 demonstrates.

<b>Exhibit 6</b>		
<b>Parishes Statewide That Would Have Failed the 1997 Whole Property Ratio Study Based on 15% COD</b>		
<b>Parish</b>	<b>1997 COD</b>	<b>Difference from 15% Standard</b>
Beauregard	17.1%	2.1%
Orleans 6 <sup>th</sup> District	17.2%	2.2%
St. Martin	18.8%	3.8%
Iberia (based on original study)	15.6%	0.6%
<b>Source:</b> Calculated by legislative auditor's staff from examination of Tax Commission Appraisal Division's annual reports.		

Tax Commission management said its COD requirements are based on traditional practice. These requirements are not written in state laws or administrative rules. Without a clear definition of benchmarks for measuring uniformity, the Tax Commission and the assessors do not have a clear reference stating when uniformity is achieved.

**Appendix C** explains how to calculate the COD.

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## Ratio Studies Do Not Determine Whether Bias Exists in Favor of Low- or High-Valued Properties

The Tax Commission does not calculate a simple statistic that could tell assessors and the public whether assessments may be biased in favor of low- or high-valued properties. The IAAO recommends that this statistic be calculated and reported in ratio studies. With such information, parish assessors could correct any biases.

If assessments are progressive, then low-valued properties are assessed at smaller percentages of their market value than high-valued properties. Regressive assessments mean high-valued properties are assessed at smaller percentages of their market value than low-valued properties. By calculating a simple statistic—the price-related differential (PRD)—the Tax Commission could determine whether these biases may exist.

Although the Tax Commission did not calculate this statistic, we did. We found that for our six sample parishes, four fell out of the IAAO's acceptable range during the four-year period we studied. In each year, assessments in at least one of these six parishes may have been biased in favor of low- or high-valued properties per Exhibit 7 below.

<b>Exhibit 7</b>				
<b>Price-Related Differential for Sample Parishes</b>				
<b>Parish</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
Franklin	<b>1.04</b>	<b>1.05</b>	1.01	0.97
Iberia	1.01	1.00	1.00	1.03*
LaSalle	1.00	1.01	<b>1.06</b>	0.99
Orleans 3 <sup>rd</sup>	1.01	1.01	1.01	1.01
Ouachita	0.99	1.02	1.00	0.97
Vernon	1.01	1.00	0.91	0.97
<b>PRD acceptable range = .98 - 1.03</b>				
<b>More than 1.03 = Regressive, biased in favor of higher-valued properties</b>				
<i>Less than .98 = Progressive, biased in favor of lower-valued properties</i>				
*Iberia Parish's 2000 study was only very slightly above 1.03.				
<b>Source:</b> Calculated by legislative auditor's staff from Tax Commission ratio studies.				

The PRD indicates only that progressivity or regressivity may exist but not whether it is significant. If the Tax Commission performs this calculation, it should follow up any indications of bias with more powerful statistical tests. Though the PRD is informative, it may not be widely used: Only seven (24%) of the Florida survey respondents used the PRD.

**Appendix C** explains how to calculate the PRD.

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## Annual Ratio Study Reports Should Include More Data

The Tax Commission's annual ratio study reports lack certain elements the IAAO recommends. The commission can improve its reports by presenting statistical material in a way that can be more readily understood by a wider audience.

When we measured the IAAO's standards against the appraisal division's 1997, 1998, 1999, and 2000 annual reports to the Tax Commission, we noted that the following elements were lacking:

- Key terms such as appraisal *level* and *uniformity* were not defined.
- An objective statement of results was not included in all reports.
- The procedural steps used in conducting the studies were not outlined.
- The sampling methodology was not described, particularly the period selected for sales samples and the number of properties in each neighborhood. The number of sales in the parish in the period selected and the number of sales actually used in the study were not included in all reports.
- The rules for eliminating outlier ratios were not laid out.
- The PRD was not included.
- The reports did not compare results with previous studies.
- Though they included some charts and graphs, the reports did not use data displays such as frequency distributions, histograms, line charts, schematics and maps to illustrate study results.



# Administrative Changes

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## Are there administrative changes the Tax Commission could make to improve its oversight of assessors?

Several administrative improvements by the Tax Commission could improve its oversight of local residential and commercial property tax assessment. These include:

- **Information system upgrades.** The Tax Commission should gather or have access to a searchable tax roll database from each parish in the state. That way, it could conduct ratio studies more efficiently. The commission could also identify some duplicate homestead exemptions.
- **Efficiency of field appraisal staff.** The field appraisers who perform the ratio studies need more direction from a procedural manual and better computer training. In addition, they may be taking more time than necessary to perform appraisals.
- **Procedural updates and documentation.** The Tax Commission operates using verbally understood rather than documented procedures for its ratio studies in many cases. It had no manuals or other instructions documenting how its ratio studies are to be conducted. Developing and promulgating standard procedures would result in better communications with parish assessors and a more consistent work product from its appraisal staff.

**Recommendation 11:** To more efficiently perform ratio studies, the Louisiana Tax Commission should pursue implementation of its electronic tax roll database. When it is fully implemented, the commission should use this database to conduct its annual ratio studies. If the commission plans to receive and maintain assessor tax roll databases, it should establish some procedures and practices common to standard management information systems. These may include a systems manual, data security procedures, program documentation, and properly trained personnel (see p. 29).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation.

**Recommendation 12:** To more effectively use staff time, the Louisiana Tax Commission should evaluate whether its expectation of 30 appraisals per week allows its appraisers more time than they actually need (see p. 31).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation. But it also says that depending on the type of study being done and in which parish, the expectation of 30 appraisals per week could be high or low. The commission also promises to have staff adhere to a more rigid work week and submit monthly production reports.

**Legislative Auditor's Additional Comments:** We recommend that the expectation be reviewed and evaluated. The commission should take into account the type of study and conditions in the parish and formulate benchmarks more appropriate to each situation. It could use the monthly production information the staff generates to help formulate minimum expectations that are realistic but more ambitious.

**Recommendation 13:** To ensure that assignments are completed quickly and accurately, the Louisiana Tax Commission should require that all field appraisers have the basic and intermediate computer skills necessary to complete all work assignments. The commission should provide adequate training for the appraisers on any software programs it expects its appraisers to use (see p. 33).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission partially agrees with this recommendation. The commission says that its appraisers have been trained on the required software and will continue to receive training.

**Legislative Auditor's Additional Comments:** We observed one appraiser who was not using some of the commission's authorized software programs. Other appraisers we spoke with were not as familiar with the programs as they could have been and therefore did not work as efficiently as they could have. We recommend additional training until the commission's appraisers are proficient in the programs. The commission should also insist that the appraisers use the programs.

**Recommendation 14:** To standardize and communicate its procedures, the Louisiana Tax Commission should prepare and continually update, as necessary, a formal manual of its policies and procedures that can be distributed to all field appraisers and assessors. Such documentation should at a minimum describe ratio study procedures and design. For its field appraisers, the Tax Commission should document all ratio study procedures it expects its appraisers to follow, including software instructions and record retention. The commission may wish to publish this manual on-line for the benefit of assessors and its own staff (see p. 34).

**Summary of Louisiana Tax Commission Response:** The Louisiana Tax Commission agrees with this recommendation. The commission has instructed its appraisal director to begin preparing a manual completely outlining the ratio study procedures and functions. The commission also says its procedures are written down in a memorandum following a management meeting.

**Legislative Auditor's Additional Comments:** We examined the contents of the meeting memorandum. It does not contain detailed procedural information.

**Matter for Legislative Consideration 1:** The legislature may wish to amend R.S. 47:1956 to specifically require that parish assessors submit electronic tax roll databases to the Tax Commission. If such a requirement is enacted, the legislature should consider a funding mechanism for the information systems (see p. 30).



**Matter for Legislative Consideration 2:** The legislature may wish to amend R.S. 47:1703 or 47:1703.1 to require that all applicants for homestead exemptions in all parishes furnish their social security numbers (see p. 30).

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## Tax Commission Is Not Using Available Computer Data

The Tax Commission has a database program that can import tax roll data from local assessors but is not using it. According to a vendor who serves assessors, some assessors have electronic tax rolls that could be imported and used to perform the ratio study calculations quickly and efficiently as well as identify duplicate homestead exemptions. But the commission does not require assessors to send tax roll data for three reasons. One, the commission has no formal management information system or information systems personnel. Two, management says it lost funding that could have been used for the database because the Tax Commission Expense Fund was dissolved last year. Three, all 70 assessors may not be willing or able to send their tax rolls electronically. As a result, the commission has not proceeded further with a statewide computerized database of tax rolls.

In 2000, the Tax Commission contracted with a software vendor to write a program that would import parish assessor data. According to the vendor who wrote the program, the commission now has the capability to import relational, searchable databases from the parishes. The database program contains spaces for items the commission would need for ratio studies such as a taxpayer I.D., date of sale, and square footage. The vendor wrote standardized coding definitions to make it easy to import data. However, the commission is not using the program and management did not appear to be familiar with its capabilities.

The Tax Commission has a local area network. Since it does not have an information systems employee on staff, an outside vendor monitors its network. If the commission plans to receive and maintain assessor tax roll databases, it would need to have certain standard management information systems procedures in place. These may include a systems manual, data security procedures, and program documentation. The commission has few of these procedures in place; in fact, the new software does not have a user's manual. Without such measures, the information system could not operate properly and the data would not be secure.

### **The Tax Commission faces obstacles in implementing the database.**

One obstacle to implementation is cooperation from assessors. Some parish assessors may be reluctant to send their tax roll data electronically. For example, the Tax Commission asks assessors to submit tax rolls on CD-ROMs. Currently, it receives tax roll reports on CD-ROMs from only 37 parishes, while the rest submit their reports on paper or microfiche. Orleans Parish's seven districts do not submit tax rolls to the commission at all. Nevertheless, state law (R.S. 47:1956) authorizes the commission to tell the assessors to submit rolls "according to a

method to be prescribed by it." Thus the commission could legally require the assessors to submit tax rolls in a database format. The reports it receives on CD-ROMs are not searchable and thus cannot be used for ratio study calculations.

Other parishes may not have the capability to send tax rolls electronically. The vendor who wrote the commission's program and one other vendor currently serve 45 of the 64 parishes. From conversations with these vendors, we can roughly estimate the costs of installing compatible tax roll software statewide at about \$10,000 - \$50,000 per parish. Some parishes already have this software. If a parish requires additional hardware such as a printer or server, costs may run about \$8,000 more. Once the right hardware and software are in place, programmers for each parish would simply have to write export routines to get the tax roll data to the Tax Commission.

Even if assessors do cooperate, system implementation may be difficult for the Tax Commission to fund. The commission lost its funding from the Tax Commission Expense Fund, which was dissolved by the legislature in 2001. As a result, system maintenance and other needs may not be funded. One of these needs is for additional hardware, which the vendor estimated at about \$5,000. Another need appears to be for personnel who are familiar with information systems.

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## Database May Detect Duplicate Homestead Exemptions

The state's constitution (Art. 7, Sec. 20) provides that each homestead used as a primary residence is entitled to a homestead exemption from state, parish, and special ad valorem taxes. Tax Commission management told us that they have seen or heard of taxpayers who take more than one. For example, a taxpayer may have a homestead exemption on his primary residence in one parish and another on his camp in a nearby parish. The commission does not compare taxpayer records across parishes because it does not have a centralized statewide tax roll database in which each Louisiana taxpayer is assigned a unique identifying number. Therefore, duplicate homestead exemptions are difficult for the commission to catch.

With a centralized database in which each individual has a unique number, such a comparison of taxpayer records across parishes is possible. The obvious choice for such a number is the taxpayer's social security number. However, an Attorney General's opinion (AGO 93-408) says that assessors may request, but not require applicants for homestead exemptions to disclose their social security numbers. Nevertheless, state law can be amended to require that applicants furnish social security numbers. R.S. 37:23 A. offers a precedent (emphasis added):

**“Each board or commission authorized to issue a license, permit, or certificate under this Title shall require each applicant to include his *social security number* on the application. Except as provided in Subsection B of**

**this Section, each board or commission shall maintain confidentiality of an applicant's social security number.”**

Such language could be added to R.S. 47:1703 or R.S. 47:1703.1, which are the statutes detailing requirements for homestead exemptions. If so, assessors must keep social security numbers private and exempt from public records disclosure. But they may share the numbers with their oversight body, the Louisiana Tax Commission. The computer program written for the commission has a space for a social security number. Therefore, if parish assessors submit their tax roll databases to the commission, the commission could run a check for duplicate homestead exemptions under a single social security number.

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### **Tax Commission May Allow More Time Than Necessary for Appraisal Portion of Fieldwork**

The Tax Commission expects its field appraisers to perform a minimum of 30 property appraisals per week. However, we observed them performing a substantial part of this process in less than one day. Depending upon the ease with which they can complete other parts of the process, this expectation could be too liberal. Thus, the appraisers may not be completing appraisals as efficiently as they could.

We observed the field appraisers performing actual appraisal work in the field for this year's residential improvements ratio study. They were able to complete the appraisal portion of this work, which consisted primarily of gathering information at the assessors' offices, then driving by and photographing more than 40 houses, in an average of half a day. The commission allows them about five days to appraise 30 properties. This equates to about two-and-a-half weeks for a small parish, three weeks for a medium-sized parish, and eight weeks for a large parish. However, the appraisers should typically use about three-and-one-half days out of each week to prepare appraisals and ratio studies like the one shown in **Appendix E**. Depending on the ease with which they can obtain data, the time periods based on the minimum expectation could be excessive.

The steps the appraisers told us they go through are listed in Exhibit 8 on the following page. These steps apply primarily to the residential studies done in 1997 and 2001, as well as the vacant land study done in 1999. For the commercial studies, appraisers physically inspect and measure each property. They then determine property values using commercial software.

<b>Exhibit 8</b>	
<b>Tasks Performed by Appraisers</b>	
1.	Select sales comparables at the assessor's office (These properties help establish a market value.)
2.	Analyze sales printout at assessor's office
3.	Get documentation to help locate property in rural parishes
4.	Calculate an average price per square foot
5.	Find, document the condition of, and photograph properties
6.	Collect property information on subjects at the assessor's office
7.	Complete desk work before submission to Tax Commission management: <ul style="list-style-type: none"> <li>• Download photographs of properties in the sample</li> <li>• Crop and paste photos into Microsoft Word</li> <li>• Perform commercial software estimates (if necessary)</li> <li>• Enter data into ratio study spreadsheet</li> <li>• Send completed ratio study packet to commission management for review</li> </ul>
8.	Complete desk work after review by Tax Commission management: <ul style="list-style-type: none"> <li>• Return to parish to get final assessments</li> <li>• Enter assessment data into ratio study spreadsheet</li> <li>• Send completed study back to management, who may pull outliers</li> </ul>
9.	Take ratio study results back to assessor
<b>Source:</b> Created by legislative auditor's staff from interviews with Tax Commission appraisers.	

As can be seen in the table above, some of these processes, such as the desk work steps, could be accomplished all at one time in a larger parish. As described in the previous section, the commission requires 200 - 250 samples for a larger parish. Based on our observations and appraisers' testimony, appraisers could complete steps 1, 2, 5, and 6 for 44 properties in about half a day. But based on the 30-appraisal-per-week benchmark, an appraiser may take up to eight weeks in a larger parish. Thus the 30 appraisal per week allotment may be too much, particularly in larger parishes.

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## Field Appraisal Staff Could Benefit From Tax Roll Database and Information Systems Personnel

When we observed the appraisers' work, they told us that they spend a significant amount of time looking up assessment data in parishes. If parishes have poorly organized tax rolls, looking up this information can delay their work. In addition, some of the appraisers appeared to be unfamiliar with the commission's basic software programs. Lack of familiarity with these programs can also impede their work. As previously mentioned, the commission has no centralized statewide tax roll database or information systems personnel. Such a database would help appraisers quickly gather the information they need for ratio studies. If the commission had a staff member to maintain this database, that person could also assist appraisers and management in ongoing computer training, as well as creating and maintaining basic spreadsheet programs to perform the ratio studies.

**Gathering data takes time.** Appraisers told us that the time the appraisal process takes varies from parish to parish depending upon the ease with which records can be located. What often takes the most time, they told us, is looking up data at the assessors' offices. These data include addresses, ownership, sale price and date, square footage, assessment, and other pertinent information about each property. Some assessors have up-to-date computer systems that make this process go quickly, while others do not. Complications in rural parishes such as increased driving time between properties and homes that do not have addresses add to the difficulty. Finally, the property tax freeze for citizens over 65 will be implemented at future reassessments. Thus, homes owned by senior citizens can no longer be used in ratio studies because these homes' assessments will probably not reflect their fair market values. Appraisers must identify and discard these properties from their samples.

If these data could be located more easily, the appraisal process could be completed more quickly. One way to accomplish this would be to have a copy of each parish's tax roll database available to each appraiser, as previously mentioned. That way, the appraisers could look up the information they need before beginning each ratio study. Since sales ratio studies such as the one done in 1998 require only the sale date, price, and assessment, they could be done without appraisers.

**Some appraisers need more computer training.** Difficulty in looking up information is only part of the problem. After the appraiser gathers information about properties, he or she must perform appraisal work using a computer. Appraisers use a cost estimation program, as previously discussed. They also use Microsoft Word and Excel to document appraisals and calculate ratios. We observed that some of the commission's field appraisers and supervisors are not as computer literate on these Microsoft programs as necessary. For example, a few of them are not familiar with Excel's ability to automatically calculate basic statistics.

In fact, one appraiser still does calculations by hand, which is time-consuming for him to produce and for his supervisors to review.

According to Tax Commission officials, all field staff are required to use computers to complete their work assignments. Although we were told that all field appraisers were required to attend Word and Excel courses, some were still not able to perform basic Microsoft functions in their everyday work. As a result, the commission's field appraisers may be spending more time than necessary to prepare their work assignments by computer.

A statewide computerized tax roll database would allow appraisers to quickly look up the basic data they need for ratio studies for all properties in each parish. The person who maintains this database could also design spreadsheets to perform ratio studies and be on hand to explain how to use them. However, the commission should not overlook the fact that appraisers would need to use the tax roll database frequently. Even now, without the database, they use computer programs. Thus the commission should provide adequate training for their appraisers in Word, Excel, and any database programs they use. Then they should insist that the appraisers use the computer programs. The IAAO strongly recommends that ratio studies be conducted using computers.

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## Tax Commission Does Not Formally Document Its Ratio Study Procedures

The Tax Commission does not document its procedures in a manual. State law requires the commission to prepare, issue, and periodically revise guides for local assessors. In addition, IAAO standards say that procedures for conducting ratio studies should be documented in an updated procedural manual available for inspection. Because it does not have such a manual, the commission cannot communicate its procedures consistently to assessors or its own staff. Ultimately, inconsistent instructions can lead to poor practices, inadequate documentation, and an inconsistent final work product from the field appraisers.

When we asked management for copies of any procedural manuals they had, they could produce only forms, letters, an employee manual, administrative rules and an appraisal manual dating from the 1960s. State law (R.S. 47:1837 D.2.) requires guides that include rules and regulations as well as appraisal manuals, special manuals and studies, cost and price schedules, news and reference bulletins, and annotated digests of property tax laws. IAAO standards specify that the manuals should describe ratio study design; data collection, confirmation, and screening procedures; adjustments for financing; and statistical calculations.

**Appraisers may be using poor practices because they have no formal policies to refer to.** We found indications of a poor practice that clear policies could help to remedy. While the Tax Commission's appraisers told us they work

closely with the assessors to correct poor uniformity, they may do so during the course of completing the ratio studies rather than after the studies are complete. Specifically, they may ask assessors to change a specific problem property, then use the corrected assessment in the ratio study. While it is desirable for assessors to correct problem assessments, the altered assessment should not appear in a ratio study. Good statistical practice requires that items in a sample not be changed during the course of a study. Altering sample items invalidates the sample. If the commission made this point clear to its appraisers, then they would be less likely to engage in this practice.

**Appraisers do not document all of their ratio study work.** Improved policy documentation could also result in better record-keeping. The commission's field appraisers do not maintain detailed working papers documenting the work they did and how they did it. For example, we found no documentation in the commission's files concerning how sample properties were selected for the studies. It is a good practice to maintain documentation of all work in case there are questions about the final work product. The commission requires only that the field appraisers send in their final appraisals and all of the ratios that they have run. Because the commission does not require that the field appraisers submit any detailed work, most of the field appraisers do not maintain such notes. If formal written procedure required them to submit these notes, then they would be likely to document their appraisals better.

**Appraisers' results using the same software can vary, resulting in an inconsistent product.** For the commercial property study and any parishes where there are few sales, appraisers are allowed to use a commercial software program to estimate the cost of a building. However, we observed that different inputs in this software can result in different values for the same property. For example, changing the quality score of one house and adding features such as a pool and porch raised its calculated value by 40%. However, the commission does not provide its appraisers with any documented guidelines for using this software that would make these inputs more consistent. As a result, the appraisers' work products could be inconsistent across the state.

In addition, some appraisers may be using this software when they should have been using sales to establish residential values. State law (R.S. 47:2321) defines fair market value as the normal price that would be agreed upon by an informed buyer and seller under usual and ordinary circumstances. What other homes recently sold for in a given area best establishes market value. While the commercial software is a good tool when enough sales are not available, it basically determines the price necessary to reconstruct a house based on the field appraiser's opinion of the quality, condition and effective age of the house. Nevertheless, the Orleans Parish appraiser is allowed to use this method, even though we found there were sufficient sales in the parish to allow him to develop market values for many neighborhoods. Another appraiser in North Louisiana had developed a method using what local sales he could find to trend this software

program's value to the market, which may be a good approach where there are not enough sales to develop a market price in each neighborhood.

**A manual is needed.** Field appraisers told us that they are trained on the job on office procedures. However, they work from their homes and most are not domiciled in Baton Rouge. Because appraisers are supervised from a distance, formal procedural documentation becomes even more important. Since the Tax Commission plans to have Internet access, management could post directives, rules, and procedural manuals on-line for its staff. They may also be able to develop their own website for this information.



# Appendix A

## Audit Scope and Methodology

# Appendix A: Audit Scope and Methodology

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We conducted this performance audit under the provisions of Title 24 of the Louisiana Revised Statutes of 1950, as amended. All performance audits are conducted in accordance with generally accepted government auditing standards as promulgated by the Comptroller General of the United States. Work on this audit began on April 11, 2001.

## Scope

This audit focused on the Louisiana Tax Commission's oversight of residential and commercial property taxation. More specifically, we concentrated our work on annual ratio studies, which the commission conducts to measure the level and uniformity of parish property tax assessments. The objectives of this audit were to determine if the commission's annual ratio studies help to ensure that residential and commercial property taxes are equitably assessed and to determine if the commission could make administrative changes to improve its oversight of assessors.

## Methodology

To gain an understanding of the laws, rules and procedures that govern the Louisiana Tax Commission, we completed the following procedures:

- Reviewed the Louisiana State Constitution, Louisiana Revised Statutes, administrative rules, attorney general opinions, and court cases related to the commission, assessors, and the assessment process
- Reviewed the executive budgets and appropriations acts for fiscal years 2000-2001 and 2001-2002, the operational plans in the budget request packet for fiscal year 2001-2002, and the strategic plan for fiscal years 1998-1999 through 2002-2003
- Reviewed outside literature relating to the commission and assessment process such as newspaper and Internet articles, other states' and associations' studies, and previous audit reports by the Performance Audit Division of the Office of the Legislative Auditor
- Interviewed commission officials concerning departmental background and standard procedures

To determine if the Louisiana Tax Commission performs ratio studies according to established best practices, we performed the following procedures:

- Reviewed and analyzed best practice standards (*Standard on Ratio Studies*) for conducting ratio studies set by the International Association of Assessing Officers (IAAO), which the commission says it uses and follows (*These standards are guidelines that represent a consensus in the assessing profession. They are*

*intended to provide a systematic means by which concerned assessing officers can improve and standardize the operation of their offices.)*

- Consulted a 2001 study of ratio study practices published by the Florida Department of Revenue to determine whether other states and Canadian provinces followed certain IAAO guidelines
- From this information, constructed benchmarks for measuring the ratio studies and developed questions to ask commission staff and management
- Selected six sample parishes for which to examine ratio studies based on parish size, performance in the sales ratio study, and geographic dispersion
- Conducted personal and telephone interviews with commission management concerning the general policies and practices for conducting each type of ratio study
- Extensively interviewed four of the commission's field appraisers and three of its field appraisal supervisors to document the specific procedures for conducting and completing ratio studies
- Visited with three commission appraisers while in the field and:
  1. Observed the different practices and activities involved in completing a ratio study
  2. Recorded each activity performed and the time spent to complete each
  3. Compared our findings to the time required by commission management
- Collected and electronically re-created annual ratio studies and results for six sample parishes from commission files for the ratio studies the Tax Commission conducted in 1997, 1998, 1999, and 2000
- Conducted statistical tests on the ratio studies for each sample parish in the four years described above according to IAAO standards and compared our ratio study results to the commission's results

We determined whether the Louisiana Tax Commission can identify and control for duplicate homestead exemptions by doing the following:

- Asked commission management and field appraisers if duplicate homestead exemptions occur and how they detected them
- Determined, from the state constitution, laws, and attorney general opinions, under what circumstances a homeowner is entitled to homestead exemption and obtained an opinion from the Office of the Legislative Auditor's general counsel

To document and illustrate the general effects on taxpayers as well as parish and state governments when the Louisiana Tax Commission identifies inequitable property tax distributions and/or incorrect levels of assessment, we performed the following procedures:

- Obtained biennial reports from the commission and quantified the total assessed value of residential and commercial property in the state for the latest year available and what local taxes are used for
- Reviewed the state constitution and relevant laws and interviewed staff of the Office of the Legislative Auditor to determine what happens to tax rates and revenues when higher tax assessment levels are identified
- Documented state law and obtained an opinion from the Office of the Legislative Auditor's general counsel to determine the commission's enforcement authority when it identifies incorrect levels of assessment or non-uniformity of assessment
- Used a simulation model developed by legislative staff to illustrate the effect of parishes achieving different levels of assessment on the Minimum Foundation Formula
- Reviewed the state constitution, laws, and administrative rules to ascertain what Louisiana's legal framework provides with respect to the four-year reassessment window and how the timing of this window would affect the commission's testing for selective reappraisal

#### Other Work Performed

We performed various other procedures that we considered necessary to address the audit objective. These procedures included data collection, interviews, and analyses. From these procedures and the work previously described, we identified ways the Tax Commission can improve administratively.



## Appendix B

# Homestead Exemptions in Louisiana

## Appendix B: Homestead Exemptions in Louisiana

Percentage of Louisiana Homesteads by Parish 100% Exempted From Property Taxation in 1996-1999:				
Parish	1996	1997	1998	1999
Acadia	86%	85%	84%	83%
Allen	94%	94%	93%	93%
Ascension	79%	77%	75%	73%
Assumption	90%	89%	88%	87%
Avoyelles	89%	88%	88%	88%
Beauregard	88%	87%	86%	85%
Bienville	97%	97%	97%	96%
Bossier	65%	65%	64%	64%
Caddo	78%	77%	76%	76%
Calcasieu	73%	74%	73%	73%
Caldwell	90%	91%	91%	91%
Cameron	87%	87%	87%	86%
Catahoula	91%	91%	91%	91%
Claiborne	91%	91%	91%	90%
Concordia	91%	91%	91%	91%
DeSoto	91%	90%	90%	89%
East Baton Rouge	58%	58%	56%	55%
East Carroll	91%	91%	91%	91%
East Feliciana	92%	92%	84%	77%
Evangeline	85%	85%	84%	84%
Franklin	91%	90%	90%	90%
Grant	94%	94%	93%	92%
Iberia	85%	84%	84%	83%
Iberville	90%	90%	89%	87%
Jackson	92%	92%	91%	90%
Jefferson	61%	60%	59%	58%
Jefferson Davis	88%	87%	86%	85%
Lafayette	71%	71%	70%	69%
Lafourche	83%	83%	81%	80%
LaSalle	95%	95%	95%	94%
Lincoln	78%	77%	75%	75%
Livingston	86%	85%	83%	81%
Madison	89%	89%	89%	89%
Morehouse	86%	85%	85%	85%
Nachitoches	80%	80%	79%	79%

<b>Percentage of Louisiana Homesteads by Parish 100% Exempted From Property Taxation in 1996-1999: (Continued)</b>				
<b>Parish</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
Orleans 1 <sup>st</sup> District	80%	81%	80%	70%
2 <sup>nd</sup> District	39%	38%	37%	32%
3 <sup>rd</sup> District	82%	81%	80%	78%
4 <sup>th</sup> District	66%	66%	65%	60%
5 <sup>th</sup> District	62%	61%	60%	59%
6 <sup>th</sup> District	38%	38%	37%	34%
7 <sup>th</sup> District	58%	57%	57%	52%
Subtotal	67%	66%	65%	63%
Ouachita	78%	77%	77%	76%
Plaquemines	70%	70%	69%	68%
Pointe Coupee	80%	80%	79%	78%
Rapides	82%	81%	80%	80%
Red River	89%	89%	89%	89%
Richland	90%	89%	89%	89%
Sabine	88%	87%	87%	87%
St. Bernard	88%	86%	85%	84%
St. Charles	63%	62%	60%	58%
St. Helena	89%	89%	89%	89%
St. James	94%	93%	92%	90%
St. John	84%	82%	80%	79%
St. Landry	86%	86%	85%	83%
St. Martin	87%	89%	88%	87%
St. Mary	91%	90%	90%	90%
St. Tammany	52%	51%	41%	38%
Tangipahoa	81%	80%	79%	78%
Tensas	89%	89%	89%	88%
Terrebonne	80%	79%	79%	78%
Union	87%	87%	86%	87%
Vermilion	82%	82%	81%	80%
Vernon	92%	91%	91%	91%
Washington	95%	95%	95%	94%
Webster	94%	94%	94%	93%
West Baton Rouge	66%	65%	64%	64%
West Carroll	89%	89%	88%	88%
West Feliciana	71%	69%	68%	65%
Winn	94%	94%	94%	93%
<i>Statewide Average</i>	<i>76%</i>	<i>75%</i>	<i>74%</i>	<i>72%</i>

**Source:** Table 44 - Louisiana Tax Commission Biennial Reports, 1996-1997 and 1997-1998.



# Appendix C

## Ratio Study Statistics

# Appendix C: Ratio Study Statistics

	<b>Median</b>	<b>COD</b> (Coefficient of Dispersion)	<b>PRD</b> (Price-Related Differential)
<b>What It Measures</b>	Level of assessment	Uniformity of assessment	Whether assessments may be biased in favor of low-valued or high-valued properties
<b>How It Is Calculated</b>	Determine the middle value in a list of numbers arranged in order. If there is an even number of ratios, the median is the average of the two middle ratios.	Calculate based on the difference between each sample ratio and the median. Compute the absolute value of the difference in each individual ratio and the median. Add them. Divide by the number of ratios in the sample, then divide by the median and multiply by 100.	Divide the mean (average value) by the weighted mean. To get the weighted mean, add all the assessed values and all the appraised values. Divide the sum of assessments by the sum of appraisals.
<b>IAAO's Target Range for Ratio Studies</b>	Within +/- 10% of required level of assessment: <ul style="list-style-type: none"> <li>• 9% - 11% residential and vacant land</li> <li>• 13.5% - 16.5% commercial</li> </ul>	<ul style="list-style-type: none"> <li>• 20% or less for rural residential and vacant land</li> <li>• 15% or less for other residential (10% or less if properties are new or fairly similar)</li> </ul>	<ul style="list-style-type: none"> <li>• .98 to 1.03</li> </ul>
<b>Does the Tax Commission Use It?</b>	Yes	Yes	No
<b>Do Other States Use It?</b>	Yes—this is IAAO's recommended measure of appraisal level.	52% of respondents to Florida's 2001 ratio study practices survey do.	24% of respondents to Florida's 2001 ratio study practices survey do.
<b>Improvements the Tax Commission Can Make</b>	Calculate this statistic for each component of the sample (neighborhoods).	Lower passing non-rural residential COD to 15%. Incorporate COD levels into administrative rules.	Calculate and report this statistic. Follow up with more powerful tests if bias is indicated.*
<p><b>*Statistical tests to follow the PRD:</b> The PRD can indicate if bias may exist but not how significant it is. To determine the significance of any bias, use more powerful tests such as Spearman rank test correlation or regression analysis.</p> <p><b>Source:</b> Created by legislative auditor's staff from a 2001 Florida Department of Revenue Ratio Study Practices Study, <i>IAAO Standard on Ratio Studies</i>, and <i>Mass Appraisal of Real Property</i> by R. Gloudemans.</p>			



# Appendix D

## Results for Sample Parishes

## Appendix D: Results for Sample Parishes

Parish	Median	Coefficient of Dispersion (COD)	Price Related Differential (PRD)
<b>Franklin</b>			
1997	9.72%	12.22%	1.04
1998	9.50%	16.62%	1.05
1999	10.00%	9.69%	1.01
2000	14.78%	6.01%	0.97
<b>Iberia</b>			
1997*	8.80%	15.62%	1.01
1998	10.00%	1.47%	1.00
1999	10.00%	17.96%	1.00
2000	15.80%	19.13%	1.03
<b>LaSalle</b>			
1997	9.83%	7.63%	1.00
1998	10.00%	1.96%	1.01
1999	10.20%	14.70%	1.06
2000	14.19%	10.57%	0.99
<b>Orleans 3rd</b>			
1997	9.90%	11.04%	1.01
1998	10.00%	2.48%	1.01
1999	9.43%	19.88%	1.01
2000	15.24%	15.91%	1.01
<b>Ouachita</b>			
1997	9.15%	7.77%	0.99
1998	9.17%	13.79%	1.02
1999	10.00%	9.58%	1.00
2000	14.31%	15.43%	0.97
<b>Vernon</b>			
1997	10.13%	5.32%	1.00
1998	9.10%	9.81%	1.00
1999	10.90%	19.07%	0.91
2000	14.06%	11.04%	0.97

\*All results from the 1997 study of Iberia Parish apply to the original study before reappraisal.

**Source:** Calculated by legislative auditor's staff from the Tax Commission's ratio studies.



# Appendix E

## Sample Ratio Study

# Appendix E: Sample Ratio Study

#	Assessment	Appraised Value	Ratio	Absolute Deviation from the Median
1	\$2,450	\$37,000	6.6%	2.9%
2	5,290	79,000	6.7%	2.8%
3	1,720	25,000	6.9%	2.6%
4	5,630	81,000	7.0%	2.6%
5	4,640	65,000	7.1%	2.4%
6	5,050	70,000	7.2%	2.3%
7	2,220	30,000	7.4%	2.1%
8	7,090	91,500	7.7%	1.8%
9	5,910	73,250	8.1%	1.4%
10	4,560	55,000	8.3%	1.2%
11	5,210	62,500	8.3%	1.2%
12	3,120	37,200	8.4%	1.1%
13	1,910	22,250	8.6%	0.9%
14	5,300	60,000	8.8%	0.7%
15	2,490	28,000	8.9%	0.6%
16	3,330	37,000	9.0%	0.5%
17	6,860	75,000	9.1%	0.4%
18	4,860	53,000	9.2%	0.3%
19	3,130	33,200	9.4%	0.1%
20	5,400	57,000	9.5%	0.0%
21	7,150	75,000	9.5%	0.0%
22	1,090	11,400	9.6%	0.1%
23	2,400	25,000	9.6%	0.1%
24	2,920	30,000	9.7%	0.2%
25	1,990	20,000	10.0%	0.4%
26	1,710	17,110	10.0%	0.5%
27	3,110	31,000	10.0%	0.5%
28	1,050	10,000	10.5%	1.0%
29	3,110	29,000	10.7%	1.2%
30	6,070	55,000	11.0%	1.5%
31	2,230	20,000	11.2%	1.6%
32	3,270	27,500	11.9%	2.4%
33	1,270	10,500	12.1%	2.6%
34	3,170	26,000	12.2%	2.7%
35	7,360	60,000	12.3%	2.8%
36	4,850	39,000	12.4%	2.9%
37	3,590	28,520	12.6%	3.1%
38	3,350	23,900	14.0%	4.5%
39	4,502	30,000	15.0%	5.5%
40	4,200	24,000	17.5%	8.0%
<b>Sum of absolute deviations &gt;</b>				69.5%

**Mean = 9.85%**  
**Median = 9.50%**  
**COD = 18.29%**

*Individual ratios*

*Break point*

Source: Compiled by legislative auditor's staff based on ratio studies performed by the Tax Commission.





# Appendix F

## Administrative Rule 303 of Title 61 Part V

# Appendix F: Administrative Rule 303 of Title 61 Part V

## §303. Real Property

- A. In making appraisals of residential, commercial and industrial land and improvements, the assessors shall use the three nationally recognized approaches to value, those being cost, income and market, where each is applicable.
1. When applying the cost approach, each assessor shall be responsible for obtaining and keeping an updated (1) Residential Cost Handbook and (2) Marshall Valuation Service, published by Marshall and Swift, and shall use the building cost index and local multipliers as of the assessment valuation date.
  2. The market approach may be used in appraisals of improvements and/or land. The income approach may be used in appraisals of improvements and/or land in use. The cost approach may be used only in appraisals of improvements.
- B. The following procedure shall be used for assessing, listing and placing transferred property and property upon which improvements have been made after the date of the reappraisal as set by the Louisiana Tax Commission:
1. Improvements shall be added to the rolls on January 1 following the year the improvements are completed (except Orleans Parish, which shall be on August 1, following the year the improvements are completed). Value of the improvements will be indexed to the date of the last reappraisal.
  2. The assessor may reappraise property based on property transfers more often than every four years, if transfers indicate that property in all or a part of the assessing district, or within a certain classification, was appraised inaccurately or was not uniformly appraised during the prior reappraisal. However, the reappraisal shall not be applied on a parcel by parcel basis, but rather, across the board in a given geographical area. Values determined from recent transfers would then be indexed to the date of the last reappraisal.
- C. The Louisiana Tax Commission has ordered all property to be reappraised in all parishes for the 2000 tax year. Property is to be valued as of January 1, 1999, in Orleans Parish the same as applies to property in all other parishes.
- D. The annual ratio studies of the Tax Commission will be indexed to the date of the last reappraisal.

AUTHORITY NOTE: Promulgated in accordance with R.S. 47:1837 and R.S. 47:2323.

HISTORICAL NOTE: Promulgated by the Louisiana Tax Commission, LR 7:44 (February 1981), amended by the Department of Revenue and Taxation, Tax Commission, LR 9:69 (February 1983), LR 12:36 (January 1986), LR 13:764 (December 1987), LR 16:1063 (December 1990), LR 17:611 (June 1991), LR 21:186 (February 1995), amended by the Department of Revenue, Tax Commission, LR 25:312 (February 1999).



# Appendix G

## Glossary

# Appendix G: Glossary

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**Appraisal.** The act of estimating the money value of property.

**Appraiser.** One who estimates the money value of property.

**Assessment.** The official act of discovering, listing, and appraising property, whether performed by an assessor, a board of review, or a court. Also, the value placed on property by this act.

**Assessor.** The elected head of an assessment jurisdiction whose duty is to enumerate, list and assess property. Louisiana has 70 parish assessors—7 for Orleans Parish and one each for each of the remaining 63 parishes.

**CD-ROM** (compact disc read-only memory). A compact disc containing data that can be read by a computer.

**Coefficient of dispersion** (COD). The average percentage deviation from the median ratio. It measures the uniformity (equity) of property tax assessment within a parish.

**Convenience Sampling.** Sampling items that are convenient to obtain.

**Homestead.** According to the state constitution, property consisting of a tract of land or two or more tracts of land with a residence on one tract and a field, pasture, or garden on the other tract or tracts, not exceeding 160 acres; also, a primary residence.

**International Association of Assessing Officers** (IAAO). A nonprofit professional association founded in 1934 that provides leadership in accurate property valuation, tax administration, and tax policy throughout the world. Its members consist of government employees in property valuation, tax administration or tax policy, or persons in organizations whose primary business is professional services in support of government jurisdictions.

**Improvement.** A change or addition that improves or adds value to a property.

**Index.** A number derived from a formula used to indicate what other values should be.

**Level (of assessment).** The parish's overall ratio of assessed values to market values.

**Mean.** The average of a group of numbers. It is calculated by adding all the values of a variable and dividing by the number of values. It measures central tendency.

**Median.** The value of the middle item in an uneven number of items arranged or arrayed according to size. If there are two central items, it is the arithmetic average of the two central items. It also measures central tendency. The Louisiana Tax Commission uses the median in calculating a parish's level of assessment.

**Minimum Foundation Program (MFP) formula.** In Louisiana, determines state funding to public schools based on parishes' student populations and relative wealth as measured by sales and property tax collections.

**Outlier.** An observation that has an unusual value that differs markedly from the measure of central tendency.

**Population.** In statistics, the entire set of items from which a sample is drawn.

**Price-Related Differential (PRD).** The mean divided by the weighted mean. It indicates whether assessments may be progressive or regressive.

**Procedural audit.** A review of appraisal and assessment procedures including a review of documentation and procedures as well as actual appraisal results.

**Progressive.** Appraisals are progressive when high-valued properties are appraised higher than low-valued properties in relation to their market values.

**Ratio study.** A study of the relationship between appraised or assessed values and market values. Of common interest in ratio studies are the level and uniformity of property appraisals or assessments.

**Regressive.** Appraisals are regressive when high-valued properties are appraised lower than low-valued properties in relation to market values.

**Representative.** When statistics calculated from a sample can be expected to illustrate the characteristics of an entire population, the sample is representative.

**Sample.** An entity representative of a class; a set of elements drawn from and analyzed to estimate the characteristics of a population.

**Sampling.** The process of selecting a sample.

**Selective reappraisal (sales chasing).** The practice of adjusting assessed values on properties that sell but not on properties that do not sell.

**Uniformity.** The degree to which different properties are assessed at equal percentages of market value.

# Appendix H

## Response of the Louisiana Tax Commission





# Louisiana Tax Commission

M. J. "MIKE" FOSTER, JR.  
Governor

MALCOLM B. PRICE, JR.  
Chairman

BATON ROUGE OFFICE  
P.O. BOX 66788  
BATON ROUGE, LA 70896

January 22, 2002

Dr. Daniel G. Kyle, PH.D., CPA, CFE  
Legislative Auditor  
1600 North Third Street  
Post Office Box 94397  
Baton Rouge, LA 70804-9397

Dear Dr. Kyle:

Responding to your Performance Audit Report and recommendations for the Louisiana Tax Commission.

Basically we agree or partially agree with the recommendations included by your staff in the LTC's Audit Report.

Listed below are incorrect statements we feel have been noted in the Legislative Audit Report.

1. The Audit Report states that neither the assessors nor the Tax Commission wants to be responsible for calculating the index to value properties back to the assessment date. While the Administrative Rules may not say specifically who is to calculate this value, it is certainly the assessor's responsibility as it would be too great a task for the Tax Commission to determine.
2. It was stated in the report that requiring 30 appraisals per week allows too much time for appraisals to be completed. Depending on the type of study being done and in which parish, the 30 appraisals per week could be high or low. This expectation is a minimum amount. If the appraiser is able he can certainly do more than this.
3. The audit mentions that all appraisers be trained on the software used in the ratio studies. All of the appraisers have been trained on the various software by both, a local computer training company and representatives of Marshall and Swift. As of yet, no appraiser has been unable to complete a ratio study due to not understanding how to use the software.

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01/22/02 11:06 AM  
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BATON ROUGE, LA 70804

4. It is stated in the audit that there are no written procedures for conducting ratio studies. While there is no formal manual for explaining ratio study procedures, Louisiana Tax Commission management meet in November/December to discuss the next year's ratio study and the procedures to be followed for that ratio study. These procedures are written down by the supervisors and given to the appraisers in writing through their monthly assignment.

The following are our responses to your recommendations that we partially agreed with or had a comment regarding the recommendation:

Recommendation 3: Due to personnel shortage the commission is unable to audit the assessor's office as often as we would like.

Recommendation 6: We felt as though we were keeping proper records. However, this recommendation will be studied and complied with.

Recommendation 8: During our Rules and Regulations process this fall the commission will be discussing and making an effort to affirm the lowering of the C.O.D. on residential property from 20% to 15%.

Recommendation 10: As time permits the LTC will be comparing previous year's Ratio Study to the present study.

Recommendation 13: The entire appraisal staff has received computer skills training and will continue to do so.

Listed below are the changes that will occur as a result of your audit findings.

A. In the very near future the LTC will be holding our Rules and Regulations hearings. During this process we will amend our rules to make it the assessor's responsibility to calculate the indexing of properties back to the assessment date.

B. The LTC will be taking an in depth look at the entire Ratio Study process. In the future all ratio studies will have a completion date, and unless in our discussion with the various assessors we find errors, the ratio studies will stand as first submitted.

C. I have instructed Raymond Foster, Director of Appraisals, to begin preparing a manual that will completely outline the Ratio Study procedures and functions.

D. I have instructed all department heads (Appraisal, Public Service and Audit), to make a concerted effort to ensure that all personnel under their supervision adheres to a more rigid work week. This is to be followed by a monthly production report to their director.

Page 3  
January 22, 2002

As a general note, we have begun to cross train and integrate our Public Service and Audit Division with management realignment of same.

I am enclosing your recommendations as part of this letter with our response.

I would like to personally thank your staff for their kindness, as well as, their professionalism and business like attitude during this audit process.

If I can be of further assistance please call.

Sincerely,

A handwritten signature in black ink, appearing to read "Malcolm B. Price, Jr.", written in a cursive style.

Malcolm B. Price, Jr.  
Chairman

Enclosures  
MBP:tc

**Office of the Legislative Auditor – Performance Audit Division  
Checklist for Audit Recommendations**

**Instructions to audited agency:** Please check the appropriate box below for each recommendation. A summary of your response for each recommendation will be included in the body of the report. The entire text of your response will be included as an appendix to the audit report.

RECOMMENDATION(S)	AGREE	PARTIALLY AGREE	DISAGREE
<p><b>Recommendation 1:</b> To ensure that parish assessors are appraising houses that sell the same as those that do not, the Tax Commission should annually test for selective reappraisal of sold properties. The commission can compare changes in sold and unsold parcels to discern whether sold parcels have been selectively reappraised. Alternatively, it could choose other statistical sampling techniques. If it finds that properties have been selectively reappraised, then it should adjust ratio studies before they tell the parish assessor to reappraise property.</p>	Agree		
<p><b>Recommendation 2:</b> To prevent selective reappraisal, the Tax Commission should rewrite its Administrative Rule 303 to clarify whether property transfers (sales) should be captured on the tax rolls immediately. The rule should also clarify whether the assessor must (see p. 12):</p> <ul style="list-style-type: none"> <li>▪ Reappraise the entire geographic area within the same year. The rule should also provide guidelines to determine:</li> <li>▪ The boundaries of such a geographic area</li> <li>▪ What level of sales activity would trigger the reappraisal of an entire area</li> <li>▪ If reappraisal is not possible, index the newly captured values back to the date of the last reappraisal. The rule should define precisely:</li> <li>▪ Who is responsible for formulating the index</li> <li>▪ How the index should be developed and applied</li> </ul>	Agree		

RECOMMENDATION(S)	AGREE	PARTIALLY AGREE	DISAGREE
<p><b>Recommendation 3:</b> So that it can help assessors prevent inequitable assessment, the Louisiana Tax Commission should attempt to determine and document the cause of any significant assessment problems they identify in ratio studies. The commission should ensure that the assessors' original assessments, rather than any changes made during the course of ratio studies, are included in the final results. It should consider conducting procedural audits of parish assessors to determine why any assessment problems exist. The commission's methods for conducting such audits should be formally documented. In addition, the commission should consider conducting formal training for parish assessors regarding ratio studies.</p>		Partially Agree	
<p><b>Recommendation 4:</b> To ensure that its ratio study samples are not biased, the Louisiana Tax Commission should institute and document a sampling procedure for its ratio studies. The commission should draft a procedure that ensures that properties selected will represent the property values that the parish contains.</p>	Agree		
<p><b>Recommendation 5:</b> So that it can properly measure the overall level of assessment in a parish, the Louisiana Tax Commission should use only the original assessments provided by the parish assessor in the year of the study. While it is the commission's right and responsibility to ask assessors to correct assessments that do not reflect fair market value, it should not use revised assessments in ratio studies.</p>	Agree		
<p><b>Recommendation 6:</b> To ensure that sample items that could affect whether a parish passes or fails its ratio studies are not discarded, the Louisiana Tax Commission should promulgate a procedure for researching, then trimming statistical outliers. The procedure should be formally documented and should not be arbitrary. The commission should keep records documenting which properties in any sample were pulled and why.</p>		Partially Agree	
<p><b>Recommendation 7:</b> So that it can tell parish assessors where pockets of overassessment or underassessment are, the Louisiana Tax Commission should calculate the median ratio of each neighborhood sample, then compare that ratio to the parish median. Commission representatives should point out to parish assessors areas or neighborhoods whose level of assessment differs by</p>	Agree		

RECOMMENDATION(S)	AGREE	PARTIALLY AGREE	DISAGREE
more than 5% from the parish level.			
<p><b>Recommendation 8:</b> So that it can better measure whether parish assessors have been fair in assessing residential property, the Louisiana Tax Commission should lower the measure of fairness it uses—the coefficient of dispersion (COD)—requirement for non-rural residential property from 20% to 15% in accordance with the IAAO’s recommendations. The commission should also promulgate administrative rules setting up benchmark COD levels to satisfy uniformity requirements in order to clarify what these fairness standards are.</p>	Agree		
<p><b>Recommendation 9:</b> So that it can point out where bias in favor of low- or high-valued properties may exist, the Louisiana Tax Commission should calculate the price-related differential (PRD). Because this statistic indicates only that bias toward low or high-valued properties may exist, the commission should follow up on any indications of bias by using more powerful statistical tests.</p>	Agree		
<p><b>Recommendation 10:</b> So that it can better communicate their ratio study results, the Louisiana Tax Commission should include, in addition to the information it publishes already, the following in the annual reports of its appraisal division.</p> <ul style="list-style-type: none"> <li>▪ Definitions of key terms such as appraisal level and uniformity</li> <li>▪ An objective statement of results</li> <li>▪ The procedural steps used in conducting the studies</li> <li>▪ Its sampling methodology, particularly the period selected for sales samples, the number of properties in each neighborhood, the number of sales in the parish in the period selected, and the number of sales actually used in the study</li> <li>▪ The rules for eliminating outlier ratios</li> <li>▪ The price-related differential (PRD)</li> </ul>		Partially Agree	

RECOMMENDATION(S)	AGREE	PARTIALLY AGREE	DISAGREE
<ul style="list-style-type: none"> <li>▪ A comparison of results with previous studies</li> <li>▪ Data displays such as frequency distributions, histograms, line charts, schematics and maps to illustrate study results</li> </ul>			
<p><b>Recommendation 11:</b> To more efficiently perform ratio studies, the Louisiana Tax Commission should pursue implementation of its electronic tax roll database. When it is fully implemented, the commission should use this database to conduct its annual ratio studies. If the commission plans to receive and maintain assessor tax roll databases, it should establish some procedures and practices common to standard management information systems. These may include a systems manual, data security procedures, program documentation, and properly trained personnel.</p>	Agree		
<p><b>Recommendation 12:</b> To more effectively use staff time, the Louisiana Tax Commission should evaluate whether its expectation of 30 appraisals per week allows its appraisers more time than they actually need.</p>	Agree		
<p><b>Recommendation 13:</b> To ensure that assignments are completed quickly and accurately, the Louisiana Tax Commission should require that all field appraisers have the basic and intermediate computer skills necessary to complete all work assignments. The commission should provide adequate training for the appraisers on any software programs it expects its appraisers to use.</p>		Partially Agree	
<p><b>Recommendation 14:</b> To standardize and communicate its procedures, the Louisiana Tax Commission should prepare and continually update, as necessary, a formal manual of its policies and procedures that can be distributed to all field appraisers and assessors. Such documentation should at a minimum describe ratio study procedures and design. For its field appraisers, the Tax Commission should document all ratio study procedures it expects its appraisers to follow, including software instructions and record retention. The commission may wish to publish this manual on-line for the benefit of assessors and its own staff.</p>	Agree		