INDIANA FISCAL POLICY INSTITUTE SINCE 1987

INFORMATION BRIEF # 2

March 2007

How Much Government Do We Have in Indiana?
By Mark D. Brown

In Indiana, local government exists only at the behest of the State Constitution and Statute. The Constitution creates the following County Officers, who shall be elected: Clerk of the Circuit Court, Auditor, Recorder, Treasurer, Sheriff, Coroner, and Surveyor.[1] The Constitution also provides for the General Assembly to prescribe by law "such other county and township officers as may be necessary."[2]

The other offices include the County Councils, Commissioners, and Assessors and Township Trustees, Assessors, and Boards. Municipalities are also created by the State and elected offices in cities and towns include mayors, city councils, and clerks. In addition, the General Assembly over the years has created a groaning (no, that is not a typo) number of "special" governmental districts that provide services to municipalities, counties, or multi-county regions.

The impact, since 1851, of the Constitution and the nearly 1,500 pages of statute in Title 36: Local Government – not to mention the statutes applicable to local governments in other Titles – is a very large number of locally elected officials, local governmental units, boards, authorities, districts, and other structures, the vast majority of which are able to levy property taxes.

Table 1 compares selected local government units in Indiana with those in states of similar population. The 11 states in Table 1 are those with populations between 4.5 million and 7.4 million, with Indiana's population in 2002 being 6.2 million.

Indiana Among States of Similar Size
Ranked by Number of Local Governments

State	Total	State	Sub-county	State	Townships	State	Municipalities
Minnesota	3,137	Minnesota	2,647	Minnesota	1,793	Missouri	946
Missouri	2,886	Wisconsin	1,850	Wisconsin	1,265	Minnesota	854
Indiana	2,792	Indiana	1,575	Indiana	1,008	Wisconsin	585
Wisconsin	2,606	Missouri	1,258	Missouri	312	Indiana	567
Colorado	1,746	Massachusetts	351	Massachusetts	306	Tennessee	349
Washington	1,491	Tennessee	349	Tennessee	0	Washington	279
Tennessee	916	Washington	279	Colorado	0	Colorado	270
Massachusetts	759	Colorado	270	Virginia	0	Virginia	229
Virginia	520	Virginia	229	Washington	0	Maryland	157
Arizona	407	Maryland	157	Maryland	0	Arizona	87
Maryland	265	Arizona	87	Arizona	0	Massachusetts	45

Source: U.S. Census Bureau[3]

Excluding public schools, locally elected judges and prosecutors, Hoosiers elect over 10,300 local officials.[4] These 10,000 elected offices lead and manage – sometimes through appointed administrators – 2,792 general purpose and special district governments. Of these, 2,076 exercised property taxing authority in recent years.[5]

Indiana has the third most local governments of the 11 states. It also has the third most sub-county governments (townships and municipalities combined) and the third most townships. Indiana has the fourth most municipalities. Only five of the 11 states utilize the township form of government. Similarly sized states in all regions of the country - the east, west, north, south, and Midwest - all have fewer governments than Indiana.

Number of Governmental Units in Indiana and Number per 1,000 Population Rank among 50 States				
Local Government Type	Number	Rank	per 1,000 Population	Rank
Total - All Types	2,792	9	0.5	16
Sub-County	1,575	9	0.25	10
Municipalities	567	12	0.09	21
Townships	1,008	9	0.16	10
Special District	1,125	11	0.18	19

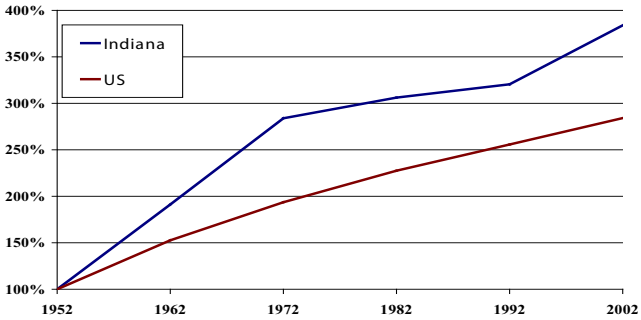
Source: U.S. Census Bureau, IFPI Calculations.

Of course, there are 50 states of all sizes. When comparing Indiana to all 50, one finds that Indiana ranks consistently between about 10th and 20th both in terms of the number of governments and the number of governments relative to population. Indiana has the ninth most townships among the 50 states and the 10th most townships relative to population.

A special note on Special Districts: The Census Bureau defines special district governments as "independent, special purpose governmental units that exist as separate entities with substantial administrative and fiscal independence from general purpose local governments." They provide specific services that are not being supplied by existing general-purpose governments.[6]

Special districts increased in Indiana from 293 in 1952 to 1,125 in 2002, about a four-fold increase. During the same period for the 50 states combined, the number of special districts increased from 12,340 in 1952 to 35,052 in 2002, or about a three-fold increase. In Indiana, the large number of general purpose governments has not obviated the need to create special districts at a rate 30 percent faster than the rest of the states.

Increase in Special Government Districts
Indiana and U.S. - 1952 to 2002



Source: U.S. Census Bureau, IFPI Calculations.

Perhaps it is time for State Government to revisit the need for over 10,000 separately elected officials operating and managing nearly 2,800 separate governments, of which 2,076 levy property taxes. Surely, as a State, we would not design local government this way if we started with a clean slate today, in 2007.

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1. Constitution of Indiana, Article 6, Section 2.
2. Ibid, Article 6, Section 3.
3. Most of this data is well known and easily obtainable. However, the numbers of elected officials serving on town boards is not kept on a statewide basis. IFPI staff obtained this information via a telephone conversation with the Indiana Association of Cities and Towns.
4. U.S. Census Bureau, 2002 Census of Governments, Volume 1, Number 1, Government Organization, GC02(1)-1, U.S. Government Printing Office, Washington, DC, 2002. Population numbers obtained from Table 1: Annual Estimates of the Population for the United States, Regions, and States and for Puerto Rico: April 1, 2000 to July 1, 2006 (NST-EST2006-01) Source: Population Division, U.S. Census Bureau Release Date: December 22, 2006.
5. Of course, the property tax issue is even more complex than stated here. The judicial system and state government (through the Family and Childrens' Fund) impose property taxes indirectly. But that is for another analysis.
6. U.S. Census Bureau, 2002 Census of Governments, Volume 1, Number 1, Government Organization, GC02(1)-1, U.S. Government Printing Office, Washington, DC, 2002. page vii.

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Statewide Property Tax Equalization Study

Media Release

Today the Indiana Fiscal Policy Institute (IFPI) released the final results of the Indiana Statewide Property Tax Equalization Study. The results include a county-by-county analysis of the 2002 pay 2003 general reassessment, a Policy Report, and a School Assessment Ratio Study. The Policy Report contains evaluations of the reassessment results, the administrative processes, and the data availability and structures and recommendations for improvements in all areas pertaining to assessment and reassessment. The School Assessment Ratio Study (ratio study) was performed in accordance with I.C. 6-1.1-34.

Steve Johnson, President of the IFPI, said the completion and results of the study demonstrate significant progress as well as a great challenge for Indiana's property tax system. "The Courts, in the St. John decisions, mandated a market-based standard of real property assessment be used meet the constitutional requirement of uniformity and equity. The next issue was to determine if the administrative system of assessment could meet that standard. At the 30,000 foot level the results look good, but at ground level, the results are problematic. Clearly, there is a great deal of work still to be done at every level of property tax administration."

With the mass general reassessment of 2002 for pay 2003 property taxes, Indiana became one of the last states to adopt market value based standards for real property assessment. After much delay, a healthy dose of consternation, and more than a little bit of legislative hedging against possible catastrophic impacts, the reassessment meant that valuation of property for taxation in Indiana took a giant step into the 21st Century.

The need for an evaluation of the 2002 pay 2003 reassessment led to a partnership between the State of Indiana, the Indiana Fiscal Policy Institute, and the private sector. Francina Dlouhy, Chairwoman of the IFPI's Board of Directors said, "The importance of an independent evaluation was unanimously supported by the IFPI's Board of Directors, as well as several other private sector organizations. For their support of this analysis, I thank them as well as the State of Indiana. Our Board believes the IFPI is singularly positioned to conduct this important analysis and provide these insightful recommendations."

The Study's Key Findings:

The adoption of the market value standard is only a first step. While the "on the surface" results show relatively good outcomes for the first-ever market-value based reassessment, the comprehensive analysis of the process reveals many serious problems, a significant number of which will require major structural changes to Indiana's property tax administration system to address.

- **The current structure does not provide for accountability across assessing jurisdictions, resulting in systematic lack of uniformity in assessment practice and assessment results. These problems plague townships within counties and cross county borders.**

- **Local governmental assessment officials and their contractors do not understand that they have a responsibility for assessment quality that extends beyond their own county.**

- **The type, quantity, and quality of data currently collected will not support a Market Value assessment system.**

- **Many counties and townships did not meet the International Association of Assessing Officials (IAAO) standards for level of assessment, uniformity of assessments, or consistency of assessments across assessing jurisdictions**

- **There is inconsistency in assessment interpretation and administrative practice between the counties.**

The State has not been willing or able to perform its oversight function. The DLGF currently does not and cannot produce future independent equalization studies, as best practice requires. The current county self-evaluation equalization system is a sham.

Hence, there is no accountability, nor has there been for several decades, which has resulted in the state of affairs that led to the Supreme Court mandated market value-based reassessment. While the standard upon which valuation is based has changed, the underlying administrative structure has not. This structure, as the Study has demonstrated in our analysis, results in a systematic lack of uniformity in assessment practice, **even under a market value system**.

The property tax system, its valuation methodology and ultimate accountability, is a responsibility of State government. It is the State Constitution and State Statutes that undergird and form the foundation for the property tax system and the policies that flow from it. The role of the local assessment offices is to apply state policies professionally and without regard to their own philosophical views of tax policy or tax burden. The assessment function is **ministerial**, and not one that makes policy or represents taxpayers.

A lack of uniformity and consistency across county borders impacts taxpayers across the state. The State appropriates over $6.0 billion per year to support local schools and reduce local property tax levies. These appropriations are made based on tax assessment information – in the case of the schools – and based on property tax liabilities determined to some extent by the shares of total assessed value born by the various classes of property.

The study found that counties do not adhere to required data standards. The DLGF has issued extensive specifications for the transmittal of data to the state. Unfortunately, the Study found widespread non-compliance with the regulations. Inconsistencies abound between the state and counties; even within counties, assessors and auditors often use different data structures and data maintenance systems. Moreover, counties have not complied with the law requiring the submission of all sales disclosure forms (SDFs) to the state. Without the collection, evaluation, and storage of market value information, the market value assessment process breaks down.

The table below summarizes the evaluation of assessment results from our equalization analysis.

Summary of Equalization Results			
Median Ratio		**Met IAAO Standard**	**Did Not Meet IAAO Standard**
Counties:	**Residential Improved**	**90.8%**	**9.2%**
	Commercial & Industrial Improved	**54.2%**	**45.8%**
Townships:	**Residential Improved**	**86.7%**	**13.3%**
	Commercial & Industrial Improved	**54.1%**	**45.9%**
Coefficient of Dispersion		**Met IAAO Standard**	**Did Not Meet IAAO Standard**
Counties:	**Residential Improved**	**14.9%**	**85.1%**
	Commercial & Industrial Improved	**10.2%**	**89.8%**
Townships:	**Residential Improved**	**20.6%**	**79.4%**
	Commercial & Industrial Improved	**12.2%**	**87.8%**
Consistency Across Jurisdictions		**Within +/- 5%**	**Not Within +/- 5%**
Townships within Counties	**Residential Improved**	**73.0%**	**27.0%**
	Commercial & Industrial Improved	**56.2%**	**43.8%**
Percentage of Counties Affected	**Residential Improved**	**27.6%**	**72.4%**
	Commercial & Industrial Improved	**12.2%**	**87.8%**
Sales Chasing		**Townships**	**Counties**
Number of Jurisdictions Tested		**733**	**65**
Number of Jurisdictions in Which Sales Chasing Evidence Found		**201**	**51**
Percentage of Jurisdictions Affected		**27.4%**	**78.5%**

While county and township results for residential improved property were reasonably good for level of assessment as measured by the median ratios, quality stopped there. Only about half of the counties and townships met the IAAO standard for median ratios in commercial and industrial improved property. With regard to uniformity of assessment, as measured by the coefficient of dispersion, only about 15% of counties and 20% of townships met the standard for residential improved property. Only about one in ten counties and one in eight townships met the CoD standard for commercial and industrial improved property.

With regard to consistency of assessment across counties and townships, the results are not better. In 63 of 87 counties (72.4%), at least one township's assessments differed materially from the other townships. For commercial and industrial property, 34 of 79 townships, representing 25 of 52 counties, varied materially from the other townships in the county.

For residential improved property, 73.1% of the townships were within +/- 5% of the county average median ratio. For commercial and industrial improved property, 56.2% of the townships were within +/-5%. In residential property, those townships represented 72.4% of the counties.

Evidence of sales chasing (the practice of changing an assessed value to reflect the sales price of that property after it sells to improve the apparent results) was widespread. In 27.4% of the townships tested, the study found evidence of sales chasing. More troubling is the fact that those townships represented 51 of the 65 counties in which testing was possible, or nearly 80% of all counties.

The study's findings demonstrate, with statistical certainty, that there is a systematic inconsistency in interpretation of the assessment statutes and rules and assessment practice throughout the state.

In summary, the study found comprehensive, statewide evidence of an overwhelming lack of uniformity and consistency in assessment results. Our analysis clearly demonstrates inconsistent application of the market value based assessment rule and provides evidence of non-uniform interpretation if the rule by the local assessor (or their contractor). Both the level of assessment – measured by the median ratio – and the uniformity of assessment – measured by the coefficient of dispersion – differ across townships and counties. Inconsistencies in assessment practice statewide demonstrate that there is little accountability practically demonstrated of local assessing officials, whether it is counties holding townships accountable or the state holding counties and townships accountable.

While some effective consolidation of assessing districts has occurred in Indiana over the years – through the use of private contracting firms and cooperation between townships and counties – there has been no systematic or structural change. Movement to consolidated assessment districts and responsibilities, independent review and equalization, increased and more sophisticated use of technology for data and analysis are all needed, yet none of these steps have yet been taken in Indiana.

A nearly complete lack of compliance with state data standards contributes mightily to the problems the Study found. The study found significant resistance on the part of locally contracted vendors to assist counties compliance with state data standards. These data compliance issues are timely to the current state of the property tax system in view of the trending process which, for its equitable implementation, will require much improved data standard compliance.

The Study makes the Following Recommendations:

1. **Ensure Complete and Accurate Collection and Transmission of Sales Data**

2. **Develop and Enforce Compliance with a Statewide Assessment Data Standard**

3. **Move Primary Responsibility for Assessment to the County Level**

4. **Introduce an Effective Equalization Study at the State Level**

5. **Complete the transition to market value standard by rewriting the assessment rule**

6. **Upgrade Assessment Training and Certification Programs and Increase Certification Standards**

A quality assessment requires independent evaluation of results. Having timely access to pertinent and accurate information about the price, terms, and circumstances of each sale is essential in a competent equalization study.

The problem of the county assessors selectively forwarding SDFs to the DLGF needs to be remedied in order to perform effective, periodic ratio studies. The state should control which sales are included or ex-

cluded, not the assessors. This means that the DLGF should develop a sales data processing manual. It should provide instructions for the timely transmittal of SDFs and backup documentation in convenient-to-process batches. It should instruct assessors on how to annotate the SDFs with their (coded) recommendations regarding the usability of each sale and the assessed value in effect on the date of sale. Ideally, data should be collected, maintained, and transmitted to state electronically. Sales Disclosure Forms should be available "on line."

On the surface, current assessment data standards (50 IAC 12) appear reasonable. However, our experience with county assessment data during the course of this equalization study found that they were widely ignored. The study recommends that the State take control of this nearly chaotic administrative structure and require that local assessors meet state standards for data collection, storage, and maintenance and transfer to the state.

The following actions should be taken:

- Seek county input regarding problems with existing standards and ways to improve them.
- Make adherence with assessment data standards a standard provision of county reassessment and IT contracts.
- Institute financial penalties for failures to comply with the standards for both governmental units and their contractors.
- An example of one data standard would be a consistent Geographic Information System (GIS) parcel numbering system statewide.

The delegation of responsibility for property assessment to township officials essentially is an artifact of the mid 19th century. Although reasonable when Indiana was being settled, this assignment is now obsolete. Assessment is a ministerial function requiring technical expertise and equipment. It is not one in which the assessor is an elected representative of the taxpayer. Because assessment in Indiana is overly decentralized, the Study found it impossible to maintain assessment accuracy and to achieve economies of scale; in other words, taxpayers are forced to pay more for less. The State should transfer responsibility for assessment from townships to counties.

The Study recommends much stronger, independent, State-mandated equalization study standards. DLGF should implement a strict requirement that ALL sales, regardless of whether they should be included in a ratio study or not, be transferred to the state. The State should commit resources to enable a state (not local) independent, professional equalization study after every general reassessment. These studies should be conducted more often, if necessary to ensure assessment quality statewide.

The state should set as a goal the adoption of a current use (value in use) market value standard, which would imply changes to assessments whenever warranted by physical and economic changes. Frequently updated general reassessments made in accordance with professional best practice mass appraisal techniques optimize property tax uniformity. The State should establish a statutory framework for market monitoring and appropriate valuation adjustments (trending).

The Indiana assessing officer education, examination, and certification programs need to be strengthened. First, the scope of the education and examination process needs to be broadened to include at least the following:

- mass appraisal applications of the sales comparison and income capitalization approaches
- monitoring property price trends statistically so that defensible indexing factors can be developed, and
- making sales ratio studies.

Second, an evaluation should be made of the testing process to ensure that it actually tests the examinees' mastery of the subjects covered, particularly of analytical topics like ratio studies. Third, certification

needs to be made mandatory.

After reviewing the Study's findings and recommendations, the State's Office of Management and Budget Director Charles E. Schalliol stated, "We applaud the hard work that The Institute has put into this study for the past three years and we have observed, over the past 10 months, many of the same frustrations and hardships that they are reporting. Many of their recommendations fit very nicely with policies that we have already begun to put into place to improve the situation; however, many of the recommendations will need assistance from the General Assembly and the local units to implement.

The School Ratio Study:

The IFPI today also released the results of the School Assessment Ratio Study. This analysis, done in accordance with state statute (I.C. 6-1.1-34) provides to the DLGF assessment ratios that are to be used to equalize each K-12 school district's property tax effort within the State's school funding (tuition support) formula.

Since the formula sets the shares of school general fund resources appropriated by the State and raised via the local property tax, the ratio study allows the State to equalize those shares by equalizing the assessed values across school districts against which the property tax is imposed. If these assessment ratio adjustments are not made as part of the execution of the school funding formula, taxpayers in some parts of the state subsidize taxpayers in those school districts in which there is systematic underassessment.

As with townships and counties in the statewide equalization analysis, some school district's ratios were greater than one and some were less than one. A ratio of less than one means that property is "underassessed relative to its market value" while a ratio of more than one means the opposite. In a simulation using only the ratios resulting from the school ratio study (and no other variables that could impact the school funding formula, such as enrollment changes), 38 school districts would see increases in property taxes while 148 would see decreases (in calendar year 2007). One hundred seven school districts would see no change in property taxes. In each school district where property taxes increase, there is an offsetting decrease in the state support while in each school district where property taxes decrease, there is an offsetting increase in state support.

The results of the school ratio study are consistent with the statewide township / county equalization study in that there is statewide inconsistency in assessment practice and results. Yet, the movement to a market value-based assessment standard enables the application of a meaningful school ratio study that makes progress in equalizing school funding across the state.

The application of these school ratios will cause changes in local and state obligations for school funding in calendar year 2007. However, in comparison with other school funding variables, such as changes in enrollments, the net impact of these ratios is minimal.

Don Villwock, President of the Indiana Farm Bureau said, "Indiana Farm Bureau is one of the major private sector sponsors of the Indiana Fiscal Policy Institute's Tax Equalization Study. As a membership organization representing taxpayers, Indiana Farm Bureau felt it important to ascertain if the reassessment conducted under new standards would satisfy the constitutional requirement for a "uniform and equal rate of assessment and taxation. We also wanted to ensure objectivity in such a study, and to assure there would be agreement to use it as a base document to improve the system in the future. Therefore we believed it was important for the state and the private sector to cooperate on a single in-depth analysis of the reassessment."

The Study began in August of 2003, when a contract was executed that called for the Indiana Fiscal Policy Institute (IFPI) to perform a statewide Property Tax Equalization Study (the Study). The purpose

of the study is to provide the State with a determination of the strengths, weaknesses, and accuracy of the Supreme Court ordered, first ever, market value-based general reassessment process and its results. The key features of the study are:

- An analysis, by jurisdiction, of the quality of the reassessment by property class.
- A study of the assessment methodology and process, with recommendations for improvements in future years,
- An analysis of the data requirements for future property tax reassessments.
- A school assessment sales ratio study.

END RELEASE

INDIANA FISCAL POLICY INSTITUTE
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Statewide Property Tax Equalization Study Policy Report

Mark D. Brown
Research Director

October 2005

Statewide Property Tax Equalization Study
Policy Report

by
Mark D. Brown
Research Director

with
Richard Almy & Robert C. Denne
Almy, Gloudemans, Jacobs and Denne

October 2005

IFPI Report No. 24

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Foreword

Two events propelled the necessity for this Indiana Fiscal Policy Institute Policy (IFPI) Report. Beginning in the early 1990s, a series of Indiana Tax Court and Indiana Supreme Court decisions, commonly referred to as the "St. John's Cases," required Indiana to abandon its decades-old standard for assessment of real property and replace it with a standard that was "objective and verifiable." In 2002, Indiana embarked on it's first ever market-value general reassessment of real property.

At the same time, the O'Bannon-Kernan administration and the General Assembly enacted the first major tax restructuring in Indiana in 30 years. It was common knowledge that the old real property valuation standard had under-valued residential property relative to its market value for decades, and the new standard would shift a greater proportion of total assessed value to homeowners in particular, especially those with older homes. Ostensibly, the tax restructuring was designed to mitigate that shift.

Then-Lt. Governor Joe Kernan recognized the need for a thorough and independent evaluation of the 2002 pay 2003 reassessment results. Without such an evaluation, it would be impossible to ascertain if the constitutional requirement of "a uniform and equal rate of assessment" had been achieved. He approached then-president of the IFPI, William J. Sheldrake, to undertake the Indiana Statewide Property Tax Equalization Study. A steering committee made up of local assessing officials, state government officials, property tax professionals and others was created to guide and receive periodic progress reports on the Study.

This Policy Report is the culmination of over two years of research, analysis, and evaluation. Doubtless, when it was undertaken, no one believed that it would take that length of time to complete (in fact, five counties are still impossible to satisfactorily evaluate). The decentralization of responsibility for assessment among 1,100 locally elected assessing officials and a plethora of disparate data systems created a research challenge that was unanticipated.

Yet, the hard work and persistence of skilled professionals has produced a high quality, high value Study. We believe that its results, findings and recommendations are presciently valuable to the public policy debate as Indiana embarks on creating a 21st century process of real property assessment.

Funding and support for this study came from the State of Indiana and several private sector organizations. All of the funders believed this report's value would come primarily from its independence. At no time did either the State or any private sector individual or entity attempt to influence any aspect of our work. The IFPI is sincerely grateful for the opportunity to contribute to this most important area of fiscal policy in the State of Indiana.

Acknowledgements

A study such as this can only be completed through the efforts many individuals. The Steering Committee provided thoughtful guidance and support, all the while asking the questions that needed to be asked and giving us the venue to discuss the issues. We thank every member for their commitment of time, energy, and insightfulness.

Mark D. Brown, the Research Director at the IFPI, is the principal author of this Report. Mr. Brown joined the IFPI in the summer of 2004 and immediately took ownership of the Study. His work went far beyond analyzing results and writing words. When necessary, he traveled to the corners of the State to stand in front of a copy machine in an assessor's office to copy data that otherwise was unattainable. He accepted, even relished, the challenge of deciphering the many inconsistencies and anomalies in data coding structures used by local officials and thereby making it possible to perform the equalization analysis.

William J. Sheldrake, the former president of the IFPI and now president of PolicyAnalytics, LLC, has no peer with regard to his knowledge of Indiana's property tax system. The breadth of his expertise encompasses the details of Indiana statute and rule, an intimate understanding of how property assessment is done

at the most local level, and the appropriate statistical methods necessary to analyze large and complex databases.

Richard Almy and Robert Denne of Almy, Gloudemans, Jacobs and Denne have extensive backgrounds, nationally and internationally, in property tax systems. Their work in and service to the International Association of Assessing Officers afforded the research team an unparalleled level of background and experience. The IFPI could not have completed this Study without their excellent work.

Crowe Chizek had the unenviable task of assembling a database suitable for completing the analyses in this Report from the various and variable quality data sources. Early in the data gathering stages of this effort, Thomas P. Miller and Associates provided significant assistance and facilitation.

We must also recognize the valuable assistance provided to us by local assessing officials too numerous to name. They provided us with their time, in some cases, their limited resources, and their knowledge. In addition, our sincere thanks go out to several individuals in state government, particularly the Legislative Services Agency (LSA), the State Budget Agency (SBA) and the Department of Local Government Finance (DLGF). Our work was able to advance seamlessly across the transition between gubernatorial administrations. Diane Powers and Chuck Mayfield of LSA and David Reynolds and Mike Landwer of SBA are just a few of the individuals we relied upon. Melissa Henson, Beth Henkel, and Kurt Barrow of DLGF also provided us considerable help.

This Policy Report introduces a new format for IFPI publications. We hope that you will find this and future publications more reader-friendly than our past works. Andrea Holden, Office Administrator of the IFPI, had the task of applying new software capabilities in designing and assembling this document. Her editorial skills and attention to detail added significantly to the quality of the Report.

Steven R. Johnson
President, Indiana Fiscal Policy Institute
October 2005

Statewide Property Tax Equalization Study
Policy Report

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STATEWIDE PROPERTY TAX EQUALIZATION STUDY

EXECUTIVE SUMMARY

The Courts, in the St. John decisions, mandated a market-based standard of real property assessment be used meet the constitutional requirement of uniformity and equity. The next issue was to determine if the administrative system of assessment could meet that standard. At the 30,000 foot level, the results look good, but at ground level, the results are problematic. Clearly, there is a great deal of work still to be done at every level of property tax administration.

With the mass general reassessment of 2002 for pay 2003 property taxes, Indiana became one of the last states to adopt market value based standards for real property assessment. After much delay, a healthy dose of consternation, and more than a little bit of legislative hedging against possible catastrophic impacts, the reassessment meant that valuation of property for taxation in Indiana took a giant step into the 21st Century.

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- ✓ **A study of the assessment methodology and process, with recommendations for improvements in future years,**
- ✓ **An analysis of the data requirements for future property tax reassessments, and**
- ✓ **A school assessment sales ratio study**

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The adoption of the market value standard is only a first step. While the "on the surface" results show relatively good outcomes for the first-ever market-value based reassessment, the comprehensive analysis of the process reveals many serious problems, a significant number of which will require major structural changes to Indiana's property tax administration system to address.

- ➢ **The current structure does not provide for accountability across assessing jurisdictions, resulting in systematic lack of uniformity in assessment practice and assessment results. These problems plague townships within counties and cross county borders.**
- ➢ **Local governmental assessment officials and their contractors do not understand that they have a responsibility for assessment quality that extends beyond their own county.**
- ➢ **The type, quantity, and quality of data currently collected will not support a market value assessment system.**
- ➢ **Many counties and townships did not meet the International Association of Assessing Officers (IAAO) standards for level of assessment, uniformity of assessments, or consistency of assessments across assessing jurisdictions.**
- ➢ **There is inconsistency in assessment interpretation and administrative practice between the counties.**

The State has not been willing or able to perform its oversight function. The Department of Local Government Finance (DLGF) currently does not and cannot produce future independent

equalization studies, as best practice requires. The current county self-evaluation equalization system is a sham.

Hence, there is no accountability, nor has there been for several decades, which has resulted in the state of affairs that led to the Supreme Court mandated market value-based reassessment. While the standard upon which valuation is based has changed, the underlying administrative structure has not. This structure, as the Study has demonstrated in our analysis, results in a systematic lack of uniformity in assessment practice, even under a market value system.

The property tax system, its valuation methodology and ultimate accountability, is a responsibility of state government. It is the State Constitution and State statutes that undergird and form the foundation for the property tax system and the policies that flow from it. The role of the local assessment offices is to apply state policies professionally and without regard to their own philosophical views of tax policy or tax burden. The assessment function is ministerial, and not one that makes policy or represents taxpayers.

A lack of uniformity and consistency across county borders impacts taxpayers across the State. The State appropriates over $6.0 billion per year to support local schools and reduce local property tax levies. These appropriations are made based on tax assessment information—in the case of the schools—and based on property tax liabilities determined to some extent by the shares of total assessed value born by the various classes of property.

The Study found that counties do not adhere to required data standards. The DLGF has issued extensive specifications for the transmittal of data to the State. Unfortunately, the Study found widespread non-compliance with the regulations. Inconsistencies abound between the State and counties; even within counties, assessors and auditors often use different data structures and data maintenance systems. Moreover, counties have not complied with the law requiring the submission of all sales disclosure forms (SDFs) to the State. Without the collection, evaluation, and storage of market value information, the market value assessment process breaks down.

The table on the following page summarizes the evaluation of assessment results from our equalization analysis.

While county and township results for residential improved property were reasonably good for level of assessment as measured by the median ratios, quality stopped there. Only about half of the counties and townships met the IAAO standard for median ratios in commercial and industrial improved property. With regard to uniformity of assessment, as measured by the coefficient of dispersion (CoD), only about 15% of counties and 20% of townships met the standard for residential improved property. Only about one in ten counties and one in eight townships met the CoD standard for commercial and industrial improved property.

With regard to consistency of assessment across counties and townships, the results are not better. In 63 of 87 counties (72.4%), at least one township's assessments differed materially from the other townships. For commercial and industrial property, 34 of 79 townships, representing 25 of 52 counties, varied materially from the other townships in the county.

For residential improved property, 73.0% of the townships were within +/- 5% of the county average median ratio. For commercial and industrial improved property, 56.2% of the townships were within +/- 5%. In residential property, those townships represented 72.4% of the counties.

Evidence of sales chasing (the practice of changing an assessed value to reflect the sales price of that property after it sells to improve the apparent results) was widespread. In 27.4% of the townships tested, the Study found evidence of sales chasing. More troubling is the fact that those townships represented 51 of the 65 counties in which testing was possible, or nearly 80% of all counties.

The Study's findings demonstrate, with statistical certainty, that there is a systematic

Summary of Equalization Results			
Median Ratio		**Met IAAO Standard**	**Did Not Meet IAAO Standard**
Counties:	Residential Improved	90.8%	9.2%
	Commercial & Industrial Improved	54.2%	45.8%
Townships:	Residential Improved	86.7%	13.3%
	Commercial & Industrial Improved	54.1%	45.9%
Coefficient of Dispersion		**Met IAAO Standard**	**Did Not Meet IAAO Standard**
Counties:	Residential Improved	14.9%	85.1%
	Commercial & Industrial Improved	10.2%	89.8%
Townships:	Residential Improved	20.6%	79.4%
	Commercial & Industrial Improved	12.2%	87.8%
Consistency Across Jurisdictions		**Within +/- 5%**	**Not Within +/- 5%**
Townships within Counties	Residential Improved	73.0%	27.0%
	Commercial & Industrial Improved	56.2%	43.8%
Percentage of Counties Affected	Residential Improved	27.6%	72.4%
	Commercial & Industrial Improved	12.2%	87.8%
Sales Chasing		**Townships**	**Counties**
Number of Jurisdictions Tested		733	65
Number of Jurisdictions in Which Sales Chasing Evidence Found		201	51
Percentage of Jurisdictions Affected		27.4%	78.5%

inconsistency in interpretation of the assessment statutes and rules and assessment practice throughout the State.

In summary, the Study found comprehensive, statewide evidence of an overwhelming lack of uniformity and consistency in assessment results. Our analysis clearly demonstrates inconsistent application of the market value based assessment rule and provides evidence of non-uniform interpretation of the rule by the local assessor (or their contractor). Both the level of assessment (measured by the median ratio) and the uniformity of assessment (measured by the coefficient of dispersion) differ across townships and counties. Inconsistencies in assessment practice statewide demonstrate that there is little accountability practically demonstrated of local assessing officials, whether it is counties holding townships

accountable or the State holding counties and townships accountable.

While some effective consolidation of assessing districts has occurred in Indiana over the years—through the use of private contracting firms and cooperation between townships and counties—there has been no systematic or structural change. Movement to consolidated assessment districts and responsibilities, independent review and equalization, increased and more sophisticated use of technology for data and analysis are all needed, yet none of these steps have been taken in Indiana.

A nearly complete lack of compliance with state data standards contributed mightily to the problems the Study found. The Study found significant resistance on the part of locally contracted vendors to assist counties' compliance with state data standards. These data compliance issues are timely to the current state of the property tax system in view of the trending process which, for its equitable implementation, will require much improved data standard compliance.

The Study makes the Following Recommendations:

1. **Ensure Complete and Accurate Collection and Transmission of Sales Data**

2. **Develop and Enforce Compliance with a Statewide Assessment Data Standard**

3. **Move Primary Responsibility for Assessment to the County Level**

4. **Introduce an Effective Equalization Study at the State Level**

5. **Complete the Transition to Market Value Standard by Rewriting the Assessment Rule**

6. **Upgrade Assessment Training and Certification Programs and Increase Certification Standards**

A quality assessment requires independent evaluation of results. Having timely access to pertinent and accurate information about the price, terms, and circumstances of each sale is essential in a competent equalization study.

The problem of the county assessors selectively forwarding SDFs to the DLGF needs to be remedied in order to perform effective, periodic ratio studies. The state should control which sales are included or excluded, not the assessors. This means that the DLGF should develop a sales data processing manual. It should provide instructions for the timely transmittal of SDFs and backup documentation in convenient-to-process batches. It should instruct assessors on how to annotate the SDFs with their (coded) recommendations regarding the usability of each sale and the assessed value in effect on the date of sale. Ideally, data should be collected, maintained, and transmitted to state electronically. Sales Disclosure Forms should be available "on line."

On the surface, current assessment data standards (50 IAC 12) appear reasonable. However, our experience with county assessment data during the course of this equalization study found that they were widely ignored. The study recommends that the State take control of this nearly chaotic administrative structure and require that local assessors meet state standards for data collection, storage, and maintenance and transfer to the State. The following actions should be taken:

- ✓ Seek county input regarding problems with existing standards and ways to improve them.
- ✓ Make adherence with assessment data standards a standard provision of county reassessment and IT contracts.
- ✓ Institute financial penalties for failures to comply with the standards for both governmental units and their contractors.
- ✓ An example of one data standard would be a consistent Geographic Information System (GIS) parcel numbering system statewide.

The delegation of responsibility for property assessment to township officials essentially is an artifact of the mid 19th Century. Although

reasonable when Indiana was being settled, this assignment is now obsolete. Assessment is a ministerial function requiring technical expertise and equipment. It is not one in which the assessor is an elected representative of the taxpayer. Because assessment in Indiana is overly decentralized, the Study found it impossible to maintain assessment accuracy and to achieve economies of scale; in other words, taxpayers are forced to pay more for less. The State should transfer responsibility for assessment from townships to counties.

The Study recommends much stronger, independent, State-mandated equalization study standards. The DLGF should implement a strict requirement that ALL sales, regardless of whether they should be included in a ratio study or not, be transferred to the State. The State should commit resources to enable a state (not local) independent, professional equalization study after every general reassessment. These studies should be conducted more often, if necessary to ensure assessment quality statewide.

The State should set as a goal the adoption of a current use (value in use) market value standard, which would imply changes to assessments whenever warranted by physical and economic changes. Frequently updated general reassessments made in accordance with professional best practice mass appraisal techniques optimize property tax uniformity. The State should establish a statutory framework for market monitoring and appropriate valuation adjustments (trending).

The Indiana assessing officer education, examination, and certification programs need to be strengthened. First, the scope of the education and examination process needs to be broadened to include at least the following:

- ✓ mass appraisal applications of the sales comparison and income capitalization approaches,
- ✓ monitoring property price trends statistically so that defensible indexing factors can be developed, and
- ✓ making sales ratio studies.

Second, an evaluation should be made of the testing process to ensure that it actually tests the examinees' mastery of the subjects covered, particularly of analytical topics like ratio studies. Third, certification needs to be made mandatory.

The School Ratio Study

The IFPI today also released the results of the School Assessment Ratio Study. This analysis, done in accordance with state statute (I.C. 6-1.1-34) provides to the DLGF assessment ratios that are to be used to equalize each K-12 school district's property tax effort within the State's school funding (tuition support) formula.

Since the formula sets the shares of school general fund resources appropriated by the State and raised via the local property tax, the ratio study allows the State to equalize those shares by equalizing the assessed values across school districts against which the property tax is imposed. If these assessment ratio adjustments are not made as part of the execution of the school funding formula, taxpayers in some parts of the State subsidize taxpayers in those school districts in which there is systematic underassessment.

As with townships and counties in the statewide equalization analysis, some school district's ratios were greater than one and some were less than one. A ratio of less than one means that property is "under-assessed relative to its market value," while a ratio of more than one means the opposite. In a simulation using only the ratios resulting from the school ratio study (and no other variables that could impact the school funding formula, such as enrollment changes), 38 school districts would see increases in property taxes while 148 would see decreases (in calendar year 2007). One hundred seven school districts would see no change in property taxes. In each school district where property taxes increase, there is an offsetting decrease in the state support while in each school district where property taxes decrease, there is an offsetting increase in state support.

The results of the school ratio study are consistent with the statewide township/county equalization study in that there is statewide inconsistency in assessment practice and results. Yet, the movement to a market value-based assessment standard enables the application of a meaningful school ratio study that makes progress in equalizing school funding across the State.

The application of these school ratios will cause changes in local and state obligations for school funding in calendar year 2007. However, in comparison with other school funding variables, such as changes in enrollments, the net impact of these ratios is minimal.

CHAPTER 1: LEGAL AND ADMINISTRATIVE BACKGROUND

Section 1 Introduction

Section 1.1: Introduction

With the mass general reassessment of 2002 pay 2003 property taxes, Indiana became one of the last states to adopt market value based standards for real property assessment. After much delay, a healthy dose of consternation, and more than a little bit of legislative hedging against possible catastrophic impacts, valuation of property for taxation took a giant step into the 21st Century. Even so, the adoption of the market value standard is only a first step. While the "on the surface" results of reassessment show relatively good results, this comprehensive analysis of the reassessment reveals many serious problems, of which a significant number require major structural changes to Indiana's property tax administration system.

Indeed, many other states have taken steps beyond just that of setting a market value based standard; they have further rationalized administration and oversight of the assessment system.

The International Association of Assessing Officers (IAAO) reported in 1992 that 15,835 primary assessing jurisdictions existed in the United States.[1] Indiana's 1,008 township level assessment jurisdictions ranked the State sixth among all states in the number of jurisdictions. The median number of assessment jurisdictions among the states was 77 at that time.[2] Thirty-six states used counties (or some higher level of government) as the primary jurisdiction, while only 14 other states use townships or municipalities.[3]

While some effective consolidation of assessing districts has occurred in Indiana over the years—through the use of private contracting firms and cooperation between townships and counties—there has been no systematic or structural change. As this report will demonstrate, movement to consolidated assessment districts and responsibilities, independent review and equalization, and increased and more sophisticated use of technology for data and analysis are all needed; yet none of these steps have been taken in Indiana.

Section 1.2: Legal Mandate of Indiana Supreme Court

The delegates from Indiana to a national tax conference in 1901 considered the Indiana tax system the best in the nation (Fisher, page 125). "Corporate property was being assessed at fair cash value, and the assessment of personal property was increasing. The assessed value of the State had increased, and the rate of taxation proportionately lowered. The principal defect in the system, according to the Indiana delegates, was the elected township assessor, but they expected that to be corrected."

The township assessor issue was addressed indirectly by establishing the office of elected county assessor, with essentially coordinate powers and duties.[4] According to the (former) U.S. Advisory Commission on Intergovernmental Relations (ACIR) in *The Role of the States in Strengthening the Property Tax* (volume 2, pages 46 and 47), significant property tax legislation was enacted in 1959. Beginning in 1961, real property was to be reassessed every eight years at one-third of its true cash value (that is, market value).[5] In the 1962, pay 1963, reassessment, seventeen counties relied on contractors. Appraisals were required to be made

1 International Association of Assessing Officers, "Assessment Administration Practices in the U.S. and Canada." Chicago, IAAO. 1992.

2 "Final Report of the Indiana Fair Market Value Study," DeBoer, Larry, et al., March, 1999. Indiana State Board of Tax Commissioners. Chapter 6, page 1.

3 "Final Report of the Indiana Fair Market Value Study," DeBoer, Larry, et al.,March, 1999. Indiana State Board of Tax Commissioners. Chapter 6, page 1.

4 Some time after 1940, the number of townships was reduced from 1,015 to 1,008. With changes in legislation, the number of trustee assessors had declined from 918 in 1940 (NAAO, page 383) to 837 today.

5 The previous reassessment was carried out in 1949-1950, at which time the legal level of assessment was reduced to one-third of fair cash value. The nominal period between reassessments was reduced to four years in the 1980s.

in conformity with a manual adopted by the State Board of Tax Commissioners (the predecessor of the Department of Local Government Finance). Although viewed as under-funded and under-staffed, the Board had twenty-five field representatives in 1963 in contrast with today's thirteen. The Board began commissioning ratio studies (quadrennially) in 1947. In 1955, county ratios ranged between 0.19 and 0.34. In 1959, they ranged from 0.17 to 0.29, revealing a creeping pattern of unequal underassessment. Assessment equity continued to decline, according to studies made by the U.S. Bureau of the Census. In 1976, the median coefficient of dispersion for the jurisdictions studied was 31.6 (36th among the fifty states). In 1981, the same measure was 33 (41st). A measure of the uniformity among jurisdictions, the coefficient of inter-area dispersion, was 13 in 1976 (16th) and 16.4 in 1981 (25th). In 1986, "true tax value" superseded fair cash value as the basis of assessment. This attempt to legalize inequities created by basing property tax assessments on "values" obtained by applying the current manual (and infrequent revaluations) did not quiet the critics of Indiana's assessment system.

Pressure to abandon the true tax value system mounted after the 1989 reassessment. The major impetus for the system changes reflected in the 2002 reassessment was the rulings of the Indiana Supreme Court and the Indiana Tax Court in the so-called "St. John" cases, the first of which made its way to the Tax Court in 1993. (Of course, the Indiana General Assembly's tax restructuring in 2002 has made the changes more palatable politically.) The petitioners were the Town of St. John and several taxpayers, and the respondent was the State Board of Tax Commissioners. The petitioners contended that the true tax value system and the 1989 reassessment violated two provisions of the Indiana constitution: (1) the uniformity provisions of Article 10, Section 1, and (2) the equal protection clause of Article 1, Section 23. In addition, it was claimed that the system violated the Fourteenth Amendment of the U.S. Constitution. In *St. John I*[6], the Indiana Tax Court agreed that the true tax system violated Article 10, Section 1, of the Indiana Constitution. Essentially, the court ruled that the constitutional requirement of "a just valuation" meant market value-based assessments and that the valuations resulting from the application of the manual were arbitrary and unrelated to actual costs or to market values in 1989.[7] The court ordered that *future* reassessments be based on market values and gave the legislature and the Board until March 1, 1998 to bring the system into compliance with the Constitution.

The State Board appealed *St. John I* to the Indiana Supreme Court, which rendered its decision in *St. John II*[8] in December, 1996. Perhaps thinking more about the assessment of farmland than about the adequacy of the manual, the Court was "unable to affirm the Tax Court's conclusion that an assessment system based solely on actual market value [emphasis added] is compelled by the 'uniform and equal' clause of Article 10, Section 1, of the Constitution." It therefore returned the case to the Tax Court to address further the requirements of the Constitution. In doing so, it vacated the deadline established by the Tax Court, and it ordered the Tax Court to address other issues raised by the petitioners.

In *St. John III,*[9] the Tax Court again concluded that the existing true tax value system violated the "uniform and equal" clause (although it denied the petitioners' other constitutional claims). It said the Constitution required a standard based on objectively verifiable real-world values, not the "imaginary" values that resulted from the application of the current manual. In reaching this conclusion, the Tax Court cataloged the features of the manual that inherently made assessments disproportionate.[10] It did not, however, invalidate the use of the cost approach per se; it required that estimates of costs and depreciation be grounded in economic reality. (*St. John IV*[11] was a separate decision by the Tax Court regarding the timetable for remedying the problems with the true tax value system.)

6 *Town of St. John v. State Board of Tax Commissioners*, 665 N.E.2d 965 (Ind. Tax Ct. 1996)

7 The costs nominally were as of January 1, 1985.

8 *Boehm v. Town of St. John*, 675 N.E.2d 318 (Ind. 1996).

9 *Town of St. John v. State Board of Tax Commissioners*, 690 N.E.2d 370, 398 (Ind. Tax Ct 1997).

10 The State Board's attempts to show that the true tax value system was equitable were undercut by its admission that it did not know how to measure equality under the system and therefore did not.

11 *Town of St. John v. State Board of Tax Commissioners*, 691 N.E.2d 1387 (Ind. Tax Ct 1998).

The State Board of Tax Commissioners appealed *St. John III* and *St. John IV*. In *St. John V*[12], the Supreme Court decided four questions, two of which bear directly on the 2002 reassessment story. The first was whether the language of IC 6-1.1-31-6(c) was unconstitutional, as the Tax Court had ruled. Because the language of the statute *did not preclude* assessments based at least in part on property wealth (that is, the State Board's regulations could require property-wealth based assessments), the Court ruled that the Tax Court had erred.

The second question was whether the cost schedules in the reassessment manual were unconstitutional as the Tax Court had ruled. The Supreme Court concurred, because the schedules lacked any meaningful reference to property wealth and because they resulted in "significant deviations from substantial uniformity and equity." The Court also held that the Constitution did not require use of all three approaches to value but it tacitly acknowledged that sales prices constituted objectively verifiable evidence of property wealth. The Court ordered the Tax Court to modify its order in *St. John III* and *St. John IV* consistent with *St. John V*.

Initially, the Tax Court declined to order that new assessment regulations consistent with *St. John V* be adopted by a specific date, because the State Board thought they would be completed in the fall of 1999. That goal was not achieved, and in March 2000, the petitioners asked the Tax Court to set dates certain for adoption of the regulations and their implementation in a new general reassessment. In *St. John VI*[13], the Tax Court ordered (1) that new, constitutional regulations be promulgated and in effect by 1 June 2001; (2) that real property be assessed according to the new regulations by 1 March 2002; and (3) that the State Board submit monthly progress reports to the Tax Court.[14]

Section 1.3: The Indiana Property Tax Equalization Study

The State of Indiana, in August of 2003, entered into a contract with the Indiana Fiscal Policy Institute (IFPI) to perform a statewide Property Tax Equalization Study (the Study). The purpose of the Study is to provide the State with a determination of the strengths, weaknesses, and accuracy of the Supreme Court ordered, first ever, market value-based general reassessment process and its results. The key features of the Study are:

- **An analysis, by jurisdiction, of the quality of the reassessment by property class through a professional equalization analysis that measures the reassessment quality against internationally recognized acceptable standards,**
- **A study of the assessment methodology and process, with recommendations for improvements in future years,**
- **An analysis of the data requirements for future property tax reassessments, and**
- **A school assessment sales ratio study.**

The IFPI utilized the services of Almy, Gloudemans, Jacobs, and Denne (AGJD) to assist with the equalization and data analysis required by the Study. Together, these organizations comprise what in this report is referred to as the "Study Team."

12 *State Board of Tax Commissioners v. Town of St. John*, 702 N.E.2d 1034, 1035-6 (Ind. 1998).
13 *Town of St. John v. State Board of Tax Commissioners*, (Ind. Tax Ct. 2000).
14 The petitioners' other requests were denied.

Section 2
The 2002 Pay 2003 Reassessment Was the First Step in a Transition from True Tax Value to Market Value That Needs To Continue

Section 2.1: Overview

The 2002 pay 2003 mass general reassessment in Indiana represented a major step toward a modern system of assessing real estate at market value. True tax value, the legal basis of assessment, previously was determined by applying a manual for estimating building costs. At the completion of a reassessment under the prior approach, and especially between reassessments, assessed values could deviate significantly from current market values across the State and within taxing districts, resulting in commensurate disparities in actual property tax obligations (effective property tax rates) in violation of Article 10 of the Indiana Constitution. Now, market data must be incorporated in the valuation process, otherwise the court's requirement that assessments be "objectively verifiable" will not be met. In addition to new legislation, a number of new administrative procedures were introduced. Although they represented significant challenges for state and local property tax officials, the changes are best regarded as piecemeal. The legislative definition of true tax value is still ambiguous. The new manual, while excellent in many respects, provides for an assessment process that gives undue emphasis to the cost approach. No major changes were made to the diffuse administrative structure for assessing real property, and the State's ability to supervise local assessors effectively is limited. The State, in its original design, relegated responsibility for evaluating assessment quality to local government officials and their contractors. Evaluation of assessment quality, then, would be conducted by the same people and organizations that performed the assessment being evaluated. This program for evaluating the accuracy of the 2002 assessments is incapable of producing conclusive results.

In addition to making the statistical analysis of the level and uniformity of assessments described in Section 6, we made a high-level systematic examination of key elements of the Indiana real property assessment system. The Study Team focused on how the true tax value standard of assessment was interpreted in practice and on the design of the 2002 reassessment. We considered the implications of how assessment-related work is organized in Indiana. We read relevant provisions of the Indiana Code and the Indiana Administrative Code. We reviewed the manual and guidelines. We also examined other available material. We interviewed officials of the Department of Local Government Finance (DLGF) and several county and township assessors.

Section 2.2: True Tax Value

Section 1(a) of Article 10 of the Indiana Constitution requires the General Assembly to "provide, by law, for a uniform and equal rate of property assessment and taxation and [to] prescribe regulations to secure a just valuation for taxation of all property, both real and personal." The General Assembly has carried out this basic mandate by enacting Title 6, Article 1.1, of the Indiana Code (abbreviated in references to statutes as IC 6-1.1). Chapter 2, Section 2, assessment methods, which requires that property that is subject to assessment be assessed "on a just valuation basis and in a uniform and equal manner," implements the uniformity standard. However, the General Assembly has defined the legal basis of assessment, true tax value, partly by what it is not. True tax value was defined in IC 6-1.1-31-6(c) as: "True tax value does not mean fair market value. True tax value is the value determined under the rules of the Department of Local Government Finance."[15]

Here we examine the law regarding the basis of assessment: "true tax value" from the perspective of the generally recommended standard of annual assessments at market value. Assessed values now are 100 percent

15 Formerly State Board of Tax Commissioners.

of true tax value rather than 33 1/3 percent as before, a simplification that makes the property tax system easier to understand.

General reassessments nominally are to be made every five years (IC 6-1.1-4-4). An important new legislative mandate is the requirement under IC 6-1.1-4-4.5 that annual adjustments be made to assessments between general reassessments to keep them in line with market values. Annual updates were to begin in 2005. Reasonably, they have been postponed due to delays in completing the 2002 reassessment. The delay should be used to develop better guidelines and to harmonize annual trending with county equalization since both operations essentially do the same thing.

Section 2.3: Local Assessment Organization

How assessment work is organized has effectiveness and efficiency implications. A brief review of those functions provides the basis for our evaluation of them here and in subsequent sections of the report.

Typically, assessment has several overlapping phases:

- ✓ *Original assessment*, generally the responsibility of local assessors;
- ✓ *Appeal, review, supervision, and equalization* by the State. Because review, appeal, supervision, and equalization sometimes are used interchangeably, it is useful to provide their traditional definitions:
- ✓ *Appeal refers to the process whereby taxpayers challenge their assessments. An appeal agency has the power only to alter assessments that have been appealed.*
- ✓ *Review technically refers to the power another government agency—such as an appeal or supervisory agency—may have to examine assessments and revise them on its own initiative.*
- ✓ *Supervision* refers to oversight, assistance, coordination, and enforcement activities.
- ✓ *Equalization* describes the process a supervisory or review agency might use to make blanket adjustments through the use of factors to the total appraised values, or assessments, of entire assessment districts.
  - ○ In so-called *direct* equalization, the factors are applied to individual assessments before local taxes are levied.
  - ○ In *indirect* equalization, the factors are used to adjust property tax roll totals for use in an aid distribution formula.

The pattern of administrative responsibility for assessment in Indiana resembles that in parts of Illinois, Michigan, Minnesota, and Wisconsin, in which the primary responsibility of assessing ordinary real estate largely resides with township governments. This assignment was eminently sensible when Indiana achieved statehood, but is now obsolete. Much of Indiana is now urbanized and real estate markets are broader than townships. Depending on the area of the State and the type of real estate, markets are at the very least regional. In any case, these markets do not follow politically determined boundaries, such as townships, cities or towns, or even counties. This means township assessors must look beyond the boundaries of their townships, or else they will not consider valuable information. Equally important, school districts often are not coterminous with townships. If a tax district encompasses all or part of several assessment districts, the burdens placed on equalization agencies are greater, as noted in the discussion of direct and indirect equalization above. The subsequent establishment of the office of county assessor is a recognition of the weaknesses inherent in township assessment.

The time and resources available for reassessment activities also must be taken into account. When powers and duties, available resources, and the reassessment calendar are considered together, the Indiana reassessment system begins to resemble a chaotic, poorly handicapped relay race, with the racers being the various agencies with assessment powers and duties and the batons representing the functional activities (see Table 5-1). The aim of the baton-passing is to ensure that the function is satisfactorily carried out by the end of the race (the implementation of the reassessment). In reality, the rules a racer is given may be a hindrance. A racer may be starved of resources

Table 2-1: Functional Responsibility Matrix						
Agency	Summary	Supervision	Assessment	Review	Appeal	Equalization
(1)	(2)	(3)	(4)	(5)	(6)	(7)
A. Department of Local Government Finance (DLGF)	State property tax supervisory and equalization agency	Yes, generally (see also Table 5-1.)	Yes, in specified situations of failure by the township or the county and in the case of certain types of property, such as utilities.	Yes, IC 6-1.1-14-5 and IC 6-1.1-14-10	No	Yes, IC 6-1.1-14-5
B. County Land Valuation Commission (LVC)	Special standards setting body with powers similar to the PTABA with respect to land value standards	Responsible for setting land value standards for non-agricultural land (IC 6-1.1-4-13.8).				
C. County Property Tax Assessment Board of Appeal (PTABA)	Although its major function is to hear appeals, the PTABA has broad review and apparently equalization powers.		See "review"	Yes, IC 6-1.1-4-13.6(b) and IC 6-1.1-13	Yes, IC 6-1.1-15	Apparently, IC 6-1.1-4-13.6(b)
D. Township Assessor (1,008)	Primarily responsible for real estate assessments	Not applicable	Original assessment of land and buildings pursuant to guidelines (DLGF, LVC and PTABA)—see, e.g., IC 6-1.1-4-15.	Not applicable	Not applicable	Not applicable
E. County Assessor (92)	Responsible for local equalization	Responsible for coordinating general reassessments. May order reassessments under IC 6-1.1-13-8.	Yes, may carry out general reassessments on behalf of township assessors. Also see review.	Yes, IC 6-1.1-13-5	No	Yes, IC 6-1.1-13-6.
F. County Auditor	Custodian of assessment rolls and receives sales disclosure forms	No	No	No	No	Effectuates equalization orders under IC 6-1.1-14-8.
G. Indiana Board	Hears appeals from PTABAs.	No	No	No	Yes, IC 6-1.1-15-3 et seq.	

despite the legislature's attempt to ensure sufficient funding. When the time comes to pass a baton, there may be too little time to compensate. Moreover, the receiving agency may have the power to decide whether to accept the baton or not. It is testimony to the professionalism of local assessing officers that the system operates as well as it does. But when things break down, ultimate responsibility for failures may be difficult to place. Legal remedies may be hollow due to a lack of time, resources, or both.

Perhaps for these reasons, the DLGF in chapter 1 of *Real Property Assessment Guidelines for 2002—Version A* (hereafter "the guidelines") encourages assessors to rely on contractors.

In the 1,008 townships in Indiana, one of three elected officials is responsible for the assessment function: the township trustee-assessor, the township assessor, or—by local agreement—the county assessor can share the responsibility with the township. The county assessor's functions include:

(1) Countywide equalization
(2) Selection and maintenance of a countywide computer system
(3) Certification of gross assessments to the county auditor
(4) Discovery of omitted property[16]

In addition, the county assessor shall perform the functions of a township assessor-trustee who:

(1) fails to make a report that is required by law;
(2) fails to deliver a property tax record to the appropriate officer or board;
(3) fails to deliver an assessment to the county assessor; or
(4) fails to perform any other assessing duty as required by statute or rule of the DLGF within the time period prescribed by statute or rule of the department or within a later time that is necessitated by reason of another official failing to perform the official's functions in a timely manner.[17]

To execute a local assessment responsibility sharing agreement, a township with a township trustee-assessor may, with the consent of the township board, enter into an agreement with the county assessor or another township assessor in the county to perform any of the functions of an assessing official.[18]

However, nowhere in the statute is the county assessor given "oversight" or "monitoring" responsibilities. Therefore, the responsibility for oversight rests with the State. With 1,008 townships and 92 counties, it can only be said that the oversight function is challenging, if not impossible. The many variations of responsibility and responsibility sharing illuminate the problem.

There are 837 township trustees-assessors and 171 township assessors. Township assessors are elected in townships with a population of more than 8,000 or in townships with populations of more than 5,000 but less than 8,000 whose township board, by resolution, determines the need for an elected township assessor.[19]

We asked the DLGF for information regarding which counties had entered into agreements whereby county assessors performed data collection and/or data entry for township officials. They were unable to provide us with that information for the 2002 pay 2003 reassessment.

The last survey that attempted to collect this information was performed as part of the "Indiana Fair Market Value Study," (Market Value Study) commissioned by the State Board of Tax Commissioners and published in March of 1999. The Market Value Study reported the results of a survey of township and county assessing officials conducted in 1996. The response rate was about 55% for township trustee-assessors, and 67% for township elected assessors.

Based on the results of the Market Value Study survey, 779 townships collect data for residential property, 508 townships collect data for commercial and industrial property, and 172 townships re-estimate values for residential and commercial and industrial property in non-reassessment years.[20] Information the Market Value Study obtained from the State Board of

16 I.C. 36-2-15-5
17 Ibid.
18 Ibid.
19 IC 36-6-5-1
20 "Final Report of the Indiana Fair Market Value Study," DeBoer, Larry, et al. March, 1999. Indiana State Board of Tax Commissioners. Chapter 3, page 4.

Tax Commissioners pertaining to the 1995 pay 1996 reassessment revealed that in 41 counties, the county contracted with private appraisers for all assessment work; in 24 counties, the townships performed all assessing functions; and in 27 counties, there was some sharing of the work.[21]

To gather up-to-date information, the Indiana Fiscal Policy Institute conducted a telephone survey, calling all 92 counties in an effort to collect information pertaining to the sharing of reassessment responsibilities. Table 2-2 on page 9 summarizes the administrative task-sharing arrangements according to the responses by 91 of 92 counties (Brown County was not surveyed).

Our survey results indicate that fewer townships collected reassessment data than reported doing so in the Market Value Study survey. There also appears to be more sharing of the responsibility between the townships and the counties. While the Market Value Study survey reported sharing in 27 counties, our survey indicates some level of county involvement in 63 counties, at least in terms of data collection.

Townships and counties relied extensively on contractors to perform the data collection function. Contractors were employed to collect residential reassessment information in 683 townships (whether hired by the township or the county) and to collect commercial and industrial information in 809 townships.

Three-hundred twenty-three of the 837 trustee assessors (38.6%) either performed or contracted for at least some portion of reassessment data collection. One-hundred forty of the 171 elected township assessors (81.9%) either performed or contracted for some portion of data collection. Remember, however, that in many of the cases of contracting, the contract included other townships in the county.

We did not find a single county or township that collected assessment data electronically. In every case, paper forms with pen or pencil data entry was used to collect the data. The quality of the data collection is wide ranging. In some cases, the data is collected on media as low quality as a paper napkin. Data entry mistakes are often made in reading and interpreting the data collection.

One county, Monroe, volunteered that they will be obtaining computerized equipment for data collection in the near future and expects it to be available for the next general reassessment. They will implement the first computer data collection process next year, using notebook computers to collect data in the field. The computers will have mapping, GIS (Geographic Information Systems) and data collection software that will mean no hand data entry "back in the office[22]."

Our survey revealed that there is no consensus organizational model for reassessment. In some counties, the county assessor contracts for all data collection and data entry. In others, the county may contract only data collection and perform its own data entry. In still other counties, the county is responsible for reassessment functions only in those townships with township trustee assessors, while elected township assessors retain their responsibility. In townships where either the township trustee-assesors or elected township assessors maintained control and responsibility, we found all combinations of in-house and contracted work. In several counties, the township assessing officials would hire a single contractor without the involvement of the county assessor.

This overly decentralized statutory framework, without a single policy or process for its application or clear statutory oversight of the assessment function statewide, simply does not work. The overall lack of a consistent administrative and implementation structure results in the general inconsistent and non-uniform application of the state assessment standard.

Section 2.4: The 2002 Reassessment

The 2002 pay 2003 reassessment was notable in that market value evidence was relevant in development of assessed values of buildings and in evaluating the fairness of assessments

21 "Final Report of the Indiana Fair Market Value Study," DeBoer, Larry, et al. March, 1999. Indiana State Board of Tax Commissioners. Chapter 6, page 3.

22 Interview with Judy Sharp, Monroe County Assessor, June 6, 2005.

Table 2-2: Property Tax Assessment Adminstrative Practices Townships and Type of Reassessment Functions				
Primary Responsibility	Data Collection		Data Entry	
	Contract	In - House	Contract	In - House
	Number of Townships in which Task Performed			
By County Assessor				
All	516	77	221	507
Residential/Agricultural	10	32	0	191
Commercial & Industrial	65	13	171	31
Exceptions				
By Township Elected Assessor				
All	26	26	3	42
Residential/Agricultural	2	47	0	17
Commercial & Industrial	38	1	10	3
Exceptions				
By Township Trustee Assessor				
All	120	67	0	4
Residential/Agricultural	9	72	0	19
Commercial & Industrial	44	11	12	0

generally. As before, the reassessment was subject to strong state regulation but limited state oversight. Assessments were to be carried out pursuant to 50 IAC 2.3, Real Property Assessment Manual, and 50 IAC 13, Land Valuation. There are essentially threee components to 50 IAC 2.3: (1) the regulation itself; (2) a separate document entitled *2002 Real Property Assessment Manual* ("the manual"), which is incorporated by reference in the regulation; and (3) version A of the guidelines, a two-volume document, which supplements the manual. In addition, there are regulations governing assessment data formats and transmittal, persons and firms qualified to assist assessors in making reassessments, and reassessment contracts. Although there is much that is good in this regulatory framework, there is much that could be improved upon, which would better enable assessors and the DLGF to meet the constitutional mandate of a just valuation, as discussed in Section 5. In this section, which draws upon Stroble 2002, we will identify areas that should be addressed prior to the next revaluation.

Reassessment Plan. In statute, Indiana has intended to execute a more or less regular cycle of general reassessments, with the interval five years. Although a five-year cycle is within the recommendations of professional standards, Indiana has not been able to adhere to the schedule.[23] In any case, more frequent reassessments would result in fairer property taxation with negligible additional costs. There are several ways of reassessing more frequently. Indiana, with its trending regulation (50 IAC 21), already is going down one path. The next step would be for the State to enact a reinspection cycle with appropriate standards and verification requirements. This cycle provides for a portion of the total parcels to be reassessed each year, enabling assessors (or their contractors) to even out work loads.

Real Property Assessment Manual. In addition to regulating the 2002 general reassessment, the manual also regulates assessments made until 1 March 2005. It establishes 1 January

23 See, for example, International Association of Assessing Officers, *Standard on Mass Appraisal of Real Property*, section 4.7.

1999 as the valuation date for those assessments.[24] Given that properties are to be assessed on the basis of their physical characteristics as of 1 March 2002 and on subsequent firsts of March, 1 January 1999 essentially reflects only the price levels that are to be used in valuation rather than the actual market values of properties on the respective assessment dates. Although the specified valuation date may be defensible under a scheme of intermittent revaluation projects, a date as close as six months before the physical status date and the tax lien date would both be fairer and technically possible.

In addition, the manual provides an operational definition of true tax value, namely the market value of a property under the assumption that its current use would be its future use ("value-in-use"). When the current use of a property is its most economic ("highest and best") use, an open-market, arm's-length sale would provide good evidence of its true tax value as well as of its market value. Sales predicated on a change in use would not provide good evidence of true tax values.

The manual also allows the sales comparison and the income approaches (including those in a "fee appraisal") to be used, provided that they are consistent with the value-in-use assumptions. Although some otherwise good sales would have to be disregarded under this standard, the manual provides a practical (if offensive to purists) standard. Of course, "true tax values" could be higher than current market values in certain worsening market conditions, and they could be lower in opposite circumstances.

The manual has a "readily available" limitation on the data that may be used in determining an assessment or in challenging it (pages 4-6).[25] Specifically, data used to challenge (or evaluate) assessments can be used only if it "was reasonably available to the assessor at the time the assessment was made."[26] Stroble (2002, page 9) points out that this limitation was overridden by HEA 1196 [P.L. 178-2002]. However, some assessors seem to believe that the limitation remains in effect, in that they feel it unfair to use sales in an equalization study that they did not rely upon in valuing the property. Some, moreover, are reluctant to embrace fully the market value concept, partly because they are more comfortable with the former regulated valuation scheme, and partly because the new regulation itself does not unambiguously embrace the market-value-in-use concept.

The manual (page 17) pre-approves the "market-calibrated" cost approach contained in version A of the guidelines. Other approaches are not prohibited, but an assessor must get the DLGF's approval before they could be used systematically. The non-trivial approval process involves procedural steps and documentation requirements. Among the documentation requirements, the assessor would have to establish beforehand that the method would be understood by taxpayers and that it would meet a number of statistical standards, unless the method already had been tried. Although we do not know of any counties that sought approval of another method, the DLFG fortunately would consider evidence from another district. Since it is doubtful that the default (version A) guidelines would meet the standards imposed on alternatives, it would be better to allow assessors more freedom in selecting appraisal approaches for the next reassessment.

The manual introduces ratio study and equalization concepts (page 20). The concepts are integral to the computation of residential neighborhood factors (see below) as well as ratio studies used in equalization. As discussed later, equalization and trending are the subjects of separate regulations (50 IAC 14 and 50 IAC 21).

Real Property Assessment Guidelines for 2002—Version A. In two volumes, the guidelines provide extensive, detailed guidance on applying the cost approach, including property characteristic data collection and the completion of property record cards. Book 1 covers non-agricultural land valuation and residential improvements, and Book 2 covers commercial and industrial improvements. Stroble 2002 evaluates the guidelines and raises issues that would be of concern to some taxpayers.

24 Although there apparently is some confusion on this point in the depreciation tables in the guidelines; see Stroble 2002, page 13.

25 State Board of Tax Commissioners, 2002. *2002 Real Property Assessment Manual.*

26 Stroble, Larry J. 2002. "2002 Indiana Real Property Reassessment."

Among them are system implications of switching from a nominal reproduction-cost basis to a replacement-cost basis when a structure is overbuilt or of limited utility (Stroble 2002, page 12). From an examination of the guidelines and the property record cards, it is not obvious how the physical differences between the actual property and its likely replacement would be determined or recorded. Certainly, the tone of the guidelines is to record what now exists, as opposed to what might be constructed to replace the structure in question. In any event, the market data analysis sections of the guidelines also provide opportunities for improvement.

Chapter 2, Land Valuation, and Appendix Residential and Agricultural Depreciation, of Book 1, Land Valuation, arguably contain the most important—and weakest—provisions for aligning true tax values with objectively verifiable market evidence. Appendix F, Commercial and Industrial Depreciation, of Book 2 shares the weaknesses of Appendix B. Fundamentally, the guidelines neglect statistical and graphical analysis, illustrate concepts with simplistic pairwise comparisons, and stress the mechanical aspects of land value and depreciation computations. (The diffusion of responsibility for land valuation between township assessors and various county boards also is of concern.)

Since non-agricultural land values are to be based on market values, the land valuation process begins with sales data assembly. (The guidelines for this begin on page 7 of chapter 2.) In addition to actual sales of vacant and improved parcels, opinions of value (of local licensed real estate professionals) also may be used. Assessors are advised to select "a representative number" of sales disclosure forms from sales that occurred within twelve/eighteen months before or after the valuation date (1 January 1999) in a neighborhood.

Unfortunately, the definition of a representative number as being no less than 3 percent of all parcels in a neighborhood has led to problems. These include the belief that a 3 percent sample is sufficient, with the result that potentially valuable sales are ignored and that too many samples are too small for reliable analysis. The guidelines wisely require that sales samples reflect a representative cross-section of the properties in a neighborhood and that sales be screened. Unfortunately, instructions are extremely general.

The instructions on sample size should focus on obtaining the representative sample needed for quality assessment valuation results, not on an arbitrarily determined minimum number that may or may not statistically represent the population of properties which may not yield quality assessment valuations. In addition, there needs to be a clear line drawn between the local assessors' data needs for determination of value vs. the State's data needs for evaluation of results. Some local officials apparently believe that "one size fits all," and therefore limit (or attempt to limit) the data (sales) used to evaluate their performance to only that data which they used to make their assessments.

Instructions on defining neighborhoods have led to problems as well. Neighborhoods serve two purposes in the true tax value system: (1) they establish the territory over which a land value base rate is to be applied (Chapter 2, page 9), and (2) they establish the territory over which a neighborhood factor is to be applied in estimating improvement values (Appendix B, page 8).

A neighborhood factor *(NF)* is the weighted average of the sum of the sales prices *(SP)* of *all* acceptable sales (not merely the representative sample used in determining land values) minus their assigned land values *(LV),* divided by the sum of all the estimates of replacement cost, less scheduled depreciation *(RCNLD)*, as follows:

$$NF = \sum(SP - LV)/\sum RCNLD$$

In theory, *NFs* compensate for inadequacies in other parts of the appraisal process, but their ability to do so depends on the quality of the sales sample and the accuracy of land values, which are determined circularly by applying a land value ratio, which is defined in Chapter 2 (pages 8 and 12) as *LV/SP* (and in Appendix F of Book 2 as *BV/LV*).

For each neighborhood, a separate base rate (or a "high" and a "low" rate) must be determined for residential, commercial, and industrial land plots as well as for one-acre agricultural home sites, as necessary. These are based on the value per front foot (or other unit of comparison) of an assessor-specified base lot. A base lot is a land plot of typical size, use, and infrastructure. The land value computation process includes pre-specified adjustment factors for differences in lot depth, front, and shape. Adjustments for other factors also may be made. The base lot values for neighborhoods having the same [use] classification and substantially similar characteristics may not differ by more than a township-specified percentage that may not exceed 20 percent. This requirement tends to inflate further the number of neighborhoods that would need to be delineated. Although the chapter contains numerous examples of calculations, they tend to be unrealistically simplistic.

The State should eliminate the problems inherent in using neighborhood factors to adjust an essentially cost-based valuation system by rewriting the real property assessment rule. This would require a new set of guidelines that addressed the shortcomings identified above. Fundamentally, the guidelines would be consistent with generally accepted mass appraisal practices as outlined in the IAAO *Standard on Mass Appraisal of Real Property* (2002). There should not be an onerous approval process to use the sales comparison approach or the income approach. Land valuation and depreciation guidelines need to be freed of current restraints.

CHAPTER 2: COMPONENTS OF A 21ST CENTURY PROPERTY TAX ASSESSMENT SYSTEM

Section 3
Standards of a Quality Property Tax System

Section 3.1: A Uniform Property Tax System Must Meet Acceptable Standards of Tax Policy and Practice

Property taxes, like all forms of taxation, should meet acceptable tax policy standards. Those standards include equity, neutrality (minimal distortion of markets), stability, yield, and administrative effectiveness and efficiency. Public finance experts, academicians, and practitioners all examine, analyze, and measure tax policies in the light of these standards. Three of these standards have direct application during the assessment process. They are equity, neutrality, and administration and compliance.

- Equity–The equity standard encompasses two philosophical perspectives: ability to pay and benefits received. In both cases, equity requires similarly situated taxpayers be treated similarly[27]. Simply stated, that means that a taxpayer has a right to expect that whether her property is separated from another taxpayer's property by 300 miles, such as properties in Wayne Township in Allen County and Boon Township in Warrick County are, or 300 feet down the block, the assessment system must appraise the respective properties so that each one bears the same relationship to the market.

- Neutrality (minimal distortion of markets)–Property taxes should be imposed and administered in such a way as to minimize any economic ill-effects. An assessment system that is inequitable and/or not uniform across taxing jurisdictions could impact business location decisions. For example, if assessors systematically assess newer properties at a higher ratio than older properties,[28] development and construction of new homes would suffer.

- Administration and Compliance–For real property, the vast majority of the administration is done by government, and taxpayer compliance costs are low. However, if assessment by the assessing official is inaccurate, biased, or not related to a clear and understandable standard, taxpayers will quickly lose confidence in the "fairness" of the property tax. In Indiana, to meet this standard, assessments must be professionally done, be equitable, uniform, and transparent as to their relation to market value.

Property taxes, when imposed on property that is long-lived (real property land and improvements), also meet the stability criterion in that property values are relatively stable. In the simplest terms, it is not "going anywhere." Due to that stability, property taxes "…produce reliable, stable, independent revenue for the governments closest to the people…"[29] In addition, the existing property tax levy control system adds to the overall stability of the system.

Section 3.2: How the Property Tax is Applied in Indiana

Property taxes in Indiana are imposed on all property deemed taxable under state statute, including real property and personal property. A taxpayers' tax liability (payable to the county in which the property sits in two installments in May and November) is determined by application of the following formula:

Levy = Assessed Value x Rate

Each taxing unit (county, city or town, township, school, library, or other taxing district) sets its budget (approval is required at one or more

27 In a market value property tax system, market value is a proxy for both ability to pay, as a measure of accumulated wealth, and as a measure of benefits received, as the market value is influenced by governmental services received, such as schools, streets and roads, police and fire protection, utilities, etc.

28 Indiana's true tax value standard prior to the 2002 pay 2003 reassessment produced this result. See Mikesell, John L. "Equity Impacts of a Non-Market Property Assessment Standard: Evidence from the Indiana Administrative Formula Approach," *Journal of Property Tax Assessment and Administration, I* (No. 1, 2004).

29 Mikesell, John L. "Fiscal Administration: Analysis and Applications for the Public Sector, 6th ed. 2003. p. 390.

than one level, but ultimately every local budget funded by the property tax requires the DLGF's approval). Once that budget is set, the amount of property tax needed to fund that budget is determined. That amount is the levy.

The assessed value of all property in the taxing unit is then compiled from the assessor's assessment – the gross assessed value. The application by the auditor of the statutorily allowed deductions and credits then determines the net assessed value.

Two of the three variables in the formula are now known—the Levy and the Assessed Value—while the Rate is yet to be determined. The total property tax levy is divided by the total net assessed value for each taxing unit. The quotient becomes the rate. It is that rate that is applied to each property tax payer's assessed value to determine their individual tax bill. The levies and rates of all taxing units that impose property taxes on a particular property are combined and become the tax payer's total property tax liability.

Levy controls in Indiana limit growth in many taxing unit's property tax levies. The controls play a role in determining whether a taxpayer's tax liability grows from year to year and by how much. In addition, growth (or reduction) of assessed value within a taxing unit will impact an individual's tax liability. For example, if the taxing unit's budget and the levy controls result in a property tax levy increasing by 4%, an individual tax payer will see a 4% increase in their tax bill if there is no change in total assessed value in that taxing unit. However, if total assessed value in the taxing unit increases by 4% (and the taxpayer's in question assessed value does not change), there will be no change in that taxpayer's bill.

In other words, an individual's tax bill from each taxing unit (and overall tax liability from all taxing units) is dependent upon both the levy of each taxing unit and the change in the assessed value from year to year within those taxing units. If assessed values increase faster than levies, taxpayers whose assessed values don't change will see lower property tax liabilities. Conversely, if levies increase faster than assessed values, tax liabilities increase.

The assessed value, then is but one part of the total property tax picture. But, it is the most important, most basic component. It is the base – the tax base – in light of which state tax policy decisions are made and it forms the foundation that must meet the constitutional mandates of uniformity and equality. To meet accepted tax policy standards and the constitutional standards, assessors need accurate and complete market data and the resources to understand and apply that information to assessment administration. Section 6 examines the status of data collection, data maintenance, and the resources used in detail.

Section 4
Property Taxation in Indiana is a State, not Local, System

Section 4.1: The State Enacts the Laws and Makes the Rules that Set the Policy

The property tax system, its valuation methodology and ultimate accountability, is a responsibility of state government. It is the State Constitution and State Statutes that undergird and form the property tax system and the policies that flow from it. It is the State's responsibility to write the reassessment rule that governs each general reassessment. And it is the State that formulated the annual trending rule to govern updates that will account for gradual inflationary changes in the property tax base.

In public finance tax policy terms, Indiana's constitutional requirement for a uniform assessment system means that taxpayers' properties are assessed uniformly with respect to their market value. This is a fundamental tenet of tax policy, conceptualized as "horizontal equity" – meaning that similarly situated taxpayers should have relatively equal burdens. The application of standardized statistical methods - a ratio study - yields an analysis of the assessment results that can then be measured against accepted tax policy standards.

We have completed analyses for 87 of 92 counties and have median ratio statistics for those counties and townships.[30] The results of the analysis clearly show that assessments are inconsistent across counties and inconsistent across townships within counties. Sales ratios range from as low as 0.744 to as high as 1.321 in townships.

A "Sales Ratio" is the primary analytical device used in equalization studies. In equalization analysis, it is the assessed value of a property divided by its market value (i.e., sales price). The formula is:

Sales Ratio = Assessed Value / Sales Price

30 Appendix A, Property Tax Equalization Study Background Toolkit, discusses the evaluation methods and the statistical analysis used in this study. It includes a brief primer on sales ratios, coefficients of dispersion, price-related differentials, and sales chasing.

To be clear, the IAAO standard for median assessment ratios is that they fall between 0.9 and 1.1 (within 10% of market value). But a uniform assessment system, whether across a county or the State, requires consistency within that range. No one would say that two taxpayers, one of whose property is assessed at 10% above its market value (a ratio of 1.1) while the others is assessed at 10% below its market value (a ratio of 0.9), are receiving uniform application of the property tax. Our analysis clearly shows this level of non-uniformity, and more.

Section 4.2: There is a Difference Between Assessment (the Determination of the Tax Base) and the Imposition of the Property Tax

Township trustees are responsible for the following statutory duties:

1. Keep a written record of official proceedings
2. Manage all township property interests
3. Keep township records open for public inspection
4. Attend all meetings of the township legislative body
5. Receive and pay out township funds
6. Examine and settle all accounts and demands chargeable against the township
7. Administer poor relief under IC 12-20 and IC 12-30-4
8. Perform the duties of fence viewer under IC 32-26
9. **Act as township assessor when required by IC 36-6-5**
10. Provide and maintain cemeteries under IC 23-14

11. Provide fire protection under IC 36-8

12. File an annual personnel report under IC 5-11-13

13. Provide and maintain township parks and community centers under IC 36-10

14. Destroy detrimental plants, noxious weeds, and rank vegetation under IC 15-3-4

15. Provide insulin to the poor under IC 12-20-16 and

16. Perform other duties prescribed by statute[31]

Elected township assessors have the following statutory duties:

1. Assessment duties prescribed by IC 6-1.1 and

2. Administration of the dog tax and dog fund, as prescribed by IC 15-5-9[32]

All township assessing officials (whether they are township trustees or elected township assessors), are required by law to follow IC 6-1.1-2-2, which sets forth the assessment method standard for all assessors. By statute, "Sec. 2. All tangible property which is subject to assessment shall be assessed on a just valuation basis and in a uniform and equal manner," applying the same "uniform and equal" standard used in the State Constitution.[33]

County assessors, township trustee/assessors, and township assessors' roles are to carry out the duties enacted by the General Assembly. It is critical that the basic valuation process—assessment—be completed in accordance with constitutional and statutory mandates, else the consequences of all subsequent tax policy decisions will be unknown and, almost certainly, not consistent with the intent of the particular policy.

Therefore, the role of the local assessment offices—whether at the township or the county level—is to determine, according to state policies and rules, the true and accurate tax base in accordance with the state enacted standards and policies. The assessment function applies those standards and policies without regard to the assessing officials' opinions, beliefs, or philosophy. The assessor, then, must follow the state written rules without regard to parochial or differing philosophical views of tax policy or tax burden considerations. In other words, the assessment function is ministerial, and not one that makes policy or represents taxpayers.

A glaring example of a local assessor developing and applying policies beyond their legal authority is something called a "developer's discount." In several counties, local assessors assess vacant land at some fraction of its market value. For example, one county assesses vacant land at 50% of what the correct application of the valuation rule would otherwise yield. That is to say that a vacant residential property parcel that should have an assessed value of $30,000 receives an assessed value of $15,000. The rationale for this adjustment is that it "encourages economic development." There is no reference in Indiana law to an "economic development policy" responsibility for township assessors. In fact, this practice reduces the cost of holding property for that property's owner at the expense of all other taxpayers.

The IAAO discusses the ministerial nature of assessment duties in its Assessment Practices Self Evaluation Guide.[34] The guide introduces the best-practices manual by noting that "The public looks to the assessor as a competent and capable professional."[35] In the first chapter, it states: "The assessor's responsibility is to keep abreast of mandated requirements and implement them effectively within the legislative and regulatory environment…"[36]

Put in the Indiana constitutional and statutory context, assessors are to apply policies that have been set by the elected representatives of the taxpayer, the members of the General Assembly. The assessors do not represent taxpayers; they represent the State-enacted standards for the uniform and equal valuation

31 I.C. 36-6-4-3.
32 I.C. 36-6-5-3.
33 I.C. 6-1.1-2-2, Indiana Constitution, Article 10, Section 1.
34 "Assessment Practices Self Evaluation Guide," 2nd ed., 2003.
35 Ibid, page vii.
36 Ibid, page 1.

of every taxpayer's property for tax purposes. Only by professional and technically competent administration of the property tax assessment function can all taxpayers be assured that they bear a uniform and equal share of the total property tax burden within the county or unit.

Section 5
The State Must Provide Leadership, Direction, and Enforcement

Section 5.1: Ratio Study, Enforcement, and Equalization Models

As with implementation of the general model of assessment supervision (Section 5.2), the characteristics of statewide ratio studies vary widely. Among the factors that affect the characteristics of these ratio-study programs are the capacities of, and resources available to, the ratio study analysts; the jurisdictional framework for assessment administration; the uses to which the studies are put; and the history of the program. Although there neither is nor can there be a single model that would serve all jurisdictions equally well, the *Standard on Ratio Studies* (IAAO 1999) provides cogent advice on the design, implementation, and use of ratio studies.[37] In addition, Dornfest and Thompson provide a picture of common practices.[38] As a basis for evaluating the Indiana ratio study and equalization system, this sub-section synthesizes relevant standards and practices and discusses some of the underlying issues. The discussion is presented in terms of the main operational steps in a ratio study program.[39]

Step 1: Definition of Purpose and Objectives. Generally, the purpose and objectives of state-level ratio studies are imbedded in legislation. States use ratio studies for general monitoring purposes, providing the basis for enforcement actions, and in equalization. Others may use them as the basis for assessment discrimination claims.

A general design issue is deciding which type(s) of evidence of market value to rely upon. The main choices are qualifying sales and independent (of the local assessor) appraisals, although other indicators of value, such as listings and informed opinion also may be used to supplement sales. According to Dornfest and Thompson, twenty-four states use sales only in their ratio studies; twenty-three (including Indiana) use both sales and appraisals; and two states use appraisals only. Sales have the advantage of being direct reflections of markets. Moreover, they can be acquired comparatively quickly and inexpensively. However, sales samples may be too small or non-representative. The chief advantage of appraisals is that adequately sized representative samples can be guaranteed. Their disadvantages include the time and expense to make them. If corners are cut (such as relying on a cost manual), appraisals are of questionable validity as indicators of actual market values. Finally, appraisals are, to some extent, dependent on available sales, although more open-market, arm's-length sales are usable for appraisal purposes than for ratio-study purposes because they do not have to be matched with an assessment.

Step 2: Data Assembly. Data assembly is the most time-consuming and labor intensive phase of any ratio study. In a sales ratio study, data assembly involves (should involve) the following steps:

- Collecting raw sales data—in Indiana, reflecting best practice, the primary source of sales data is a mandatory sales declaration, the sales disclosure form. There are many acceptable paths for assembling these data. The common element in all of them is state control of the process. In some states, the forms are submitted directly to the State; in most, the data are funneled through local officials (as in Indiana). Other sources, such as multiple listing services (MLS) can be used to *verify* and supplement official data sources. As will be discussed, the DLGF makes no direct use of sales disclosure forms; instead, it relies entirely on data submitted by counties.
- Screening the sales to determine whether a particular sale should be used in the ratio study—only open-market, arm's-length sales provide reliable evidence of market values. Family sales, foreclosure sales, and the like often do not. More controversially, sales that

37 Revisions to the standard are pending.

38 Dornfest, Alan S., and Douglas C. Thompson. 2004. "State and Provincial Ratio StudyPractices: 2003 Survey Results." *Journal of Property Tax and Assessment Administration,* Vol. 1, no. 1: 31-70.

39 The steps enumerated below reflect actual practices (and Indiana needs) more than the steps enumerated in section 4 of the standard.

result in extremely high or low sales ratios (known as "outliers") may be excluded. In best practice, the State would control this process, although input from local assessors might be solicited. In Indiana, local assessors completely control the screening process.

- Matching the sale price with an assessment—here it is important to determine whether the property that was sold essentially was the same as the property that was assessed. A sale can take place any day of the year, while assessments are as of a single date. If significant physical changes to a property take place between the two dates, the sale should not be used to evaluate the quality of the assessor's appraisal or to equalize assessments. (However, the sale would be valuable in the development of valuation models used in an appraisal ratio study, if the characteristics of the property as of the date of sale were known.) In a similar vein (as discussed further below), the appraisals of sold properties should not be unduly influenced by the sales. Some states guard against this problem by using only sales that occurred after the appraisals were finalized. Others test for sales chasing (see below) and similar efforts to manipulate sales samples.

- Making necessary adjustments to reported sales prices—sometimes adjustments to actual sales prices are warranted to make the evaluation of assessments fairer. If a sale included significant personal property that was not considered in the real property assessment, the estimated value of the personal property should be subtracted from the sale price. Similar adjustments should be considered when existing lease rates do not reflect current rent levels. Although not a common problem nowadays, when the seller helps the buyer finance the purchase, the price agreed to may reflect the value of the financing as well as the value of the real estate. Such distortions should be removed. Finally, if real estate prices are rising or falling significantly over the period of sales used in the ratio study, the sales prices that occurred well before or after the date of the analysis (the valuation date) should be adjusted to the price level on that date to better reflect what the property would have sold for on that date. In best practice, the state would make any adjustments or would validate any adjustments made locally. Indiana does neither.

- Ensuring that the appraisals of sold and unsold properties are made in an unbiased way—as is well known, unscrupulous (or ignorant) assessors may engage in the illegal practice known as "sales chasing." Sales chasing is a term used to describe the practice of setting property's assessment value based on the price for which it recently sold, and not on professional appraisal methods as described by law. Best practices include recognized tests for this practice. Indiana accepts local data without question.

- Ensuring that the ratio study data are not improperly manipulated in other ways—when the stakes are high, a few unscrupulous assessors may attempt to manipulate the data used in ratio studies in other ways. One practice, known as "cherry picking" (which exists in Indiana), is to regard as valid only sales that closely match appraised values. The State must take steps to discourage or minimize these practices, or its reassessment evaluation process will be unreliable. As will be demonstrated in later sections, both cherry picking and sales chasing are prevalent in Indiana.

After these steps, the sales and assessment data are ready for analysis. If appraisals are used in lieu of sales or as a supplement to sales, a defensible appraisal program should be designed and carried out. Despite the potential importance of appraisals, defensible appraisal programs are rare in practice (New York arguably has the best appraisal program). In Indiana, counties may use appraisals and other indicators of value, but the State imposes no controls on them.

Step 3: Stratification. Ratio study data are "stratified" (assigned to property class or assessment jurisdiction subsets) for two, often overlapping reasons:

- To satisfy legal requirements—as in Indiana, most legislatures define categories (classes) of property of interest or for differential taxation. In addition, assessment districts and taxing districts constitute bases for

stratification in county and statewide ratio studies.

- To improve the representativeness of sales samples—because real estate markets are naturally segmented and because different methods may be used to appraise different types of property, a better picture of appraisal accuracy can be obtained if different subsets of property are studied separately. Common subsets ("strata") are the main types of property—residential, commercial, industrial, agricultural, and vacant land.

In a sales ratio study, increasing the number of strata has the undesirable effect of so reducing the size of sales samples in many strata that reliable ratio study statistics cannot be produced, with the result that wise equalization and enforcement decisions cannot be made. Although real estate market-strata can be reduced to three or so (agricultural, residential, and commercial/industrial), the problems of an excessive number of small assessment and taxing districts are not so easily solved. Indiana illustrates this problem: the number of strata that potentially needs to be studied exceeds 8,000, which implies a need for 120,000 sales distributed proportionally among the strata (eight use categories multiplied by 1,008 townships plus 293 school districts). The practical number of strata are fewer, because the strata with twenty-five or fewer properties do not need to be studied. While neither the IAAO standards nor the Dornfest and Thompson survey address the difficulties in studying a very large number of political subdivisions explicitly, it is worth noting that counties are responsible for assessment in thirty states and that only six states (including Indiana) have 1,000 or more assessment districts. Indiana should eliminate the responsibility for the assessment function at the township level and move primary responsibility for it to the county assessor.[40]

Step 4: Data Analysis. After data assembly and stratification, analysis can begin. Normal ratio study statistics include measures of central tendency (the median, weighted mean, and, perhaps, the mean), variability (the coefficient of dispersion and the price-related differential), and reliability (confidence intervals). Although these statistics are widely known and easily verified, the DLGF allows counties to submit non-standard and erroneous statistics.

Step 5: Evaluation of Results. When a sample of sales (or appraisals or both) is small, when it does not represent the total makeup of the total assessment roll well, and when the variation in ratios is great, ratio study statistics may not reliably portray the overall quality of appraisals. The same is true when ratio study statistics have been manipulated by adjusting appraisals so that they approximate sales prices ("sales chasing") or by selecting only sales with "good" ratios ("cherry picking"). Analysts should consider such possibilities before drawing conclusions based on ratio study statistics about the quality of appraisals. The DLGF accepted all county studies of the 2002 pay 2003 reassessment at face value. That practice cannot continue. The State must implement an independent, professional, statewide equalization analysis.

Step 6: Reporting. The final step in a ratio study is to report the results. *The Standard on Ratio Studies* recommends that procedures be well documented and that ratio study reports summarize these procedures and provide information on how to interpret the results in addition to presenting statistics. In Indiana, counties are required to provide the DLGF with spreadsheets containing the data used in the study as well as show the statistics. None of the equalization studies we reviewed provided any narratives, and there was no standardization in the spreadsheets (except that studies prepared by a single vendor usually were similar in format). Few of the studies complied with all of the DLGF's requirements, and many contained non-standard statistics, and some contained significant and substantive errors. Some were constructed in ways that would make it difficult to verify the overall accuracy of the studies. In contrast to Indiana's fragmented approach, some states are building statewide sales databases that could be used to validate reported ratio study statistics and perform related analyses.[41] Similarly, many local assessment districts in other states make it possible to evaluate assessment accuracy over the Internet by comparing assessments with those of comparable properties

40 IAAO's *Assessment Practices: Self-Evaluation Guide,* 2nd edition (page 8) suggests that assessment districts with fewer than 5,000 parcels of real estate or with total annual property tax levies of less than $12 million are too small.

41 Alberta's ASSET system is an outstanding example of such a system.

The challenge a supervisory agency faces is achieving the balance of activities that results in the highest level of assessment performance with the least consumption of resources and the least amount of stress. In other words, the more effectively the supervisory agency encourages high-level performance and the more effective its assistance activities are, the less onerous its enforcement activities will need to be.

and by examining comparable sales.

Section 5.2: A Model of State Supervision of Local Assessment

When a state delegates substantial responsibility for assessment to local governments, it needs to provide effective supervision of them.[42] Especially where there are many small local assessing jurisdictions, the supervisory agency can provide tools and services that are too costly for many local governments. Supervision also deters destructively competitive underassessment that can occur when state aid is based on local property tax wealth or tax effort. A competent property tax supervisory agency encourages competence in local assessment offices.

Recommendations made by the ACIR, the International Association of Assessing Officers (IAAO), and others constitute a general model of assessment supervision. The model assigns supervisory agencies four broad, interrelated functions: (1) setting standards and specifications, (2) assistance and counseling, (3) monitoring and analysis, and (4) enforcement.[43] The main components of this model are depicted in the top row of Table 5-1. In many respects, the boxes in the table represent a la carte menu choices, and application of the model varies widely.[44]

The development of standards and specifications is necessary for effective, uniform administration of property tax laws. Assisting and counseling activities can help local governments perform satisfactorily. Although crucial to effective supervision, monitoring and analysis may be seen as an intrusion or a threat. Enforcement is confrontational, with the supervisory agency often in a resented position of power. Enforcement actions, therefore, usually are a last resort, but they must be taken when other supervisory initiatives have not produced the desired results. The challenge a supervisory agency faces is achieving the balance of activities that results in the highest level of assessment performance with the least consumption of resources and the least amount of stress. In other words, the more effectively the supervisory agency encourages high-level performance and the more effective its assistance activities are, the less onerous its enforcement activities will need to be. In summary, the assessment supervision model combines effective programs for monitoring local conditions and local assessment performance, a strong commitment to assisting when necessary, "counseling" when performance falls below standards, and enforcing legal standards firmly and consistently.

Section 5.3: The Role of the Department of Local Government Finance

As Table 5-2 reveals, the DLGF, formerly the State Board of Tax Commissioners, has many of the powers and duties identified in the model of assessment supervision (Table 5-1). However, its record in applying the model is decidedly mixed. Furthermore, it appears that the DLGF's resources have not been commensurate either with its powers and duties or with local needs (see below). Whether that has been due to ineffectual leadership or to constraints imposed from above is difficult to say.

Resource Adequacy. In the State's current fiscal situation, the DLGF is acknowledged to be under-resourced relative to the workload implied by the State's organizational design for local assessment and relative to its statutory

42 This discussion is drawn from Almy 2003.

43 In addition to supervision, many supervisory agencies are responsible for the assessment of certain classes of property (such as transportation and utility property and occasionally industrial property).

44 The *Standard on Administration of Monitoring and Compliance Responsibilities* (IAAO 2003) contains a different set of choices.

Table 5-1: General Model of Assessment Supervision			
Set Standards	**Provide Assistance**	**Monitor Performance**	**Take Corrective Action when Necessary**
Examples of Options			
Valuation accuracy (ratio study standards)	General advice (policy, legislation, practices)	General oversight via field visits and complaint investigations	Intervene in local taxation via a roll approval process, quashing assessments, etc.
Revaluation and re-inspection frequency	Publications—including web-based (manuals, bulletins, periodicals)	Ratio studies	Order reassessments, assume responsibility for assessment, discharge assessors, etc.
Model revaluation contracts	Professional development (conduct or cooperate with conferences, courses, and workshops)	Performance audits	Administer performance-based financial incentives and penalties
Technical proficiency (education and certification requirements)	Provide appraisal assistance	Review copies of rolls	Direct equalization
Forms, codes, data, and system specifications	Provide mapping services	Competency testing	Indirect equalization
	Sponsor/develop computer systems for local use		
	Research		
	Financial assistance		

Table 5-2: Department of Local Government Finance Powers, Duties, and Activities	
Power, Duty or Activity	**Comment**
Set Standards	
Rules, generally—Yes, IC 6-1.1-4-26, (reassessment manuals, publications, and forms), IC 6-1.1-31-1	Pursuant to statutory mandate, the DLGF has issued reassessment regulations (50 IAC 2.3) in the form of an assessment manual and guidelines.
Appraisal performance—usually in the form of ratio study (3.2) standards	50 IAC 14 incorporates the ratio study performance standards from the IAAO *Standard on Ratio Studies*.
Revaluations—Yes, IC 6-1.1.-31-5 (valuation factors), IC 6-1.1-31-9 (general reassessments), IC 6-1.1-4-18.5 and 19.5 (revaluation contracts), and IC 6-1.1-31-12 (adjustments by county assessors).	The 2002 reassessment manual essentially provides background information. Version A of the guidelines provides considerable instructions and assistance, although virtually no information is provided on the sales comparison and income approaches. The DLGF's standard revaluation contract contains virtually no technical standards or performance standards.

Table 5-2, continued	
Power, Duty or Activity	***Comment***
Technical proficiency—ensuring that assessors and deputies have requisite skills—Yes, IC 6-1.1-35 (instruction and certification), IC 6-1.1-35.2 (training of new officials and continuing education), IC 6-1.1-35.5 (assessor-appraiser examination and certification) and IC 6-1.1-31-1 (to revoke certificates)	See 50 IAC 15. There are two levels of certification of local assessing officers discussed further below.
Forms, codes, data—Yes, IC 6-1.1-4-25 (electronic data files of township assessors), IC 6-1.1-15-1 and 2.1 (appeal forms and procedures), IC 6-1.1-31-1, and IC 6-1.1-31-6.	In regulations, the DLGF has issued extensive specifications for the transmittal of data to the State. Unfortunately, compliance with the regulations has been inadequate.
Provide Assistance	
General advice—IC 6-1.1-31-5 authorizes a variety of publications.	The Assessment Division of the DLGF deploys a number of field representatives. It also maintains a website, publishes a newsletter, and issues bulletins.
Professional development—training programs	The DLGF conducts or sponsors courses needed for certification under 50 IAC 15.
Appraisals	Apart from its powers under IC 6-1.1-35-13, the DLGF apparently has no authority to assist with the valuation of property short of taking charge of the assessment process. Doubtless its field representatives provide advice, however.
Mapping	The DLGF provides no mapping services. Its standard for parcel numbers often is ignored.
Systems	Apart from software needed to facilitate data transfers under IC 6-1.1-33.5-2, the DLGF is under no obligation to provide software. However, it has studied the feasibility of doing so. See *Uniform Property Tax Management: Feasibility,* Department of Local Government Finance, 2005.
Monitor Performance	
General oversight—Yes, IC 6-1.1-4-31 (periodic checks during general reassessments); also IC 6-1.1-33.5-4 (powers of the Division of Data Analysis).	The DLGF tracked progress during the 2002 pay 2003 reassessment and reported the results in a series of spreadsheets. Presumably, the DLGF's field representatives report noteworthy things to their supervisors.
Ratio studies—a statistical analysis of the level and uniformity of assessments—Yes, IC 6-1.1-33.5-3 requires the DLGF to make a "coefficient of dispersion study" every two years and a [full] sales ratio study every four (in conjunction with general reassessments). In addition, IC 6-1.1-34 requires that school ratio studies be conducted.	As discussed below, the DLGF is not currently capable of making ratio studies
Performance audits—IC 6-1.1-33.5-3 appears to authorize performance audits.	This power appears not to have been exercised.
Reviews of copies of rolls—IC 6-1.1-33.5 would appear to require the DLGF to build a database that would enable it to analyze local assessment rolls.	The DLGF's progress toward building a database is unknown; a file of sales was removed from its website shortly after this project began.

Table 5-2, continued	
Power, Duty or Activity	**Comment**
Competency testing—Yes	The DLGF administers the certification program required under 50 IAC 15.
Take corrective action when necessary	
Roll approval—as a prerequisite to levying property taxes	This enforcement tool is not contemplated under Indiana statutes.
Reappraisal orders—when existing valuations fall far short of standards (1.1)—Yes, the law provides several avenues for the DLGF to cause reassessments (e.g., IC 6-1.1-4-6 et seq., IC 6-1.1-15-10 et seq., and IC 6-1.1-33.5-6).	Apart from assuming responsibility for the 2002 reassessment of Lake County (under IC 6-1.1-4-32?), the DLGF does not have a history of probing the quality of assessments; it has complacently accepted county equalization reports in the 2002 reassessment.
Financial incentives/penalties	None appear to be contemplated in Indiana statutes.
Direct equalization—Yes, under IC 6-1.1-14-5 et seq.	This power appears not to have been exercised during the 2002 pay 2003 reassessment.
Indirect equalization—Effectively yes under IC 6-1.1-34.	School ratio studies make necessary adjustments to assessment totals.

duties. A general benchmark for evaluating the adequacy of funding for a state-level property tax supervisory agency is the ratio of its funding to total property tax collections in the state. According to available budget documents, actual expenditures by the DLGF for property tax administration in 2002 was $4 million, which is less than 0.08 percent of property taxes collectable in the year. The current combined budget (for the DLGF and the Indiana Board of Tax Review) is $6.3 million. It is often held that expenditures for property tax supervision should be at least 0.1 percent of property tax revenues. Table 5-3 provides the most recent comparative national statistics. With a combined staff of about 87, only 13 of which are assessment function field representatives, and a huge number of local districts to supervise, the State's property tax administration and oversight resources are spread thin. As currently staffed, the DLGF seems ill-equipped to visit local districts, counsel and train local assessment personnel as necessary, review sales screening, review county equalization studies, and value centrally assessed property, much less to make its own equalization studies.

Training and Certification of Assessing Officers. As indicated in Table 5-1, Indiana provides training for assessing officials and has a certification program. Other than a requirement in IC 6-1.1-35-1.1, which seems to require that each county and each township with an

Table 5-3: Supervisory Agency Budget & Staffing Benchmarks

	Budget as a Percentage of 1996 Total Property Tax		Agency Budget ($) per Assessment District		Assessment Districts per Staff Member	
	1992	1999	1992	1999	1992	1999
Minimum	0.014	0.003	1,098	170	0.14	0.24
Median	0.14	0.141	24,941	30,779	2.03	1.79
Maximum	3.211	0.551	508,333	306,153	43.75	299

Source: International Association of Assessing Officers, 2000, *Property Tax Policies and Administrative Practices in Canada and the United States*, page 12, Exhibit 4-3.

elected assessor must "employ a level two assessor-appraiser," the certification program is voluntary. Under it, interested assessing officers and others may take examinations of their knowledge of Indiana property tax law and assessment practices, valuation principles, and other subjects. Before sitting for the examination, each examinee must take a six-hour course. Successful examinees are awarded a certificate by the DLGF. There are two levels of examination and certification: a basic level (level one) and a more advanced level (level two). Once certified, the certificate holder must complete continuing education requirements to retain her or his certificate (30 or 45 hours over three years, depending on the level of certification). The DLGF furnishes the six-hour preparatory course, a three-day course for new assessing officers under IC 6-1.1-35.2-2, and other offerings. The emphasis in training and certification is on matters covered in the 2002 manual and guidelines and in the *Assessor's Operations Manual*, which was updated in 2003, but which we could not inspect because it is no longer available. However, based on what we have seen, examinees' mastery of critical subject areas—ratio studies, mass appraisal model building, and similar important subjects—would not be tested.

Supervision of the 2002 Reassessment. The DLGF's supervision of the 2002 pay 2003 reassessment largely was confined to a series of *pro forma* progress checks. Assessors were required to secure the DLGF's approvals at various stages of the assessment and taxation process. They had to secure its approval of software vendors, revaluation contractors, county equalization studies, assessed values, and budgets before 2003 taxes could be levied and assessed. This limited, essentially reactive, role doubtless contributed to the delay in completing the 2002 reassessment.

Section 5.4: Indiana's Equalization System

Indiana essentially has a two-stage equalization system.[45] It is depicted in Figure 5-1. In the first stage, county assessors are to make ratio studies and equalize local assessments as necessary under IC 6-1.1-13-6. In the second, the DLGF reviews the county studies and is empowered to make any necessary further adjustments pursuant to IC 6-1.1-14-5. IC 6-1.1-31-5 requires the DLGF to issue rules regarding equalization by county assessors, and 50 IAC 14 contains these rules. Rather than forthrightly addressing important statistical issues, the rule merely refers to the IAAO *Standard on Ratio Studies* (1999), which in turn may not provide clear guidance. In short, complying with the rule would require users to be experts in ratio studies. Based on our review of a sample of county studies, most counties and their equalization study consultants would seem unequipped to comply with the IAAO standard and make credible studies.

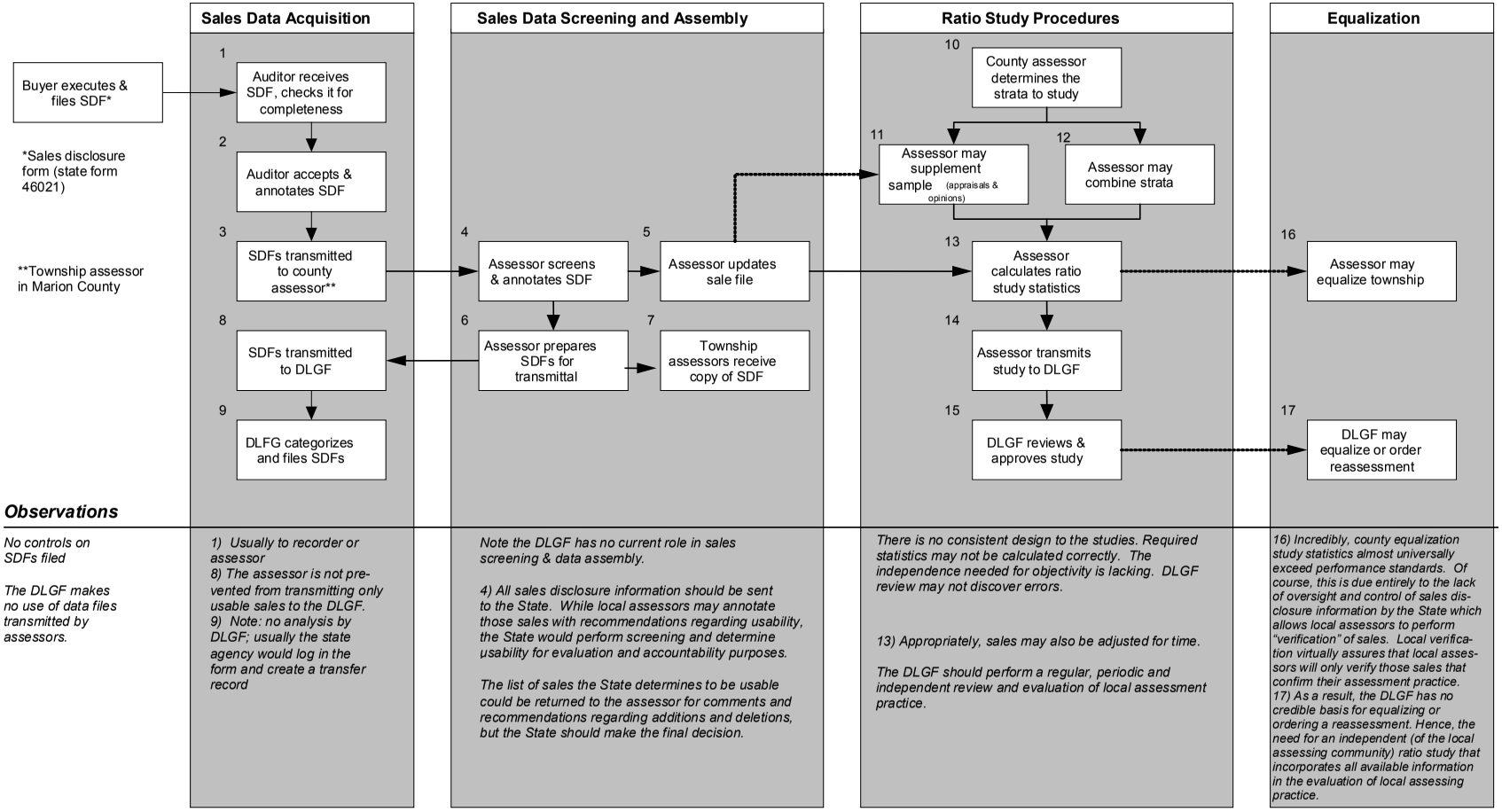
It should be emphasized that the DLGF currently does not and cannot make an independent ratio study as the law requires (IC 6-1.1-33.5-3 requires the Division of Data Analysis of the DLGF to make three ratio studies: a biennial COD study, a quadrennial sales ratio study, and the school ratio study called for by IC 6-1.1-34). As noted in Section 8, legally required data standards are not adhered to. Moreover, the DLGF only archives the sales disclosure forms it receives. Partly because county equalization studies come in many formats, it is difficult for the DLGF even to verify the computational accuracy of the studies. The DLGF accepted all studies and did not question them even when several uncorrected computational errors were noted.

A larger problem is the inability of the DLGF to analyze the sales samples used in the county studies. As a result, the current equalization system is a sham. The incredibly good accuracy portrayed by the county studies (in contrast to the results of our independent analysis) demonstrates that many of the sales used in the county studies are included only if they confirm the assessments (so-called "cherry picking"), or that sold properties are assessed on the basis of their sales prices (so-called "sales chasing"), or both. An independent ratio study that complies with professional standards is needed. As noted, seventy-three counties relied on contractors for all or part

45 Illinois and Michigan have similar systems. In Alberta, the province audits ratio studies and sales file submitted by municipal assessors. Importantly, there is a 3rd party source of all sales transactions in Alberta that Alberta Municipal Affairs uses as a check against (omissions in) the sales reported by local assessors.

of the 2002 reassessment. In twenty-two, the reassessment contractor also made the equalization study, a clear conflict of interest. Similarly, in nine counties, assessors evaluated their own performance.

Figure 5-1: Current Indiana Equalization Study Process



Section 6
Market Value Assessment Requires Complete, Accurate, Pertinent, Low Cost, and Timely Assessment and Sales Data

Section 6.1: Description and Discussion of Data Issues Found During the Study

In property taxation, the determination of property value is the determination of the tax base. The accurate and uniform determination of value is a necessary step in the administration of a quality property tax system. Data, or "factual information, especially information organized for analysis or used to reason or make decisions,"[46] is absolutely necessary to making the determination of value accurate and uniform. Without good data, quality assessments are not possible.

Property tax data, from assessment data to deductions, credits, and exemptions to billing information to tax collection, is needed and used by several local and state officials, departments, and agencies. Locally, the assessor, the auditor, and the treasurer all have major roles in the administration of the property tax. But the most basic information, the tax base, is the most important data of all, because if the tax base—or the starting point of property tax administration—is not "right," then the rest of the system begins to break down.

So, while the needs and uses of other local officials (the county auditor and county treasurer foremost among them) are important, it is vital that assessor-compiled information be of the highest quality. The determination of the tax base and the State's ability to evaluate that function require quality, complete assessment data, including all of those data points required under the current state assessor data standard. Any less would make constitutional compliance impossible.

Market value assessment requires more timely data than the previous, true tax value, standard. In addition, data collection, storage, manipulation, and sharing requirements are more complex than in the past. Yet, in spite of extensive regulations requiring the transmission of data to the State, very few local assessors have complied and even fewer have come to the common, standard form of practice.

Prior to January 1, 2003, the State did not mandate a standard format for parcel identification numbers (PINs). The only requirement was that a parcel number be "a unique identifier assigned to a real estate parcel by each county."[47] The State did mandate that "all counties must specify geographic information on each parcel in the real estate parcel file, including county number, township number, and district number."[48]

From January 1, 2003 forward, 50 IAC 12-15-1(c) stated that: The parcel index numbering system shall be structured as "00–00-00–000–000.000–000". The digits indicated shall reference the following:

(1) The first "00" digits shall reference the county;
(2) The second "00" digits shall reference the congressional township and range;
(3) The third "00" digits shall reference the section number assigned under the United States public lands survey;
(4) The fourth "000" digits shall reference block numbers in urban areas (if no block number is necessary they remain all zeros);
(5) The fifth "000.000" digits shall reference the permanent parcel number assigned to identify each parcel; and
(6) The last "000" digits shall reference the taxing district in which the parcel is located (if it is only a two (2) digit number, the first digit is to remain a zero (0)).

In addition, the rules mandated that a county "assessment system shall maintain and make available for electronic retrieval all assessment system data relative to" the current date, the

46 *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*

47 50 IAC 12-2-25.

48 50 IAC 12-1-3(a)(9).

most recent and prior March 1st, and the assessment date of the most recent general reassessment.[49]

Therefore, even if counties decided to not comply with the post-January 1, 2003 rules and submitted assessment data in an older format, that format, if followed correctly, would have provided all assessment information necessary to complete the Study.

Not only did counties not adopt the post-January 1, 2003 rules, but they were not in compliance with the prior data processing rules. We found nearly complete lack of consistency across the counties in regards to data handling that encompassed every aspect of assessment data. Assessment data was not transferred in the DLGF-mandated format. In some cases, the complete dataset was from the incorrect year and incorrectly labeled. In other cases, data was incomplete or contained meaningless information.[50]

Even when the dataset was complete, systems, structures, and coding systems varied. PIN system structures had multiple formats. The structures ranged from as few as 6 characters to as many as 18.[51] In one county, records in the parcel file were not uniquely identified by their PINs in certain cases. Taxing district identification structures used by the county assessor differed from the state taxing district identification structure. Within counties, different schemes were used by the assessor, auditor, treasurer, and on sales disclosure forms.

In many counties, the standard format assessment data submission did not contain consistent or complete information. In some counties, taxing district codes had inconsistent structures. In other counties, class codes were incomplete or missing entirely. PINs contained some of this information in some cases, which the Study Team used. In still other counties, sales information was missing, incomplete, or undecipherable. Table 6-1 summarizes the ubiquitous nature of data problems encountered by the Study Team.

49 50 IAC 12-3-6.

50 For example, in Adams County, the standard format submission contained over 30,000 records of sales information. But, in EVERY record, there was no sales price. In addition, some of those records dated back into the mid-1800s.

51 The mandated standard for assessor data submitted to the State is in 50 IAC 12.

The reasons—and responsibility—for the data problems lie in a variety of places. First, the DLGF, and its predecessor, the State Board of Tax Commissioners, have not provided the leadership, direction, or enforcement of whatever state standards they were empowered to design and require. Second, the interaction of several locally elected officials—the assessor, the auditor, the treasurer—all with different constitutional and statutory powers, responsibilities, and deadlines, has led to the development and implementation of inconsistent data processes and systems. Finally, the lack of recognition by many local officials—and the State—that they are accountable beyond their political borders for their practices and administration, have led many to believe that they are responsible for policy and that they, and only they, should decide what data they need and how they use it.

Not every local official, or State official, falls into the previous paragraph's characterization. Some comply with state standards and some work efficiently and effectively with other local and state officials. Nevertheless, the data problems encountered by the Study Team were well beyond what anyone expected.

Although the Study Team was able, with an enormous expenditure of resources, to obtain and decipher an adequate amount of data to conduct equalization analysis on 87 of the 92 counties, the remaining five proved beyond the reach of the Study within an acceptable time frame. The IFPI will continue working with these counties (where possible) to obtain data that will allow the completion of equalization analysis in these counties in which we can have confidence. Those counties are: Brown, Henry, Noble, Perry, and Wabash. We will discuss each in some detail later in this section.

Noncompliance, errors, and omissions contributed to extraordinary amounts of both time and money being expended on this study. It kept the Study Team from completing its work in all 92 counties. The status quo will not allow the State to meet the constitutional standard of uniformity simply because there will be no effective way to evaluate local assessing results and thereby ensure compliance with State Standards.

Table 6-1: Review of Data Problems Data Type, by County ("x" indicates those counties in which we found problems)				
County Number	County Name	Parcel Identifier Data	Taxing District Identifier	Sales Disclosure Data
1	Adams		x	x
2	Allen		x	
3	Bartholomew		x	
4	Benton	x		
5	Blackford	x	x	
6	Boone		x	x
7	Brown	x	x	x
8	Carroll	x	x	
9	Cass	x	x	
10	Clark		x	
11	Clay		x	x
12	Clinton		x	
13	Crawford	x	x	x
14	Daviess		x	x
15	Dearborn			
16	Decatur	x	x	
17	DeKalb		x	
18	Delaware	x		x
19	Dubois		x	
20	Elkhart			
21	Fayette	x	x	
22	Floyd	x	x	
23	Fountain		x	
24	Franklin		x	
25	Fulton	x	x	
26	Gibson		x	
27	Grant		x	
28	Greene			
29	Hamilton		x	
30	Hancock		x	
31	Harrison	x		
32	Hendricks	x	x	x
33	Henry	x	x	x
34	Howard			
35	Huntington		x	x

Section 6.2: Parcel Identification Numbering Structures

The parcel identification number is the basic piece of information necessary to perform equalization analysis, because it ties assessment information from the county assessor-supplied data to sales information from the sales disclosure form (or other sales proxy data). Without the parcel number, equalization analysis would not have been possible for this study.

Table 6-2 lists a selection of counties with different PIN structures. They range from Crawford County, which uses six digits to uniquely identify a real property parcel, to Switzerland County, which uses 17 digits. Nearly every number of digits in between was used by some county or counties. Note that there are at least three different parcel numbering systems in use in Noble County. Ultimately, the Study Team was unable to decipher Noble County data sufficiently to have confidence in the equalization analysis.

In many counties, the Study Team found that more parcel numbers existed than parcels. One explanation for this, provided by the Monroe County assessor, is that the auditor assigned "dummy" PINs in order to estimate property tax liabilities for yet to be developed parcels. For example, if an empty residential lot were to have a house built on it, the builder (or soon-to-be homeowner) would ask the auditor to estimate their property taxes. The auditor would create a dummy parcel number in order to make the estimate, and that number would stay in the system.

In some counties, PINs used by the assessor differed from those used by the auditor. In most cases, the "translation" needed to allow local administration appear to have worked adequately. However, since the auditor's office completes the sales disclosure forms, they often used their PIN to complete the form. If that PIN structure differed from the assessor's, then the Study Team could not match sales information to assessment data. We identified at least 24 counties in which we encountered PIN problems of one sort or another.

Table 6-1, continued				
County Number	County Name	Parcel Identifier Data	Taxing District Identifier	Sales Disclosure data
36	Jackson		x	x
37	Jasper	x	x	
38	Jay	x	x	
39	Jefferson		x	x
40	Jennings		x	
41	Johnson	x	x	
42	Knox			
43	Kosciusko		x	
44	LaGrange		x	
45	Lake	x	x	x
46	LaPorte		x	
47	Lawrence	x	x	x
48	Madison		x	x
49	Marion		x	x
50	Marshall		x	
51	Martin			x
52	Miami	x	x	
53	Monroe	x	x	
54	Montgomery		x	
55	Morgan		x	
56	Newton		x	
57	Noble	x	x	
58	Ohio	x		x
59	Orange			
60	Owen		x	
61	Parke	x	x	
62	Perry		x	x
63	Pike			
64	Porter	x	x	
65	Posey	x	x	
66	Pulaski			x
67	Putnam		x	
68	Randolph	x	x	
69	Ripley			
70	Rush			x
71	St. Joseph		x	x
72	Scott		x	

There were no counties in which all SDFs could be matched to parcels via their digitized PINs, and of course matching PINs from Multiple Listing Service (MLS) data was even less likely to be successful. The availability of sales data is the single biggest constraint to accurately appraising property and to evaluating assessment performance. To waste potentially available data of this nature by being unable to match them to parcels because of foolish inconsistencies seems profligate.

Section 6.3: Taxing District Codes

Besides the PIN, the taxing district code assigned to that PIN is the most important piece of information for property tax administration. The inconsistent structures for taxing district codes were particularly troublesome and frustrating for the Study Team. There are an astounding 73 counties (79% of the total) in which the locally used taxing district codes differ from the state-assigned codes.[52] In these counties, a translation from local to state codes is required in order for the State to administer the property tax system.

In most cases, although, for some reason, not all, the DLGF coding convention starts with the number 1 and continues in numerical order. Taxing district names are ordered, beginning at 1, alphabetically by township, with municipalities within a township immediately following the township. Table 6-3 shows an example of this convention in Floyd County.

We find it unconscionable that the DLGF, and its predecessor, the State Board of Tax Commissioners, allows (and allowed for decades) this practice to continue. It almost surely caused errors, some of which may not ever have been found, and certainly caused inefficiencies (read, cost more money) and probably incorrect tax billings at both the state and local administrative levels.

No one person or entity in state government, either at the DLGF, the State Budget Agency, or the Legislative Services Agency, had a

52 The actual state convention is a five digit number. The first two digits are the county number (xx), followed by a three digit assignment for each taxing district. When we refer to a taxing district code of 1, the actual code would be xx001 at the State and 001 locally. For a code of 10, the state code would be xx010 and the local code 010. For ease of explanation, our discussion eliminates "leading zeros."

Table 6-1, continued				
County Number	County Name	Parcel Identifier Data	Taxing District Identifier	Sales Disclosure data
73	Shelby		x	
74	Spencer	x	x	x
75	Starke		x	
76	Steuben		x	
77	Sullivan			
78	Switzerland	x		
79	Tippecanoe		x	x
80	Tipton		x	
81	Union	x	x	
82	Vanderburgh		x	x
83	Vermillion			x
84	Vigo		x	
85	Wabash	x	x	
86	Warren		x	
87	Warrick		x	
88	Washington		x	
89	Wayne		x	
90	Wells		x	
91	White		x	
92	Whitley		x	
	Total	30	73	25

complete list of taxing district codes. The IFPI staff spent many, many hours researching, analyzing, and contacting local assessors, auditors, and the staff at the DLGF in order to compile data to allow the translation from local taxing district codes to the state coding conventions.

The local coding conventions differed in nearly as many ways as there are counties. In some counties, townships were identified starting with the number 1 followed, in numerical order, by municipalities. Some counties followed this convention by assigning numbers in alphabetical order while others did not. Another example of a coding convention assigned the numbers 10, 20, 30, and so on to townships with municipalities within a township numbered in sequence following the township number. For example, the Whitley County treasurer assigned “20” to Columbia Township and “21” to Columbia City in Columbia Township.

Perhaps the most troubling aspect of the nonconformity problem was that some jurisdictions used exactly the same set of codes as prescribed by the State, e.g., the numbers 1, 2, 3,...20, but assigned them different meanings. In several cases, such errors were caught only because the distribution of parcel counts among the townships implicit in the codes differed radically from the known relative populations of the actual townships. In other cases, there was one code fortuitously unused

Table 6-2: Examples of Varying PIN Structures			
County	Number of Digits in PIN	Example	Notes
Crawford	8	RE010032	First 2 denote real estate, only last 6 have meaning
Hendricks	13	0111371100005	Also provided GIS id, 18 digits
Jay	15	132320100300013	Also provided GIS id, 18 digits
Lawrence	10	08 000509 02	No meaning in 3rd or 4th digits
Noble	11	02019004377	Used 11, 12, and 13 digit PINs
Noble	12	020190043156	
Noble	13	0200800350050	
Ohio	16	003-03-34-400-009-000	
Spencer	14	021-080-00003945	
Switzerland	17	005-008-30-700-011-003	

Table 6-3: Floyd County	
Taxing District	**State Code**
FRANKLIN TOWNSHIP	22001
GEORGETOWN TOWNSHIP	22002
GEORGETOWN TOWN	22003
GREENVILLE TOWNSHIP	22004
GREENVILLE TOWN	22005
LAFAYETTE TOWNSHIP	22006
NEW ALBANY TOWNSHIP	22007
NEW ALBANY CITY	22008

that served to signal that all was not well with the data.

In Whitley County, the County assessor uses the same codes as the DLGF, but their parcel codes contain a different taxing district code for use by the county treasurer in preparing tax bills. According to the county assessor, they were told to use the different coding by their software vendor.[53]

A version of this convention is used by several other counties in which the township codes start at 5 and continue, by fives: 5, 10, 15, and so on. Morgan County uses this convention, with Jackson Township assigned number 45 and Morgantown Town in Jackson Township assigned number 46.

The Study Team asked counties why they chose their coding conventions and the most common answer was "it's always been this way." But there were a variety of other responses, as well:

- In Miami County, the county assessor's office directed us to the county auditor for help deciphering the difference between the taxing district codes used locally and the state codes. The staff in the auditor's office said that they had been using the local convention "forever." She did not know why the State would "use different codes."[54]
- Warrick County said that it "would stick with two sets of numbers going forward."[55]
- Wabash County Assessor Kelly Schenkel indicated that she wants to change her local coding system to match the State's, but that the Wabash County auditor's system can't handle the change since the new parcel numbering system "has too many digits."[56]
- In Putnam County, according to County assessor Anita Peters, the coding convention was produced by their software vendor in 1996 with no consideration for state numbers.[57]

As a final example, Table 6-4 shows the state and local conventions for Jay County.

It is absolutely unclear to the Study Team why, in Jay County, the local coding convention is what the State uses in most other counties but the State chooses to use a different, and on the surface, illogical one. In Jay County, the State convention is unlike any other convention seen in any other county. It certainly appears, from this example, that the DLGF was not only not interested in establishing consistency in the counties, but that they did not see any value in consistency within their own structure.

Section 6.4: Matching Parcels to Taxing Districts

Because counties did not use the state taxing district codes, the parcel number became our primary method of determining in which township a parcel was located, because, often, the local taxing district codes were used in PINs. Here again, inconsistencies in structures posed problems. PINs could differ across assessors and auditors, as could taxing district codes. Noble County is an extreme example because we have not been able to develop enough confidence in our ability to decipher parcel and sales disclosure data to complete the equalization analysis. However, the problems we en-

53 Telephone conversation with Angie Adams, Whitley County assessor, on August 20th, 2004.

54 Conversation with Miami County assessor's staff and auditor's staff, August 20, 2004.
55 Conversation wth Cathy Madden, Warrick County assessor, November 19, 2004.
56 Conversation with Kelly Schenkel, Wabash County assessor, November 19, 2004.
57 Conversation with Putnam County assessor Anita Peters, November 19, 2004

Table 6-4: Jay County		
Taxing District	State	County Assessor
BEARCREEK TOWNSHIP	020	001
BRYANT TOWN	021	002
WAYNE TOWNSHIP	033	003
PIKE TOWNSHIP	029	004
JACKSON TOWNSHIP	023	005
GREENE TOWNSHIP	022	006
JEFFERSON TOWNSHIP	024	007
PENNVILLE TOWN	011	008
PENN TOWNSHIP	010	009
KNOX TOWNSHIP	025	010
RICHLAND TOWNSHIP	030	011
DUNKIRK CITY	014	012
REDKEY TOWN	031	013
PORTLAND CITY	034	014
WABASH TOWNSHIP	032	015
MADISON TOWNSHIP	026	016
NOBLE TOWNSHIP	028	017
SALAMONIA TOWN	027	018

countered are illustrative of others throughout the State.

Note that in Noble County, three different taxing district coding conventions are in use; one each by the State, by the County assessor, and by the County auditor. In addition, the assessment data has an 11, 12, or 13 digit PIN (see Table 6-5) and an 18 digit GIS parcel number, while the sales disclosure forms have a 10 digit PIN. After obtaining a translation table with the 18 digit GIS parcel number, an "alternate" PIN and a "Tax ID number," we were able to "match" 499 sales to assessment data. The results were surprising, as the residential improved property class median ratio for Noble County was 0.424. The county-wide CoD was 33.8. The township by township results were similar and consistent across townships. If the analysis were valid, Noble County would be the first—and perhaps the only—county with a severely low assessment level. The CoD did not meet the IAAO standard and would have ranked near the bottom (in the bottom quartile) of all counties. However, data quality checking raised questions about the validity of the data, the results, or both.[58]

While we have not been able to complete the analysis of Noble County, the data inconsistencies clearly illustrate the difficulties for the State in reaching a constitutionally uniform property tax system. Without data, without complete, quality, and consistent data, equalization analysis cannot be conducted with confidence. Without the analysis, the State cannot effectively administer a uniform property tax system because it cannot hold local assessment officials accountable. Noble County's locally performed equalization analysis presented a residential improved reassessment that met the IAAO standards, with median ratios in townships ranging from 0.94 to 1.04 and CoDs ranging from 6 to 14.59.

Without being able to confirm our analysis of Noble County, we could not make credible recommendations for action. Yet, our analysis raises serious questions about the quality of the reassessment in Noble County. This clearly indicates that better data is absolutely necessary in order for the State to ensure professional and uniform application of the property tax assessment standards.

Section 6.5: Property Class Codes

Class codes, of course, are necessary to conduct equalization analysis by the different property classes—residential, commercial, industrial, vacant and improved. In several counties, the assessment data submitted in the standard format contained incorrect property class codes or no coding at all. Although we were able to overcome the problems in all but one case, it was an unnecessary use of time and expense.

In Henry County, the problem was that the county used a coding system not recognized by the State to track property classes The information

58 Total assessed value of the assessment data set, as calculated by the equalization analysis, appeared to be inconsistent with regard to other sources of reported data. Equalization analysis yielded very low ratios. The Study Team does not regard Noble County's analysis as complete and is continuing to investigate.

59 Noble County's own equalization analysis of commercial and industrial property did not obtain a sample size sufficient for credible analysis.

storage, structure, and transmission mandated in the standard format were not followed. The county used "land use codes" for their local purposes. As a result, preliminary analysis for Henry County indicated that there were only 23 parcels of commercial or industrial improved property in the county. That, of course, was not the case and it calls into question the accuracy of the other analysis. The county did not provide the properly structured data transmission in time for inclusion in the statewide analysis.[60]

Missing property class codes were problematic in Benton, Blackford, Fayette, and Warren counties.

Table 6-5: Noble County

Taxing District	State	County Assessor	County Auditor
Albion Township	57001	5	13
Albion-Albion	57002	6	14
Allen Township	57003	10	9
Kendallville City-Allen Twp	57004	70	10
Avilla Town	57005	11	11
Elkhart Township	57006	15	3
Green Township	57007	20	20
Jefferson Township	57008	25	12
Noble Township	57009	30	19
Orange Township	57010	35	4
Rome City Town	57011	36	5
Wolcottville Town	57012	37	6
Perry Township	57013	40	1
Ligonier City	57014	75	2
Sparta Township	57015	45	16
Cromwell Town	57016	46	17
Swan Township	57017	50	21
Washington Township	57018	55	18
Wayne Township	57019	60	7
Kendallville City-Wayne Twp	57020	71	8
York Township	57021	65	15
Albion-Jefferson	57022	7	23
Albion-York	57023	8	22

60 As with Noble County, the Study Team is investigating the new data in an attempt to complete equalization analysis.

Property class codes were also misused in respect of exempt properties. Rather than using the property class code signifying that the property was exempt, we found that some jurisdictions assigned exempt property codes suggesting that it was residential/commercial or whatever, but denoted its exempt status by means of non-standard tax district codes (and provided no information to alert the team to the fact that such non-standard practices were being followed).

Section 6.6: Sales Disclosure Form Data

Without question, data that provided market value information was the most problematic for the Study Team. There was, statewide and almost without exception, a severe lack of quality sales disclosure information. This was in spite of the facts that:

1. The DLGF mandated that sales information be collected, maintained, and submitted in the standard electronic format, and

2. That the State has required sales disclosure information to be collected, maintained, and submitted for more than a decade.

Sixty-seven of the 92 counties submitted at least 50 usable sales in the standard format.

Table 6-6: Number of Counties Providing More than 50 Sales Transactions

Source of Sales Information	Submitted	Used in Analysis
County Report, Local Format	5	5
Standard Format	79	67
MLS	28	14
Sales Disclosure Forms	90	63
IFPI Data Entry	7	7
Total	91	91

Twenty-five did not. In some cases, some data was included but very little—or none of it—was usable. Adams county submitted 30,178 sales records in the standard format but not one of them contained a sales price. In addition, many of the records were old and would have been unusable, as they were dated from as far back as 1833. Other counties provided similarly useless data. Five counties provided sales data that contained some usable sales in their own, locally determined format. Marion County first submitted only those sales they used to conduct their own equalization study. MLS data was ultimately obtained by the Study Team and used to perform equalization analysis on Marion County.

The DLGF provided no electronic sales disclosure information. It merely archived the paper forms it received. With the DLGF's cooperation, we obtained the archived forms and had them digitized. Other sales disclosure data was obtained directly from counties and manual data entry was performed by the IFPI staff. This labor intensive and expensive process involved scanning and hand editing or hand entering data from paper sales disclosure forms. The availability of these forms was limited or, for some counties, not available from the DLGF. Digitized data was available for 90 of the 92 counties; only Brown and Porter counties did not provide sales disclosure information in this manner. However, in only 53 counties were as many as 50 of these sales usable in the equalization analysis.

The Metropolitan Indianapolis Board of Realtors (MIBOR), the Evansville Area Board of Realtors (EABOR), and the Northwest Indiana Board of Realtors (NIBOR) each provided sales information electronically. We used this MLS data to supplement our sales disclosure form data in 14 counties.

In those counties where the DLGF did not have, or had only a few, paper copies of the sales disclosure form, the IFPI either obtained paper copies or made paper copies of locally stored sales disclosure forms. The IFPI staff traveled to Crawford, Hendricks, Jackson, Ohio, Perry, Switzerland and Vermillion counties to gather this sales information. In Vermillion County, as an example of the lack of understanding of the value of this information, staff in the County assessor's office complained about "too much paperwork." The staff member did not understand why sales disclosure information should be copied and sent to the State, given to realtors, or attached to the property record card "even though the information was already on the sales disclosure form."[61] She apparently thought that one copy in her filing system was sufficient and these other entities really did not need the information or did not need the information on a separate paper copy. Nevertheless, without this source of sales data, equalization would not have been possible for these counties as they did not provide adequate numbers of sales information.

From all sources, the Study Team obtained a total of 2,535,144 sales transaction reports. However, from this number, only 217,847 proved usable in equalization analysis. Only 8.6% of all sales were used in the analysis. Normally, in a robust market value assessment system, about half of all sales proxies prove usable.

Section 6.7: Data Quantity and Quality

The fact that several sources of data were needed to complete the Study reinforces the fact that data gathering, maintenance, and transmission processes have not been systematically addressed. Without complete, accurate, easily obtainable and usable sales data, quality assessments may be unachievable and there can be no accountability of the assessment process or results.

Beyond the issues of evaluation and accountability, quality data collection and maintenance processes add value to a market value assessment system. Indeed, they are necessary to its success. There are three issues in this regard. First, the sheer quantity of data is important. Data from every sales transaction should be collected, evaluated, stored, and be available for analysis by both the local assessor and the State. Second, information from the transaction should be complete. Lastly, local officials should ensure the quality of the data.

61 Conversation with "Paige" in Vermillion County assessor's office when picking up sales disclosure forms in order to copy them at IFPI offices on August 23rd, 2004.

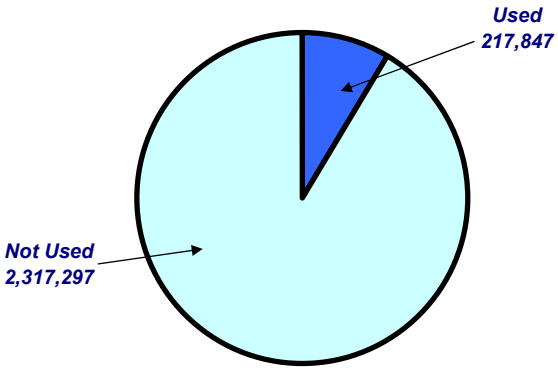
Complete data is as worthless as no data if it is incorrect or unreadable (in an electronic sense or otherwise).

The equalization analysis provides evidence of the value of more, as opposed to less, quality data. Figure 6-2 displays the range of each county's confidence interval for its residential property median ratio. The values between the lower and upper bound of a 95% confidence interval are the range within which, with a 95% probability, the actual median ratio will fall. The range is a measure of how confident we are of our median ratio estimate. A narrower range means we are more confident of our result. The size of the range is dependent upon the sample size (the number of sales) and variability of the values in the sample. The variability in the sample is a function of the quality of the assessment. The more sales, the narrower the confidence interval. The narrower the confidence interval, the more precisely we can measure the quality of the assessments. In other words, the more sales, the better the assessment AND the evaluation of the results will be.

The county-wide confidence intervals are, in some cases, quite narrow and, in others, very wide. We found the narrowest residential improved median ratio confidence intervals in Allen, Hendricks, and Marion Counties. They were essentially equivalent to the median ratio. That is, our analysis indicates that we are 95% confident that we have estimated the actual median ratio. The widest range is in Martin County, at 0.31. In this case, we are confident only that the actual median ratio is somewhere between 1.02 and 1.33 with a 95% probability. In other words, the median assessed value for a house with a market value of $100,000 could be as low as $102,000 or as high as $133,000.

There is a distinct correlation between the sample size (the number of sales) and the confidence interval in our results. The sample size was generally larger in counties in which the confidence interval was narrowest. The sample size was over 1,050 in the 21 counties with the narrowest confidence intervals. No county with a sample size greater than 1,000 had a confidence interval wider than 0.04. Union,

Figure 6-1: 8.6 out of 100 Sales Proxies Used in Equalization Analysis



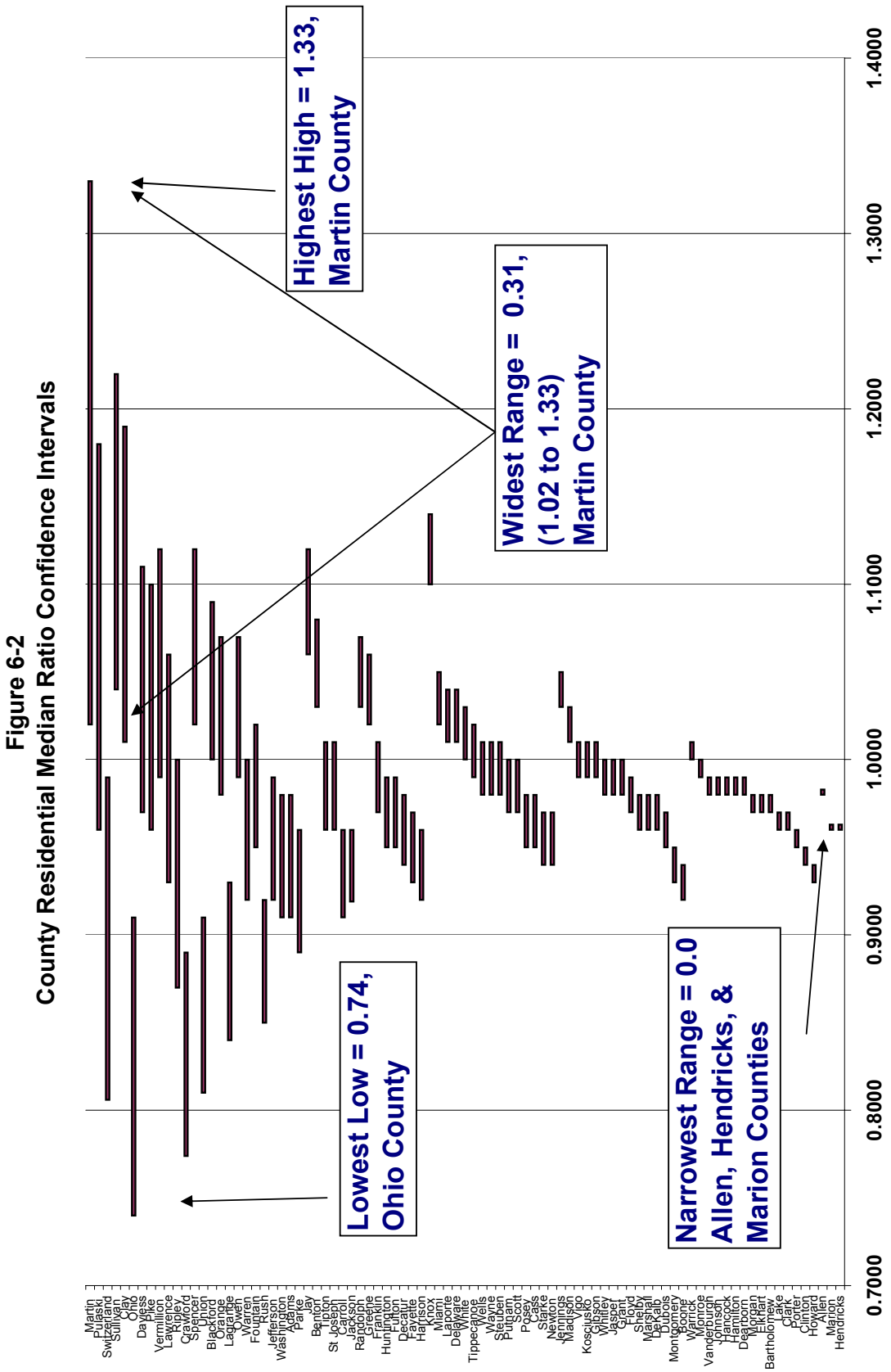
Spencer, Ripley, Ohio, Switzerland, Pulaski, and Martin counties all had sample sizes of less than 100. Those counties confidence intervals were all wider than 0.10.

Charting the confidence interval ranges for commercial and industrial property yields a similar result and reinforces the idea that larger sample sizes reduce confidence intervals. In every county, there were fewer commercial and industrial sales than residential sales. Figure 6-4 displays the width of the confidence interval which, in every county, is wider than for residential property.

Obviously, sample sizes, the number of sales transactions within a county (or township), are dependent upon a number of factors. Chief among those factors is the literal size of a county (or township). Those with either more land or more people will have more parcels and, probably, more sales transactions. Economically active counties (or townships) will have more sales as well. On the other hand, rural counties (or townships) will have more land devoted to farming and therefore fewer parcels and sales.

A significant number of counties are more rural than urban, are smaller in geographic size, and are not as active economically as other counties. In those counties, the simple lack of sales transactions make both the assessment process and its evaluation more difficult. Table 6-7 lists the 10 counties with the smallest and largest number of real property parcels and the sample size for this Study. Combined, the 10 counties with the fewest parcels do not have

Figure 6-2
County Residential Median Ratio Confidence Intervals



as many as are in Elkhart County. The 15 counties with the most parcels contain 50.1% of all parcels in the State.

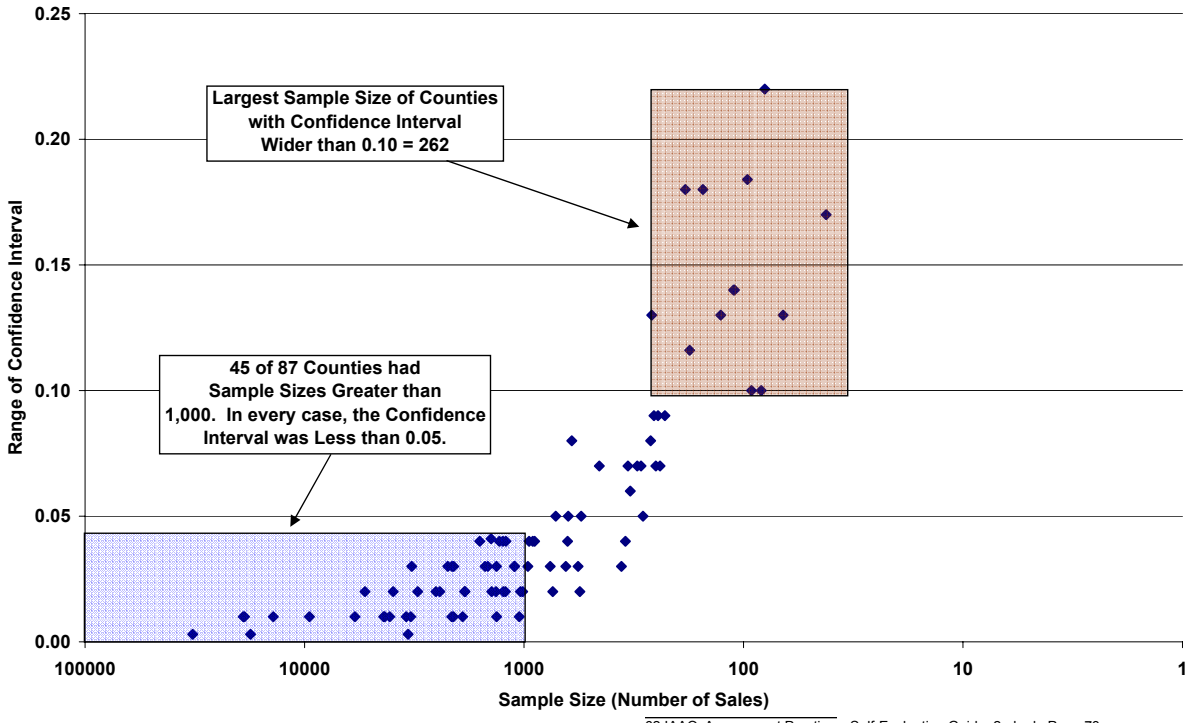
In terms of data necessary for quality assessment and assessment evaluation, the number of sales is more important. Here, too, there is great disparity across the counties. The 10 counties in which the most usable sales were available combined to account for over 56% of all usable sales in the State. Conversely, the 10 counties with the fewest sales combined to account for less than 1% of all usable sales.

Clearly, limiting data availability and use to county boundaries severely limits the data in many counties. The limitation, obviously, is more severe if that limitation is based on township boundaries. Artificially (and historically) drawn jurisdictional boundaries do not apply to most real property markets in Indiana, so market information from beyond assessment jurisdictional boundaries should be pursued; in fact, it should become standard operating procedure. Indeed, the State should give serious consideration to regionalizing assessment jurisdictions in order to maximize effective and efficient application of data availability and usage.

Finally, in terms of sales transaction data, there has been much discussion (and, some legislative proposals) concerning the "verification" of sales to be used for equalization analysis. Many people involved with the assessment process, including some local assessing officials, do not understand the meaning of the term verification. The IAAO uses a different term: screen. In its assessment self-evaluation guide, it states "all real estate sales should be timely screened by a qualified staff person, and assigned a validation code indicating whether the sale is an open market, arm's length transfer and, if not, the reason why it is not."[62]

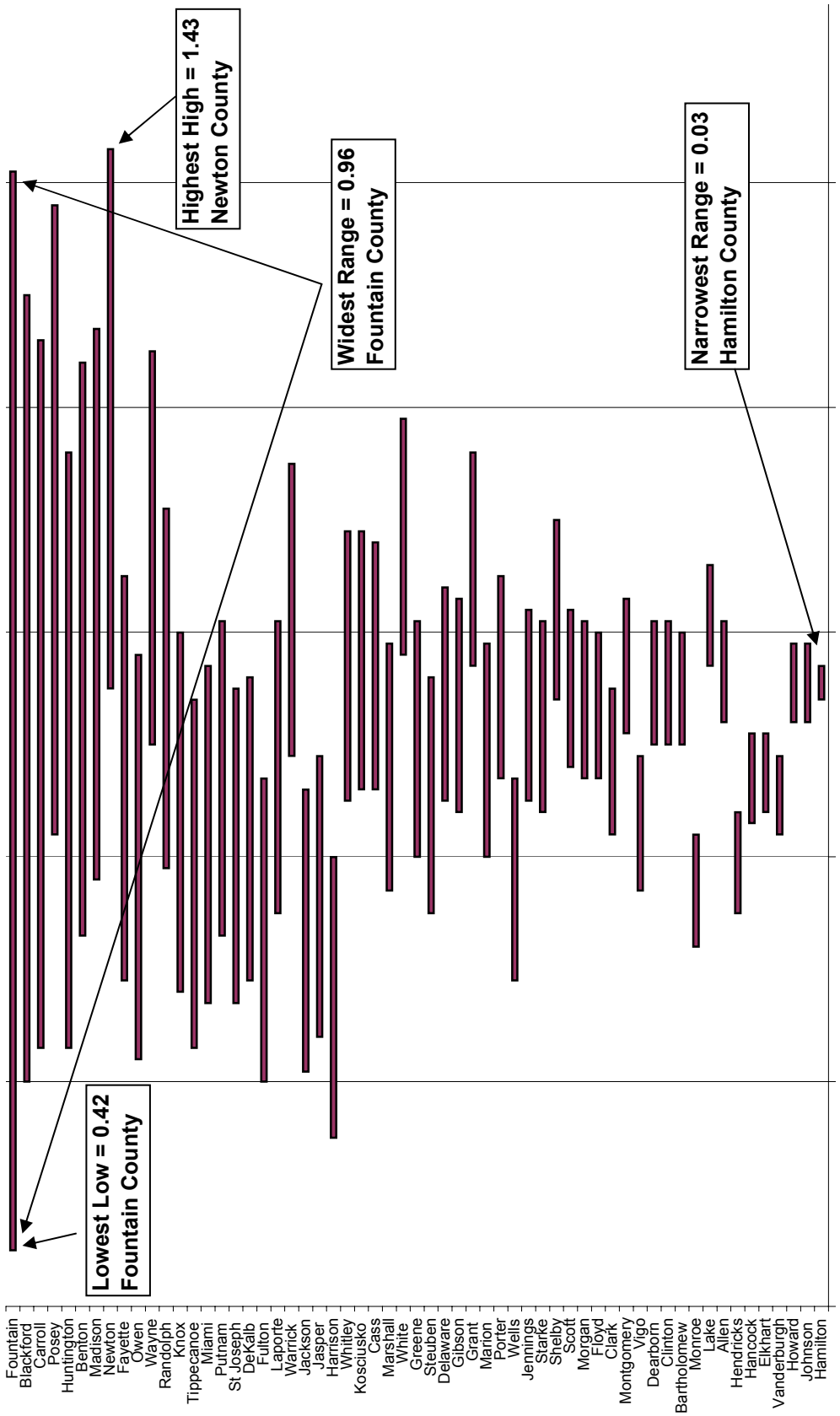
A factually and completely executed Indiana Sales Disclosure form provides the information necessary to screen every sale. If the information is collected and stored electronically, then validation of the sale is an electronic process, as well. Statistical screening for outliers and data trimming techniques, in addition to

Figure 6-3
Impact of Sample Size on Range of Confidence Interval



62 IAAO, Assessment Practices, Self-Evaluation Guide, 2nd ed. Page 73.

Figure 6-4: County Commercial and Industrial Median Ratio Confidence Intervals



complete disclosure information, will generate the quality sales samples needed for analysis. See Section 7, Equalization Study Design and Methodology for a discussion of the electronic and statistical screening processes used in this Study.

Therefore, in a professionally administered assessment process with a 21st Century data collection, storage, and maintenance system that obtains quality, complete information on every sales transaction, verification becomes an electronic process.

Only when sales disclosure information is incomplete or incorrect is the labor intensive process of determining if a sale is an open market, arms length transaction necessary. Data processing and statistical analysis can, and does, screen sales information so as to include only those truly market value transactions.

Finally, in a 21st Century information technology and processing world, data handling processes can—and should—be made to work automatically. That is, there should be minimal "hand entered" data, even at the assessment data gathering stage: assessment data should be electronically available to the State, and all other local offices with property tax administration responsibilities.[63] Most importantly, the data and the processes must conform to a state-mandated system that ensures consistent application of property tax laws and rules and allows oversight and monitoring of the system. Compliance is not just the responsibility of the local assessing official. Vendors providing contractual assistance to assessors should also be held responsible for meeting data and format reporting standards.

Table 6-7

Counties with Fewest Parcels		Counties with Most Parcels	
County	Parcels	County	Parcels
Ohio	2,906	Marion	330,530
Union	5,881	Lake	221,395
Switzerland	6,684	Allen	142,898
Benton	6,955	Saint Joseph	115,873
Martin	9,068	Hamilton	87,522
Crawford	9,099	Elkhart	85,334
Warren	9,513	Vanderburgh	77,802
Blackford	9,867	Madison	76,370
Newton	10,300	Porter	67,675
Rush	10,875	LaPorte	63,413

Table 6-8

Counties with Fewest Sales		Counties with Most Sales	
County	Sales	County	Sales
Martin	81	Marion	32,496
Ripley	95	Lake	19,322
Daviess	132	Hamilton	19,078
Spencer	138	Allen	18,145
Union	144	Vanderburgh	14,496
Pulaski	154	Elkhart	10,182
Lawrence	170	Johnson	6,118
Clay	174	Vigo	5,710
Switzerland	181	Monroe	5,012
Pike	197	Bartholomew	4,574

Section 6.8 Spencer County – an Illustration of How Data Problems Slowed the Equalization Analysis

The Study Team began working on Spencer County in September 2004. Sales disclosure form data was available in two forms: electronic and paper. There were 16,635 market value proxies in an electronic format, but none of them proved usable. Another 398 paper forms were in the DLGF archive, but only 137 of those were usable.

Unraveling the assessor-provided data became significantly problematic, as most all aspects of data conventions were not compliant with state standards and inconsistent within the county. There are at least two different parcel identification numbering structures in use in Spencer County. First, the auditor has their own "taxpayer id" system. The assessor uses a different system. Therefore, the assessor

63 Auditor, recorder, treasurer, for example.

has two sets of numbers, one of which is 15 digit map or key number.

Contributing further to the confusion, sales disclosure forms are completed using a 12 digit parcel identifier. To translate that 12 digit identifier used by the auditor on the sales disclosure form to match a 15 digit parcel identifier used by the assessor in the data they submitted to the State for this study requires the use of the algorithm in Table 6-9.

That 15 digit number must then be translated through a side by side table to the 14 digit number used on the assessor's electronic record. From this point, the use of different taxing district codes by the State and the county (Table 6-10) required a translation so that taxing districts could be properly identified. Finally, the county uses a different coding system for their townships, adding a code and splitting Hammond Township into "north" and "south." Sorting out the various translations and correctly applying the algorithm required an enormous expenditure of time and effort by Mark Brown and Bob Denne.

Mark Brown made numerous (five or six) telephone calls to Spencer County, spent many hours and days working with their parcel and SDF data, and communicated on several occasions with Bob Denne. Denne also spent many hours on Spencer County, meaning that between the two of them, significant resources were devoted to simply understanding and unraveling the data issues in Spencer County in order to perform the equalization analysis.

It is unclear to us why such confusion is necessary and why the DLGF would tolerate such distortion. It makes every attempt at equalization (and most other sub-county property tax) analysis problematic and time consuming. Spencer County truly is the perfect example of why a statewide standard needs to be developed, implemented, and enforced by the DLGF.

Table 6-9: Conversion Algorithm for PINs in Spencer County

Start with the PIN Recorded on Sales Disclosure Form: 05-10-102-049-21		Steps to Convert to Usable PIN:	Intermediate and Final Results:
Step 1	05-10-102-049-21	Move last 2 digits ("21") to front and add a leading "0"	021-05-10-102-049
Step 2	021-05-10-102-049	Then remove the 12th character (in this case, it changes "102" to "12).	021-05-10-12-049
Step 3	021-05-10-12-049	Finally, add three zeros ("000") to the end of the character string	021-05-10-12-049-000

Table 6-10: Spencer County Taxing Districts State and Local Codes

Taxing District	State	Spencer Co.
CARTER TOWNSHIP	001	10
DALE TOWN	002	11
SANTA CLAUS TOWN-CARTER TOWNSH	003	12
CLAY TOWNSHIP	004	20
SANTA CLAUS TOWN-CLAY TOWNSHIP	005	21
GRASS TOWNSHIP	006	30
CHRISNEY TOWN	007	31
HAMMOND TOWNSHIP-NORTH	008	41
HAMMOND TOWNSHIP-SOUTH	009	42
GRANDVIEW TOWN	010	43
HARRISON TOWNSHIP	011	50
SANTA CLAUS TOWN-HARRISON TOWN	012	51
HUFF TOWNSHIP	013	60
JACKSON TOWNSHIP	014	70
GENTRYVILLE TOWN	015	71
LUCE TOWNSHIP	016	80
OHIO TOWNSHIP	017	90
ROCKPORT CITY	018	91

CHAPTER 3: EQUALIZATION ANALYSIS AND RESULTS

Section 7
Equalization Study Design and Methodology

Section 7.1: Data Assembly

Although the statutes and regulations require counties to submit data in state-prescribed formats, preliminary submissions of assessment and sales data were found to be in such diverse formats and unreliable condition as to necessitate the development of a new standardized set of data file specifications that each county, or its vendor, was expected to follow in the submission of such data for the Study. Crowe Chizek took the lead on this matter, with consultations involving Almy, Gloudemans, Jacobs & Denne (AGJD), counties, vendors, and others. The final set of assessment data (as distinct from tax data) included specifications for eight files. Of these, the most important were Parcel, Sales Disclosure, Improvement, Dwelling, and Building; of lesser importance were the Appeals, Building Detail, and Land files.

Contrary to expectations, there were significant variations in the submitted data even after the establishment of the standard specifications. As discussed in Section 6.1, the following were among the most troublesome variations:

- the omission of information on prior assessments in the Parcel file
- the omission of data on sales in the Sales Disclosure file (some counties reported nothing; others reported such facts as the parcel identifier, the transaction date, and parties involved, but not the transaction amount; surprisingly few met the requirement entirely)
- the inconsistent usage and formatting of parcel identifiers in the various files
- the inconsistent usage and coding of tax district identifiers in the Parcel file

In view of the widespread noncompliance with the request to submit information, particularly information on sales in standard format, efforts were undertaken on several fronts to obtain information on sales from other sources. Very few counties exceeded expectations by providing copies of their working sales files, complete with codes to indicate the usefulness of each sale as an indicator of market value, and similar valuable information. More often, study personnel were obliged to rely on two alternative sources: multiple-listing-service (MLS) files from several realtor groups from various parts of the State and specially keyboarded files resulting from a project-funded endeavor to digitize the paper sales disclosure forms (SDFs) provided to the State. The state copies of such SDFs, often accompanied by an attached photocopy of the assessor's "property record card," were captured as digital images, and relevant fields from the SDF, including parcel identifier, sale price, and transaction details, were key entered in four separate batches over the course of the project.

The crucial elements from the assessment data were the parcel identifier (without which it was impossible to link to other files to assemble other essential information), the total assessment for the parcel (some use was made of the separate land and improvement assessments as well), the property class code (which determined whether the parcel was includable in the Study and the stratum in which it belonged), and the tax district number (which was decoded into a township identifier, although when necessary, townships were alternatively identified by other means). Assessment information that was used, if available, included the assessment in place prior to the reassessment (total and separately for land and buildings), the year that an improvement was constructed (including information on the effective construction year and renovation year if available), the total square footage of the improvement, and the square footage of living area for residential improvements. Crucial elements of data for sales were the parcel identifier, the transaction amount (at least approximately), and the transaction date (at least approximately). Additional

data that were used if available included the class of the property at the time of its sale and a variety of codes tending to indicate the validity of the sale as an indicator of an arm's-length, market-value transaction.

The equalization studies supplied by the counties to the DLGF were not used in the present study because, as a general matter, they failed the test of independence. They did not follow the required standard format. In addition, there were many irreconcilable differences in the numbers of properties in the various strata. More importantly, too often sales seemed to be selected because they confirmed the assessments. In some strata, actual sales were not used, rather, opinions of value supposedly independent of the assessor's/contractor's opinion of value were used. Significant problems arose in identifying exactly what the value indicator was (sale or appraisal). In addition, it was difficult to determine if it may have been adjusted to reflect such considerations as time of sale, unusual financing, and personal property and other factors. Given the goal of performing an independent, objective, standards-based study as uniformly as possible, the decision was made to conduct the present study independently of them, although members of the Study Team other than the principal analyst have generally reviewed them and contrasted their results.

Section 7.2: Data Qualification

For a ratio study to have applicability to the population as a whole, not just to the small subset of properties that happened to have been sold, it is essential that the sample of properties being analyzed be representative of the population. To help ensure this, two steps were taken. First, tests were made for the possibility of biased treatment of sold properties relative to unsold ones. Second, properties for which there was evidence of significant new construction or a change in use were eliminated from the Study. The latter policy was adopted on two grounds: assessments on new construction in general are not always reflective of assessments on the remaining stock, and there was a significant problem in many counties in ensuring that the parcel as assessed matched the parcel as sold due to lack of compliance with the uniform data specifications. In the interest of employing uniform procedures in each county in the frequent absence of uniform data, the policy of eliminating new construction from consideration was adopted. In addition to excluding new construction, properties that had a change of use, as indicated by a significant change in the use code of the property between the time of its sale and the time of its assessment, were eliminated from consideration if the available information permitted this, because such sales would not be reflective of the definition of true tax value in the *2002 Real Property Assessment Manual.* The tests for biased treatment will be described below.

In addition to qualifying the parcels in the Study, steps were taken to qualify the sales where it was possible to do so. Validity codes provided in the few working sales files from county assessor's offices were considered. Also considered were the various codes from the digitized SDFs when available. Unexpected problems arose in the processing of some of these data, and in such cases, we gave the county the benefit of the doubt. For example, we expected that for "type of deed," reasonable codes would be Q/q (for quit-claim, an excludable type) and W/w (for warranty, a good indicator of market value, other things being equal). Often, however, we were faced by a flood of undefined codes, which necessitated adoption of the rule that only records having blanks or clearly suggestive codes, such as W/w, would be retained for further analyses. Where such data were lacking, principally in the MLS files, we obviously could not perform such screening, but such data are much more likely to be valid, arm's-length transactions in any event.

To maximize the number of sales available for analysis, sales from as far back as 1998 were included. All sale prices were adjusted to the reflect the price level on the assessment date using the time adjustment procedures described on pages 265-268 of *Mass Appraisal of Real Property,* IAAO, 1999. Reported adjustments for personal property and financing, when available and consistent with the gross sale price, were accepted. In cases where a given property was

sold multiple times during the period, only the most recent sale was considered for inclusion in the Study.

Sales could only be used if they could be matched to parcel records, which occasioned a significant amount of struggle in an attempt to maximize the number of available sales. Both MLS sales and records transcribed from the digitized SDFs were subject to a variety of problems in this regard. The two biggest problems were variation in the "punctuation" of parcel identification numbers (PINs), and undocumented changes in the length or structure of PINs. Some jurisdictions, presumably in an effort to make long PINs friendlier to human readers, insert a variety of dots, dashes, spaces, and other characters into their PINs. Surprisingly, some even do this inconsistently, such as in their Parcel file but not their sales disclosure file. Unsurprisingly enough, outside documents, including SDFs and MLS records, rarely follow the punctuation pattern reliably. Fortunately, it was often possible to solve this problem when it arose by algorithmically removing all such punctuation wherever it appeared and matching records on the basis of newly created "depunctuated PIN" fields in each file. The more troublesome, and generally insoluble, problem arose when the jurisdiction replaced one system of PINs with another. In such cases, we may have had a multitude of MLS and SDF records with one set of PINs and a parcel file with a different set of PINs, usually of much greater length. As a general matter, we have had no success in obtaining translation tables from one set of PINs to another, although we have tried a variety of sources, including tax records (as opposed to assessment records) in the specified standard format. In such counties, the number of sales available for analysis is simply extraordinarily circumscribed.

A final qualification of sales involved calculating the ratio of assessment to (adjusted) sale price and excluding the records with so-called "extreme" ratios. The objective is to eliminate records that are almost surely erroneous and therefore unrepresentative of the population at large. Such "trimming" procedures are sanctioned by the *Standard on Ratio Studies* of the International Association of Assessing Officers, 1999. Trimming was done in each county, irrespective of whether or not it had complied with requests for the provision of sales data. The idea behind the procedure is much like the practice of excluding the tails from a set of normally distributed data, which many people may be familiar with from statistics courses. The details in this context differ, however, for several reasons. The data of interest here are far from normally distributed. Thus, we are constrained to use so-called nonparametric statistics rather than the more familiar parametric statistics including the standard deviation and the mean. Further, since the data (a) are ratios that can never be less than zero, (b) are tremendously bunched up between zero and 1.0, and (c) can assume virtually any value greater than 1, finding a way to trim both sides of the distribution equivalently requires an extra step. The key is to consider that a given misstatement (say ten-fold) of a numerator (dropping or adding a zero, for example) will appear much different than an identical misstatement of a denominator in natural form, but will be perfectly equivalent if logarithms are taken. The same is true of other magnitudes of misstatement, say fifty percent instead of ten-fold. Thus, the first step in eliminating extremes is to take the logarithm of the ratios (either natural or base-ten; it doesn't matter). Next, the width of the central portion of the data is identified. This is done by subtracting the 25th percentile from the 75th percentile and obtaining the inter-quartile range, or IQR. The IQR, of course, encompasses 50 percent of the data, in contrast to the 68 percent of normally distributed data that the two central standard deviations encompass. To trim "extremes," add 3 IQRs to the 75th percentile and reject any values over that amount and subtract 3 IQRs from the 25th percentile, and reject any values under that amount. (To trim "outliers," not just extremes, use a multiplier of 1.5, not 3, for the IQR-based amount that is to be added to and subtracted from the upper and lower quartiles.) Outliers will be discussed in connection with the bias tests described below.

Although the amount of effective qualification of sales could not be made uniform across all the counties in the State due to the constraints of inconsistently supplied data, the same

procedural steps were followed in each county. The counties that provided more sales and more information on the qualification of such sales will tend to have more reliably measured ratio-study results, but there was no penalization of non-complying counties. The only disadvantages such counties suffered were self-inflicted, and every reasonable effort was made to treat each county as fairly as possible, with the most attention paid to obtaining additional sales data for counties with the least amount of qualified sales data.

Section 7.3: Data Analyses

Stratification, that is to say grouping for analytical purposes, was done both by township and by the major property classes specified legislatively. Detail at the following levels was provided in each township:

- agricultural vacant (Vacant meaning unimproved land, without structures, rather than without inhabitants. Agricultural vacant properties are required to be evaluated in terms of compliance with the use-value methodology, not sales, as here. 50 IAC 14-5-1.)
- agricultural improved (Such properties are not required to be studied, 50 IAC 14-5-2, but were included here for convenience.)
- industrial vacant
- industrial improved
- commercial vacant
- commercial improved
- residential vacant
- residential improved

In all cases, a property's classification was derived by collapsing the more detailed "property class code" from the parcel file records into the relevant broader categories given above. A given property was never subdivided among classes, as agricultural properties reputedly sometimes are for other purposes, since there is no objective way of subdividing a given sale transaction into multiple values.

All the statistics recommended in the *Standard on Ratio Studies* were calculated, although not all of them were included in published reports.

The main statistics calculated for each stratum include the following:

- The parcel count from the assessment roll
- The current total assessed value from the assessment roll
- The number of qualified sales in the given stratum
- The sampling fraction in terms of parcel counts
- The sampling fraction in terms of assessed value (these are not particularly important in terms of the sample reliability, but most observers find them interesting)
- The median ratio. Medians are preferred to means because they are the least affected by outlier or extreme ratios. The median is the preferred measure of how close the assessor has come to estimating full market value when the objective is to measure performance. When the objective is to equalize assessments made at disparate levels among various local governments, the median may also be used, although an alternate measure, the weighted mean, is preferred when the data are of high quality. The median is the middle ratio when the ratios are sorted from lowest to highest.
- The weighted mean ratio. Although calculated, this statistic is not generally used in this study except for the legislatively required school equalization purposes because of problems with the generally low quality of the data. Like the mean, the weighted mean is subject to undue influence by extreme and outlying ratios. When the data are known to be clean, valid representations of market value, the weighted mean ratio can be preferred for equalization purposes because it appropriately weights evidence by market value, not by individual sales, and so can properly reflect the true total market value of a jurisdiction that may be affected by value-related assessment inequities. The school corporation ratio study required by IC 6-1.1-34 requires the weighted mean to be used.
- The coefficient of dispersion, which measures how tightly the assessors' estimates of value cluster around the market values indicated by the adjusted sales prices. It is somewhat

analogous to the standard deviation. It is calculated by taking the average of all the absolute values of the differences between each individual ratio and the median ratio, dividing that average by the median ratio, and expressing the result as a percentage. It is sometimes thought of as the average percentage error, although that is not a strictly accurate characterization.

- The price related differential, which indicates a regressive pattern of assessments (i.e., higher-valued properties assessed at lower fractions of market value than lower-valued property) if the number is greater than 1.03 and a progressive pattern of vertical inequity (the opposite of that described above) if the number is less than .98. Numbers between those bounds are considered to exhibit no first impression of vertical inequity, although it is possible more detailed tests may reveal some. (No such further testing was done on these data thus far.) The range is slightly asymmetrical in reflection of a slight statistical bias in the way the numbers are calculated. It is calculated by dividing the mean ratio by the weighted mean ratio.
- The upper and lower bounds of a 95% confidence interval about the median ratio (and the weighted mean ratio where relevant). These bounds indicate the reliability of the estimate of the median (or weighted mean) given the size of the sample from which it was calculated and the variability of the ratios in the sample. It is analogous to the margin of error given in connection with opinion polls. The number goes up directly with the increases in the variability of the sample ratios and goes down with the square root of the size of the sample. It is, technically, the range within which the true median would be found to lie, with 95 percent reliability, if it were possible to repeatedly perform the calculation with a different but equivalent sample of sales each time.
- The imputed market value of the stratum, which is the result of dividing the total assessed value by the calculated median (or weighted mean) ratio of assessed value to market value derived from the sample of validated, time-adjusted sales.

State law provides that when the number of parcels in a stratum is below a *de minimus* threshold, no equalization is required. Even with this provision, and even including up to five years of sales when they were available, however, there were many cases of strata for which there were no or inadequate numbers of sales. Since sales cannot be made to order, of course, the only objective alternatives were to consolidate strata and to impute the performance in one stratum based on the measured performance in another. Both of these approaches were adopted. Consolidation was done on the basis of experience elsewhere in the similarity of assessment performance with various kinds of property. Consolidations were done in steps, with the following combinations being ultimately reached:

- Improved commercial and improved industrial property
- Vacant commercial, industrial, and residential property
- Each of the remaining separate classes as identified above

Even with these consolidations, however, there were cases where sufficient sales data were unavailable. Within counties, data were also consolidated across township lines into both the mandated strata given earlier and the consolidated strata given immediately above.

Section 7.4: Validation

Sample-based statistics are only valuable to the extent that the sample represents the population of interest, as noted above. To the end of ensuring that the sample does not present a biased view of the population, tests were made of the sample to compare the treatment of the properties that were included in the ratio study to properties that were not recorded as having been sold in the interval. (Properties that were sold but not part of the Study were excluded from the following analyses.)

The preferred comparison was of changes in assessment, as a percentage, from the immediately preceding assessment roll to the current roll implementing the reassessment. The idea

is to determine if all properties experienced similar changes, on the one hand, or the sold properties were increased more while the unsold properties were substantially unchanged, on the other hand. In order to perform this test, of course, both current and prior assessments were required. These were not always provided, and in some cases where they were apparently provided, there was reason to believe the previous assessments may have been reassessment drafts rather than prior-year finals. In such cases, an alternative test, described below, was performed.

The analysis of assessment percentage changes, like the calculation of ratio statistics *per se*, was done only after eliminating extremes. However, in addition to eliminating extremes, outliers were also eliminated in an attempt to explore what was happening with the bulk of the population. In this case, the extremes and outliers were defined in terms not of assessment ratios, but rather in terms of assessment percentage changes. In so doing, the sensitivity of the test was deliberately blunted, since it is well know that ratio studies can be distorted by the inclusion of just a handful of "chased sales" (those whose assessments have been changed to reflect market value while assessments on similar unsold properties remain unchanged). But we wanted to minimize the incidence of false positive results generated by the uneven quality of the data. The test we performed is the Mann-Whitney test, described in the *Standard on Ratio Studies*. That test is sensitive to differences across the entire distribution of percentages changes, not just differences between the two median changes. In addition to the test, we calculated the median percentage change for the studied and the unsold parcels. When both the difference in medians was practically significant (i.e., ten percent or more) and the Mann-Whitney test indicated the differences between the two distributions of changes would have arisen by chance alone, in the absence of a real difference between them, only five percent of the time (i.e., it was statistically significant at the 95 percent confidence level), we noted the situation. In general, we noted only cases where the increase for the studied properties exceeded the increase for the unsold properties, not the other way around, since we understood the inequities of the prior assessments to have favored older, more depreciated structures that may nevertheless have been more valuable than previously assessed and thus to have required disproportionate assessment increases to bring them to equitable levels of assessment.

Tests of disproportionate assessments per square foot of improvement (with a number of variations) were made between studied and unsold parcels when data availability problems precluded testing for differences in assessment percentage changes. Again, both extremes and outliers (in terms of assessments per square foot, not assessment ratios) were eliminated from consideration. Four tests were made, in a two by two setup, since none of the tests were ideal. Those were: total assessments and improved assessments both per total square footage of improvement and per square footage of living area (for residential properties). Again, medians were calculated and Mann-Whitney tests for differences in the distributions of assessments per square foot were performed. When differences that were both practically significant (studied properties assessed at least ten percent higher per square foot than unsold properties) and part of a difference in the two distributions that was unlikely to have arisen solely by chance at the 95 percent confidence level, the fact was noted.

To date, nothing has been done about suspected biased results beyond noting where further exploration seems warranted. Given the less-than-ideal reliability of the data in some jurisdictions, automatic adjustment of the initial ratio study results in the absence of an opportunity for the affected jurisdiction to be heard seemed premature.

Section 7.5: Conclusion

The numerical results are presented and analyzed on an overall basis in Section 8 of this report. There is also a separate tabulation of data in the format required for the school district equalization study. In addition, separate reports have been prepared for each county, showing results by township and by major property classes. These reports are available

electronically from the following internet address: http://www.indianafiscal.org.

The Study was seriously impaired by a lack of compliance in submitting mandated data. Data acquisition activities included seeking the cooperation of counties and vendors in the provision of legislatively mandated data. When failures occurred, the Study Team took extraordinary measures to obtain additional data from various sources, including realtor MLS files, and to capture and analyze unprocessed data in warehoused Sales Disclosure Forms (State form number 46021). As a result, the present Study is the best that can be done short of dramatically increasing costs to obtain appraisals of properties in strata where reported sales are nonexistent or inadequate in number.

The study was performed objectively and in accordance with standards of best practice.

Section 8
Equalization Analysis

By one standard, the county-wide level of assessment as measured by the median ratio, one could state that the results of the first ever market value-based reassessment was surprisingly good. Indeed, as we shall see, 90% of the counties we evaluated met the IAAO standard for level of assessment. It is good news that Indiana's first attempt at a market value-based assessment system demonstrated that our assessment community has the well-known Hoosier "can do" attitude. However, the level of assessment is but one measure of assessment quality. As our analysis demonstrates in the sections below, there is much improvement needed if the State is to meet the constitutional standard of uniformity.

Our analysis found comprehensive, statewide evidence of an overwhelming lack of uniformity and consistency in assessment results. Our analysis clearly demonstrates inconsistent application of the market value based assessment rule and provides evidence of non-uniform interpretation of the rule by the local assessor (or their contractor). Both the level of assessment (measured by the median ratio) and the uniformity of assessment (measured by the coefficient of dispersion) differ across townships and counties. Inconsistencies across townships within and across counties demonstrate that there is no accountability required of local assessing officials, whether it is counties holding townships accountable or the State holding counties and townships accountable.

Section 8.1: Overview

For purposes of this report, 87 counties provided data sufficient for us to perform the equalization analysis with confidence in the results. For four other counties, Henry, Noble, Perry, and Wabash, we have questions about the veracity of the data or know that the data is problematic in some way.[64] We did not obtain data from Brown County in time to include it in this report. The analysis and results presented below use data from the 87 counties listed in Table 8-1.

We performed equalization analysis on assessment and market value proxy (sales) data

Table 8-1: Summary Equalization Statistics by County

		Parcels and Samples			Residential Improved				Commercial & Industrial Improved			
	County	Parcel Count	Total Sample	Sample as % of Count	Sample Size[2]	Median	COD	PRD	Sample Size[2]	Median	COD	PRD
1	Adams	17,265	261	1.5%	240	0.938	19.34	1.03	17	1.087	42.56	1.23
2	Allen	142,898	18,145	12.7%	17,628	0.981	14.00	1.02	360	0.961	29.98	1.16
3	Bartholomew	32,344	4,574	14.1%	4,312	0.976	13.35	1.02	135	0.953	21.07	1.11
4	Benton	6,955	618	8.9%	549	1.056	30.94	1.10	33	1.000	66.92	1.47
5	Blackford	9,867	301	3.1%	256	1.024	35.06	1.16	22	1.079	36.21	0.96
6	Boone	25,023	1,424	5.7%	1,342	0.933	16.87	1.02	10	0.675	36.72	1.05
7	Brown[1]											
8	Carroll	18,343	831	4.5%	717	0.935	35.49	1.14	57	0.844	73.09	1.27
9	Cass	26,286	2,379	9.1%	2,093	0.965	27.57	1.09	129	0.984	50.57	1.24
10	Clark	46,465	2,262	4.9%	2,133	0.968	13.94	1.01	54	0.901	25.25	1.14
11	Clay	21,423	174	0.8%	153	1.080	51.17	1.30	11	1.068	62.69	2.98
12	Clinton	20,711	2,142	10.3%	1,905	0.945	21.60	1.05	113	0.948	31.08	1.20

64 We present and discuss these issues in Section 6 of the Report.

Table 8-1, continued

	County	Parcels and Samples			Residential Improved				Commercial & Industrial Improved			
		Parcel Count	Total Sample	Sample as % of Count	Sample Size[2]	Median	COD	PRD	Sample Size[2]	Median	COD	PRD
13	Crawford	9,099	361	4.0%	176	0.810	41.82	1.15	15	0.560	72.24	1.38
14	Daviess	16,889	132	0.8%	110	1.019	36.33	1.15	12	1.178	28.79	0.99
15	Dearborn	27,323	1,476	5.4%	1,334	0.985	16.44	1.04	68	0.952	21.47	1.12
16	Decatur	18,143	666	3.7%	633	0.965	18.80	1.03	14	0.914	46.81	1.32
17	DeKalb	26,170	2,766	10.6%	2,419	0.970	24.36	1.05	138	0.818	56.05	1.07
18	Delaware	56,120	1,575	2.8%	1,462	1.025	29.81	1.14	82	0.962	43.12	1.08
19	Dubois	30,165	588	1.9%	557	0.961	8.31	1.00	15	1.013	13.72	0.96
20	Elkhart	85,334	10,182	11.9%	9,503	0.977	17.94	1.02	480	0.868	34.04	1.08
21	Fayette	13,533	1,044	7.7%	913	0.949	27.38	1.07	44	0.809	57.32	1.46
22	Floyd	33,087	4,207	12.7%	3,946	0.977	21.30	1.01	166	0.928	32.23	1.16
23	Fountain	13,085	392	3.0%	293	0.995	36.65	1.14	20	0.688	91.99	2.28
24	Franklin	14,069	378	2.7%	345	0.994	18.12	1.03	9	0.626	60.40	1.21
25	Fulton	15,551	1,470	9.5%	1,210	0.972	33.35	1.11	86	0.715	63.70	1.01
26	Gibson	19,989	800	4.0%	740	0.999	15.77	1.03	48	0.948	18.68	1.00
27	Grant	45,551	2,690	5.9%	2,518	0.990	23.76	1.08	108	1.028	42.91	1.06
28	Greene	22,541	1,223	5.4%	948	1.041	35.32	1.16	81	0.878	61.21	1.61
29	Hamilton	87,522	19,078	21.8%	18,758	0.985	8.11	1.01	218	0.959	15.58	1.05
30	Hancock	29,207	3,561	12.2%	3,443	0.986	9.43	1.01	51	0.871	19.46	1.02
31	Harrison	23,461	1,724	7.3%	1,248	0.940	31.60	1.06	90	0.646	77.72	1.31
32	Hendricks	51,363	3,466	6.7%	3,373	0.961	11.18	1.01	80	0.799	25.29	0.98
33	Henry[1]											
34	Howard	40,899	4,217	10.3%	4,090	0.938	12.65	1.02	104	0.960	15.68	1.14
35	Huntington	20,835	932	4.5%	895	0.971	23.70	1.05	20	0.889	47.29	1.13
36	Jackson	22,437	1,650	7.4%	1,414	0.933	29.27	1.02	78	0.696	63.42	1.88
37	Jasper	17,566	1,365	7.8%	1,216	0.986	20.26	1.02	75	0.751	45.90	1.13
38	Jay	13,956	401	2.9%	328	1.083	33.64	1.14	10	1.389	50.71	1.52
39	Jefferson	18,381	316	1.7%	251	0.955	28.37	1.10	12	0.780	44.65	1.14
40	Jennings	18,832	1,158	6.1%	1,014	1.037	14.31	1.03	54	0.955	24.44	0.92
41	Johnson	53,041	6,118	11.5%	5,894	0.988	11.01	1.01	127	0.945	17.64	1.01
42	Knox	27,861	1,419	5.1%	1,295	1.124	32.77	1.16	100	0.871	57.75	1.47
43	Kosciusko	50,740	3,425	6.8%	3,050	1.003	23.05	1.06	173	0.973	49.09	1.20
44	LaGrange	22,392	277	1.2%	228	0.888	33.18	1.11	10	0.996	52.74	1.47
45	Lake	221,395	19,322	8.7%	19,033	0.965	16.00	1.03	237	1.012	29.76	1.13
46	LaPorte	63,413	3,570	5.6%	3,246	1.026	35.84	1.17	174	0.857	67.62	1.50
47	Lawrence	27,222	170	0.6%	127	0.987	30.61	1.08	8	0.825	102.27	1.47

Table 8-1, continued

	County	Parcels and Samples			Residential Improved				Commercial & Industrial Improved			
		Parcel Count	Total Sample	Sample as % of Count	Sample Size[2]	Median	COD	PRD	Sample Size[2]	Median	COD	PRD
48	Madison	76,370	1,118	1.5%	1,038	1.017	28.70	1.11	39	1.099	42.28	0.78
49	Marion	330,530	32,496	9.8%	32,344	0.957	17.40	1.06	89	0.928	32.29	0.98
50	Marshall	30,793	1,460	4.7%	1,243	0.966	19.90	1.07	112	0.878	39.62	1.16
51	Martin	9,068	81	0.9%	60	1.108	30.79	1.09	6	1.267	17.04	1.00
52	Miami	23,232	2,434	10.5%	2,129	1.036	38.66	1.17	126	0.754	71.92	1.34
53	Monroe	49,673	5,012	10.1%	4,362	0.996	13.68	1.02	146	0.769	31.02	1.06
54	Montgomery	19,987	2,034	10.2%	1,862	0.939	19.77	1.04	69	0.980	21.88	0.99
55	Morgan	37,845	3,447	9.1%	3,280	0.976	19.03	1.03	84	0.942	33.67	1.12
56	Newton	10,300	419	4.1%	360	0.956	23.36	1.06	24	1.082	31.11	1.01
57	Noble[1]											
58	Ohio	2,906	258	8.9%	226	0.900	26.33	1.07	11	0.500	85.76	1.27
59	Orange	17,220	288	1.7%	245	1.013	39.94	1.23	12	0.656	83.30	1.42
60	Owen	15,318	930	6.1%	606	1.019	39.57	1.14	40	0.798	67.15	1.46
61	Parke	18,298	563	3.1%	454	0.921	35.61	1.11	15	0.868	40.82	1.02
62	Perry[1]											
63	Pike	15,589	197	1.3%	111	1.016	37.09	1.13	5	1.438	51.03	1.06
64	Porter	67,675	2,213	3.3%	2,097	0.955	15.41	1.02	59	0.994	23.73	0.97
65	Posey	17,337	1,470	8.5%	1,335	0.963	24.07	1.07	34	1.027	48.67	1.08
66	Pulaski	15,328	154	1.0%	80	1.079	27.02	1.05	14	1.026	69.02	1.06
67	Putnam	24,127	1,231	5.1%	1,106	0.985	19.91	1.05	50	0.843	44.76	1.20
68	Randolph	18,258	1,960	10.7%	1,591	1.053	40.11	1.19	135	0.974	61.82	1.07
69	Ripley	14,420	95	0.7%	66	0.936	23.57	1.05	8	0.980	75.77	1.68
70	Rush	10,875	342	3.1%	305	0.896	32.58	1.09	12	1.202	61.90	1.75
71	Saint Joseph	115,873	829	0.7%	629	0.987	24.36	1.03	84	0.843	52.64	1.31
72	Scott	13,208	884	6.7%	760	0.985	26.73	1.10	65	0.948	26.20	1.23
73	Shelby	25,730	2,055	8.0%	1,859	0.966	18.54	1.03	61	1.008	31.20	1.17
74	Spencer	21,554	138	0.6%	83	1.043	39.17	1.16	4	0.666	22.77	1.89
75	Starke	19,696	628	3.2%	567	0.952	17.75	1.03	24	0.919	17.51	1.14
76	Steuben	36,210	2,504	6.9%	2,224	0.997	29.58	1.10	121	0.855	53.33	1.19
77	Sullivan	15,525	265	1.7%	184	1.114	42.54	1.21	8	1.386	62.65	2.41
78	Switzerland	6,684	181	2.7%	96	0.910	36.49	1.16	7	0.390	47.35	1.92
79	Tippecanoe	51,496	756	1.5%	645	1.002	12.86	1.03	36	0.827	32.14	0.99
80	Tipton	12,633	322	2.5%	287	0.984	20.86	1.05	14	0.903	55.11	1.32
81	Union	5,881	144	2.4%	94	0.954	29.72	1.42	3	.483	18.15	1.1
82	Vanderburgh	77,802	14,496	18.6%	13,879	0.982	24.29	1.07	497	0.850	46.66	0.98

Table 8-1, continued

	County	Parcels and Samples			Residential Improved				Commercial & Industrial Improved			
		Parcel Count	Total Sample	Sample as % of Count	Sample Size[2]	Median	COD	PRD	Sample Size[2]	Median	COD	PRD
83	Vermillion	11,620	338	2.9%	262	1.052	45.42	1.18	10	0.839	71.34	0.88
84	Vigo	55,311	5,710	10.3%	5,302	1.004	27.65	1.08	282	0.832	52.07	1.30
85	Wabash[1]											
86	Warren	9,513	358	3.8%	265	0.954	31.47	1.13	18	0.806	68.60	1.18
87	Warrick	32,704	1,157	3.5%	1,052	1.003	11.17	1.01	40	0.951	30.36	1.04
88	Washington	17,663	391	2.2%	336	0.957	31.15	1.07	13	0.997	50.45	1.26
89	Wayne	31,991	1,689	5.3%	1,505	0.996	22.42	1.07	128	1.056	45.45	1.24
90	Wells	15,531	1,189	7.7%	1,104	0.998	18.89	1.03	54	0.803	35.13	0.96
91	White	20,904	1,141	5.5%	960	1.016	27.12	1.09	76	1.057	46.22	1.19
92	Whitley	17,290	1,548	9.0%	1,403	0.990	17.79	1.02	61	0.966	31.99	1.04

[1] Five counties did not provide complete or corrrect data: Brown, Hery, Noble, Perry, and Wabash. See Appendix for Details.

[2] For the purpose of our analysis in this report, we included estimates of equalization measures only when the sample size was greater than 20. This was the case for both township and county jurisdictions and for individual property classes.

from 87 counties, encompassing 3,064,720 parcels among eight classes of property.

Although Table 8-1 provides sample sizes for all 92 counties, our equalization analysis only includes townships and counties in which the sample size is 20 or larger. This limitation particularly reduced the number of townships and counties included in commercial and industrial property analysis.

The total statewide sample size was 217,847. This rather small number of sales was the usable subset of all sales provided to the IFPI for possible use in the Study. Sales

Table 8-2: County-Wide Equalization Statistics

Residential Improved	Total	Mean	Minimum	Maximum
Parcel Count	1,893,712	21,767	1,906	268,620
Sample Size	215,734	2,480	60	32,344
Median Ratio		0.985	0.810	1.124
Coefficient of Dispersion		25.497	8.110	51.170
Price - Related Differential		1.082	1.000	1.420
Median Ratio (Low Confidence Interval)			0.74	
Median Ratio (High Confidence Interval)				1.33
Commercial & Industrial Improved	**Total**	**Mean**	**Minimum**	**Maximum**
Parcel Count	145,098	1,668	394	17,938
Sample Size	6,681	77	4	497
Median Ratio		0.905	0.296	1.438
Coefficient of Dispersion		45.856	13.720	102.270
Price - Related Differential		1.243	0.780	2.980
Median Ratio (Low Confidence Interval)			0.45	
Median Ratio (High Confidence Interval)				1.43

provided from all sources totaled 2,535,144. Ultimately, only 8.6% of all sales were used in the analysis.

For the residential improved equalization analysis, 1,893,712 parcels were part of the analysis (see Table 8-2). The smallest number of parcels that were part of the analysis in a county was 1,906, in Ohio County. The largest number was 268,620, in Marion County. Martin County provided the smallest number of usable sales, 60, while Marion County's number of usable sales, with the assistance of MLS, was 32,344.

Table 8-2 also provides similar statistics for commercial and industrial improved (C&I) property. Note that there are far fewer parcels and sales in the commercial and industrial property class. In only 59 of the 87 counties were there as many as 20 C&I sales. Of course, this limited our analysis of C&I property not just in counties, but in townships as well. We will discuss townships in more detail below.

In addition, the Table 8-1 provides county-wide statistics for the 87 counties, including mean (average) median ratios, coefficients of dispersion, and price-related differentials and minimum and maximums of those measures and the confidence intervals.

Section 8.2: County Residential Property Analysis

The backbone of any equalization analysis is the calculation of the relationship between the assessed value of property and its market value: the result is known as the assessment ratio. To perform an equalization analysis, a number of ratios, sufficient to allow credible statistical analysis, must be calculated. Once completed, a median ratio is determined, which measures assessment quality by estimating the overall level of the assessed values relative to their market value.[65] The IAAO standard for the median ratio, or level of assessment, is for that ratio to be between 0.9 and 1.1, or within a plus or minus 10% of market value.

Figure 8-1 displays the county-wide median ratio, as calculated by our analysis, for the 87 counties. The counties are ranked, left to right, from lowest median ratio to highest. The lowest county-wide ratio was 0.81, in Crawford County. The highest was in Knox County, at 1.12. The IAAO standard is between 0.9 and 1.1. While the IAAO standard allows as much as a 10% variance from the market value, Knox County's median ratio is 38.3% higher than Crawford County's, a difference that is nearly double the margin allowed under the standard. Of the 87 counties, 79 met the standard. Eight did not. Those counties are: Crawford, Ohio, Union, LaGrange, Rush, Martin, Sullivan and Knox.

While the IAAO standard allows median assessment/market value ratio variance from market value, the IAAO also recommends that assessment jurisdictions within a larger taxing authority maintain uniformity across the assessment jurisdictions (i.e., townships within counties and counties within the state). The IAAO recommendation is that individual jurisdictions have median ratios that are within a plus or minus 5% of the larger taxing authority's median ratio.[66] The State of Indiana is, in fact, the largest taxing authority in Indiana and makes funding and taxing decisions based on property tax assessment within the State. Therefore, county-wide median ratios should not vary from the average of all of the county-wide median ratios by more than 5%. Figure 8-2 displays the range of variance for all 87 counties from the statewide average median ratio, ranked from lowest variance on the left to highest variance on the right.

Twenty-one of the 87 counties have median ratios that vary by more than +/- 5% from the statewide mean of 0.98. Nearly one county in four have median assessed values that are not consistent with the statewide average. A property tax payer knows, from this evidence, regardless of the county in which they live, that their property is not being assessed at a level consistent with other properties in other counties with a similar market value.

Another important measure of assessment quality is the Coefficient of Dispersion (CoD).

65 See Appendix A, Background Toolkit, for a detailed discussion of the methodology of an equalization analysis.

66 International Association of Assessing Officers, *Standard on Mass Appraisal of Real Property*. 2002

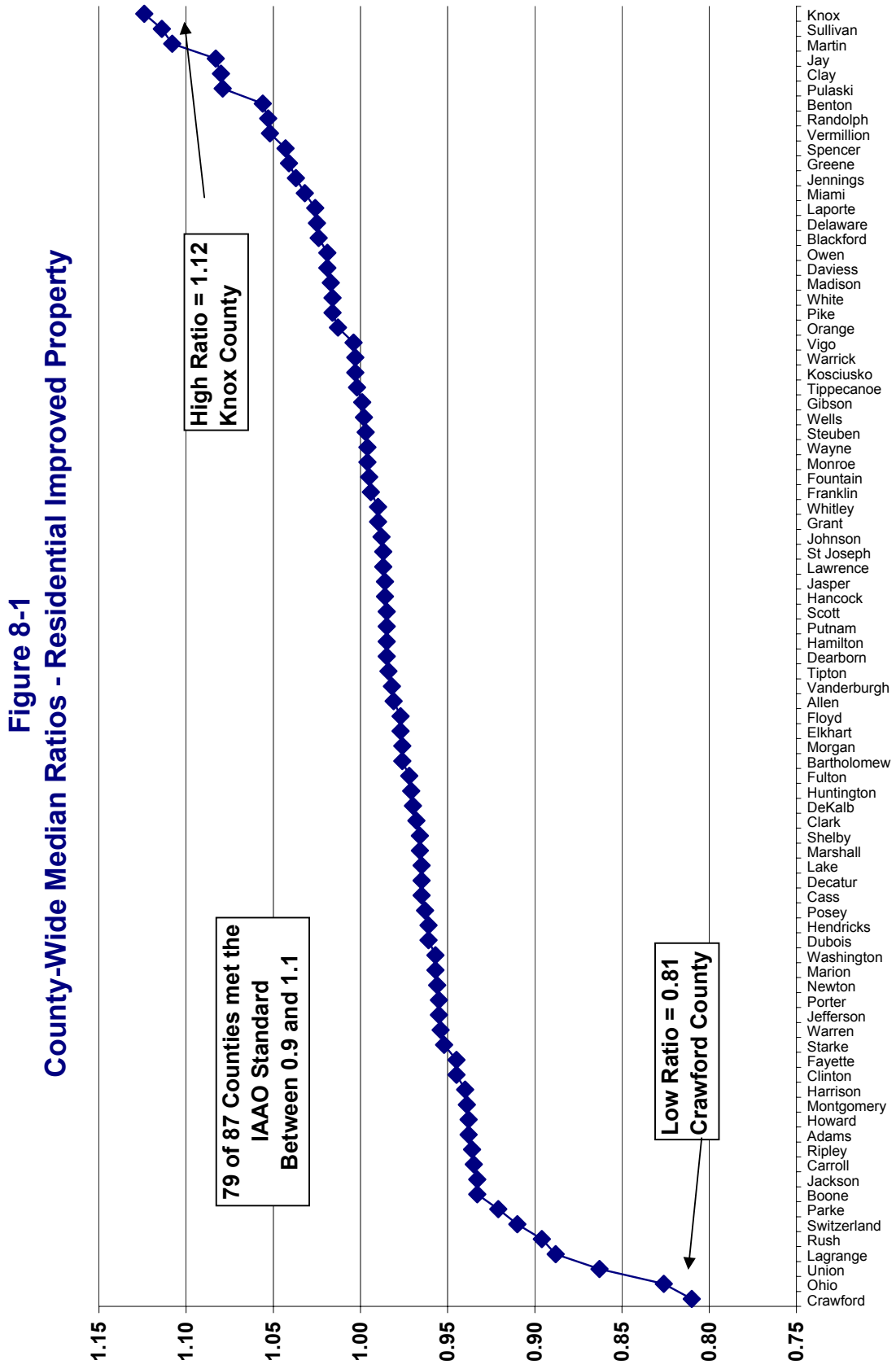


Figure 8-1
County-Wide Median Ratios - Residential Improved Property
High Ratio = 1.12
Knox County
79 of 87 Counties met the
IAAO Standard
Between 0.9 and 1.1
Low Ratio = 0.81
Crawford County
1.15
1.10
1.05
1.00
0.95
0.90
0.85
0.80
0.75
Knox
Sullivan
Martin
Jay
Clay
Pulaski
Benton
Randolph
Vermillion
Spencer
Greene
Jennings
Miami
Laporte
Delaware
Blackford
Owen
Daviess
Madison
White
Pike
Orange
Vigo
Warrick
Kosciusko
Tippecanoe
Gibson
Wells
Steuben
Wayne
Monroe
Fountain
Franklin
Whitley
Grant
Johnson
St Joseph
Lawrence
Jasper
Hancock
Scott
Putnam
Hamilton
Dearborn
Tipton
Vanderburgh
Allen
Floyd
Elkhart
Morgan
Bartholomew
Fulton
Huntington
DeKalb
Clark
Shelby
Marshall
Lake
Decatur
Cass
Posey
Hendricks
Dubois
Washington
Marion
Newton
Porter
Jefferson
Warren
Starke
Fayette
Clinton
Harrison
Montgomery
Howard
Adams
Ripley
Carroll
Jackson
Boone
Parke
Switzerland
Rush
Lagrange
Union
Ohio
Crawford

Figure 8-2
County Median Ratio Variance from Statewide Median
Residential Improved Property

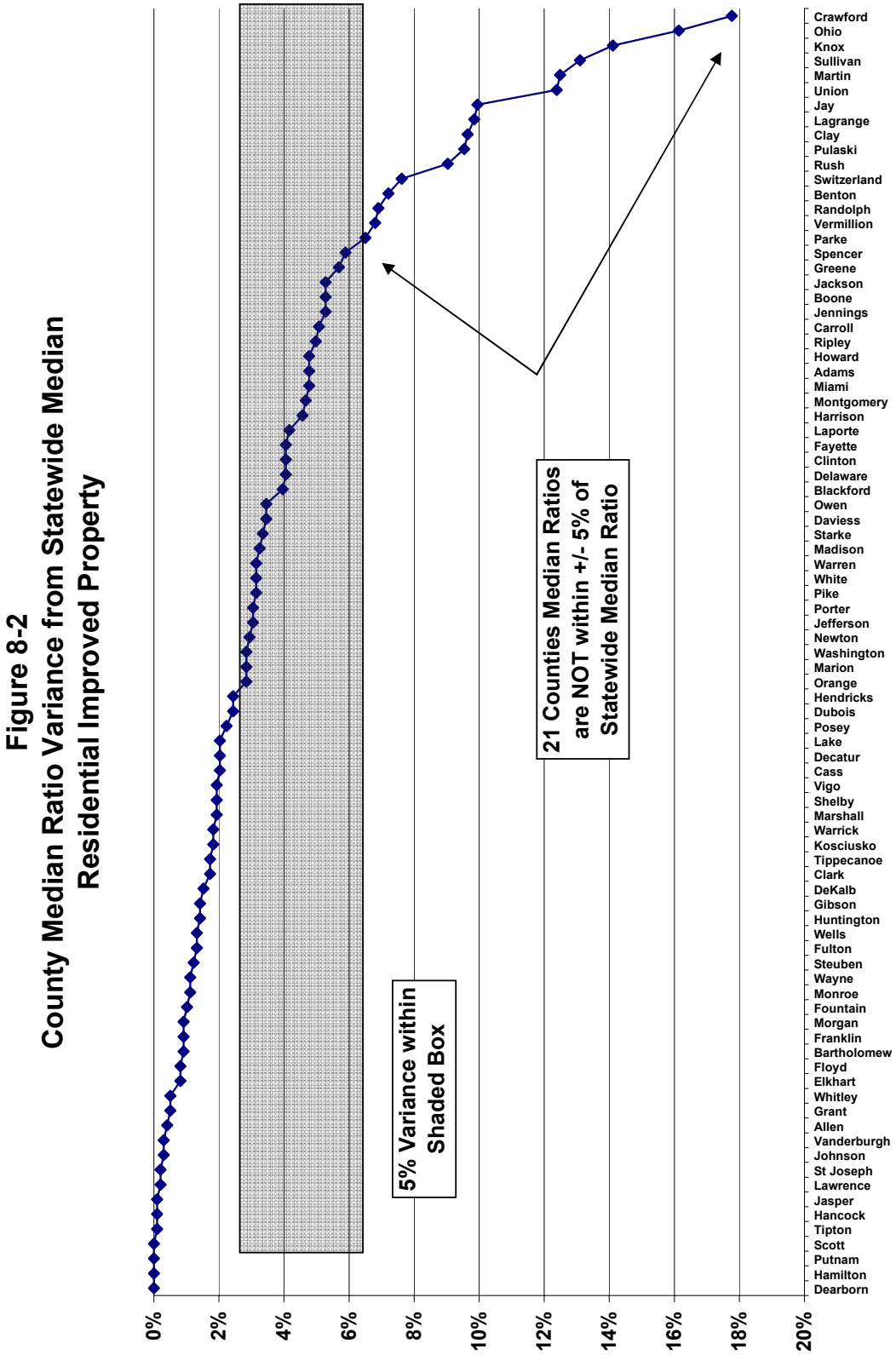
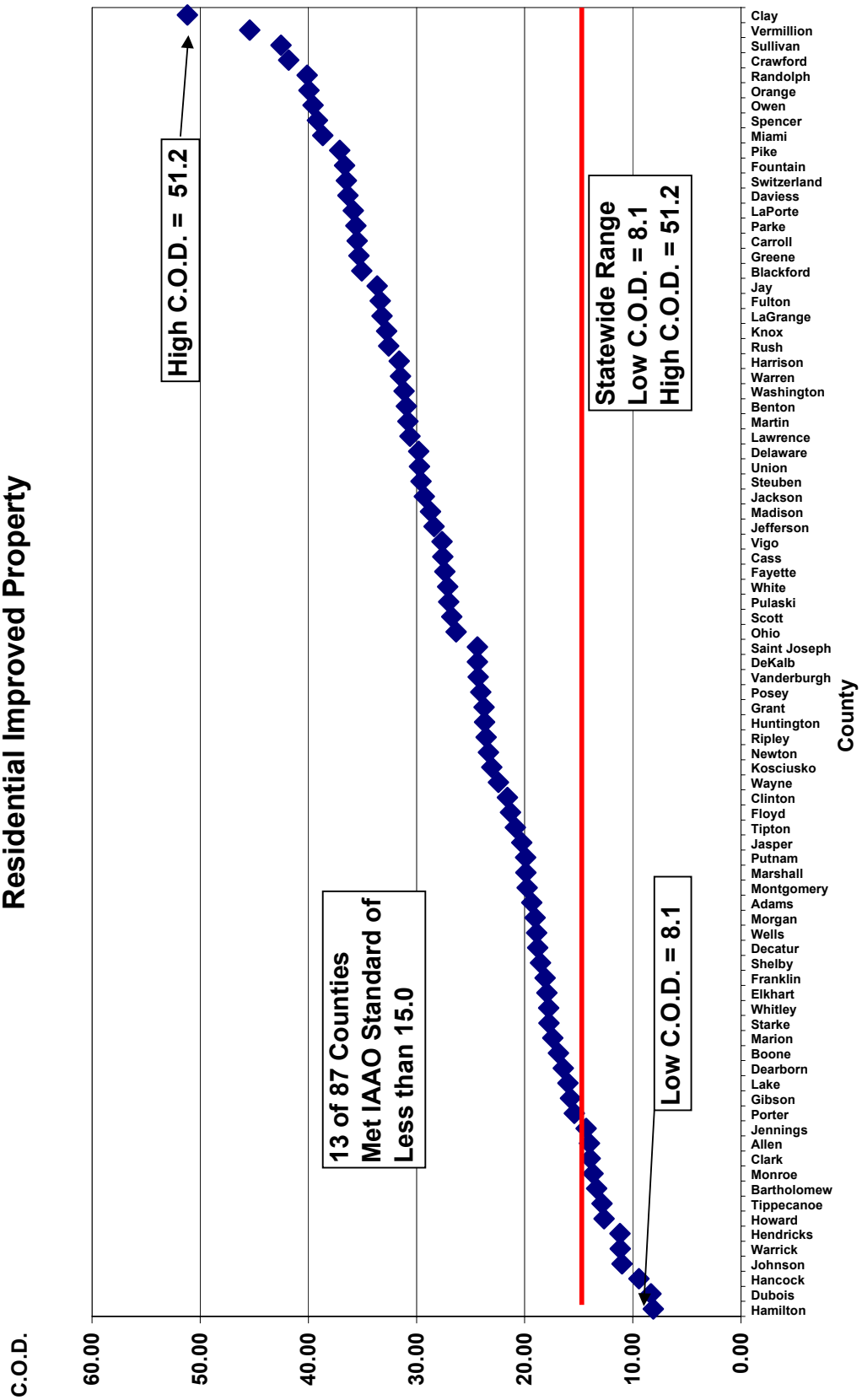


Figure 8-3
County - Wide Coefficients Of Dispersion
Residential Improved Property



It measures the uniformity of assessments within an assessment jurisdiction. It does so by determining the average percentage that all of the individual assessment ratios vary from the median ratio for an assessment jurisdiction. The IAAO standard is that urban or suburban residential assessments vary, on average, by less than 15% (either more than or less than) from the jurisdictions median ratio. Rural residential property and commercial and industrial property should vary from the median ratio by less than 20%.

Figure 8-3 displays the county-wide CoDs for all 87 counties, ranked from lowest to highest, left to right. Only 13 of the 87 counties met the IAAO standard of 15.0 for residential property. An additional 17 counties' CoDs were less than 20.0. Of the 17 counties, only 4 (Marion, Lake, Elkhart, and Porter) are decidedly urban in nature. Another five (Morgan, Marshall, Dearborn, Shelby, and Boone) are suburban in nature, with either a single municipality—such as Shelbyville in Shelby County—or are closely tied to a large urban area (such as Dearborn County with Cincinnati, Ohio). That leaves eight of these counties that, with CoDs of less than 20.0, could be characterized as meeting the IAAO standard.

Adding the 13 counties that met the 15.0 CoD standard to the eight rural counties whose CoDs were less than 20.0 brings to 21 the number of counties that met the IAAO standard for uniformity of assessments. Clearly stated, in 66 counties, or 3 out of every 4 counties, a residential property tax payer cannot have confidence that their property is being assessed at a level that is consistent with other similarly valued properties within the county in which their property is located.

The equalization analysis demonstrates that residential improved property is not assessed consistently, either across county lines or within counties.

Section 8.3: County Commercial and Industrial Property Analysis

Analysis of commercial and industrial property reveals a similar, but more striking, pattern of inconsistency.

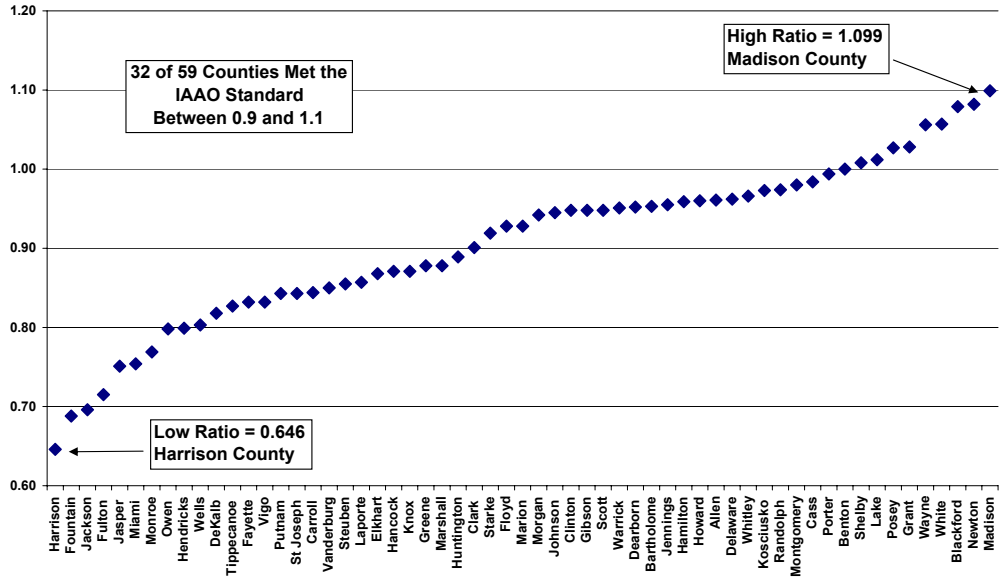
Although we obtained a sufficient sale sample size to conduct equalization analysis for improved residential property in all 87 counties, we obtained significantly fewer sales proxies for commercial and industrial property. Table 8-1 (4 page summary at beginning of section) provides the actual commercial and industrial sample size for all 87 counties. But for only 59 counties was the sample size 20 or larger. Although some statistical analysis can be valid for sample sizes smaller than 20, we decided to include in our report analysis only those counties (and later on, townships) in which the sample size was at least 20. This is somewhat conservative, although well within common practice. The latest available survey data[67] indicate thirty-six states and provinces rely on statistics calculated from strata or samples of fewer than 20 sales, while twenty-five states or provinces require at least 20 or more sales or embrace some other threshold. Like confidence intervals, sample-size thresholds are intended to prevent lay analysts from embracing doubtful

Table 8-3: Counties with Residential CoD Between 15.0 and 20.0

County	Residential CoD	Character	County	Residential CoD	Character
Marion	17.40	Urban	Gibson	15.77	Rural
Lake	16.00	Urban	Montgomery	19.77	Rural
Elkhart	17.94	Urban	Starke	17.75	Rural
Porter	15.41	Urban	Decatur	18.80	Rural
Morgan	19.03	Suburban	Whitley	17.79	Rural
Marshall	19.90	Suburban	Adams	19.34	Rural
Dearborn	16.44	Suburban	Wells	18.89	Rural
Shelby	18.54	Suburban	Franklin	18.12	Rural
Boone	16.87	Suburban			
Putnam	19.91	Suburban			

67 Dornfest, Alan S., and Douglas C. Thompson. 2004. "State and Provincial Ratio Study Practices: 2003 Survey Results." *Journal of Property Tax and Assessment Administration*, Vol. 1, no. 1: 31-70.

Figure 8-4: County-Wide Commercial & Industrial Median Ratios Ranked by Ratio Value



conclusions on the basis of data that might not support them due to the inherent variability of samples. Larger samples allow more confidence in statistical analysis results for those counties (and townships) in which we conducted the analysis. This seemed a reasonable approach, given that the reassessment was the first ever conducted in Indiana based on market value and considering the complexity and challenges that were associated with it.

Figure 8-4 displays the median ratios for 59 counties in which commercial and industrial sample sizes were sufficient for equalization analysis.

Thirty-two counties' median ratios met the IAAO standard; they were between 0.9 and 1.1. Twenty-seven counties' had median ratios below 0.9; none were above 1.1. The lowest median ratio was 0.65, in Harrison County. The highest ratio was 1.10, in Madison County. While the IAAO standard allows as much as a 10% variance from the market value, Madison County's median ratio is 70.1% higher than Harrison County's. A commercial and industrial property whose assessed value is at the median in Harrison County is assessed at 65% of its market value while a commercial or industrial property whose assessed value is at the median in Madison County is assessed at 110% of its market value.

The range of median ratios for commercial and industrial property was greater (0.65 to 1.10) than the range of median ratios for residential property (0.81 to 1.12).

The greater range among the level of assessment in commercial and industrial property also means that there is more disparity from the statewide average median ratio.

Twenty counties' median ratios were within +/- 5% of the statewide average ratio of 0.91. The twenty included some of the largest counties, Marion and Elkhart, and some of the smallest, Jennings and Scott. Likewise, those counties outside of the 5% variance were not limited to counties of a similar character. Lake County's median ratio was more than 10% higher than the statewide average; Newton County's was 17.6% higher. Counties whose ratios were below the statewide average included Owen, at 10.6% and Monroe, at 13.7%.

As with residential property, improved commercial and industrial property demonstrated a pattern of inconsistent assessments with regard to the level of assessments across counties. A property tax payer in one county knows that other properties in other counties are not as-

Figure 8-5
County Median Ratio Variance from Statewide Mean
Commercial & Industrial Improved

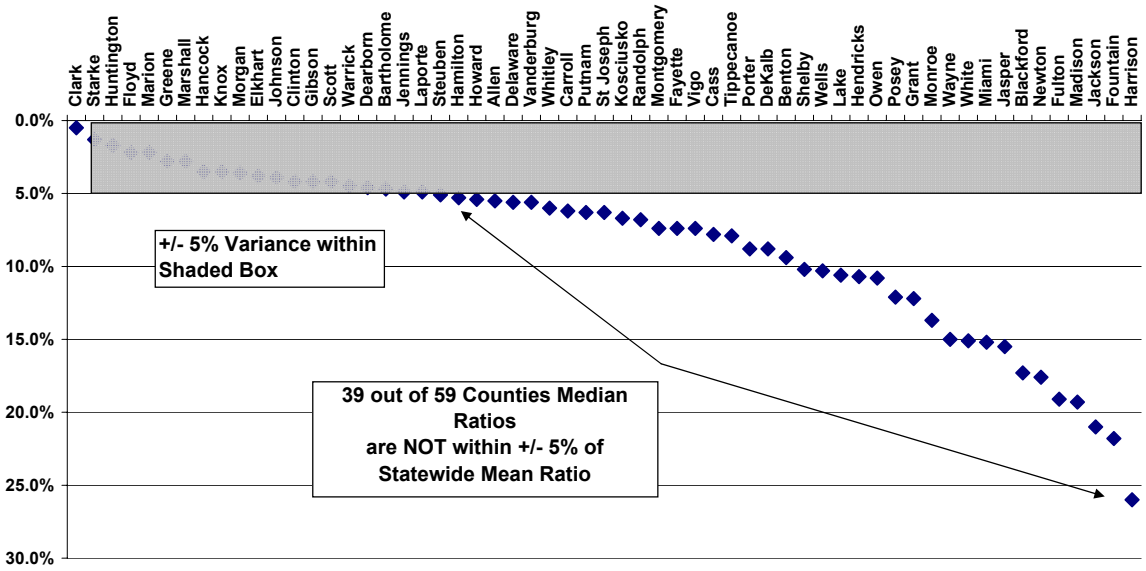
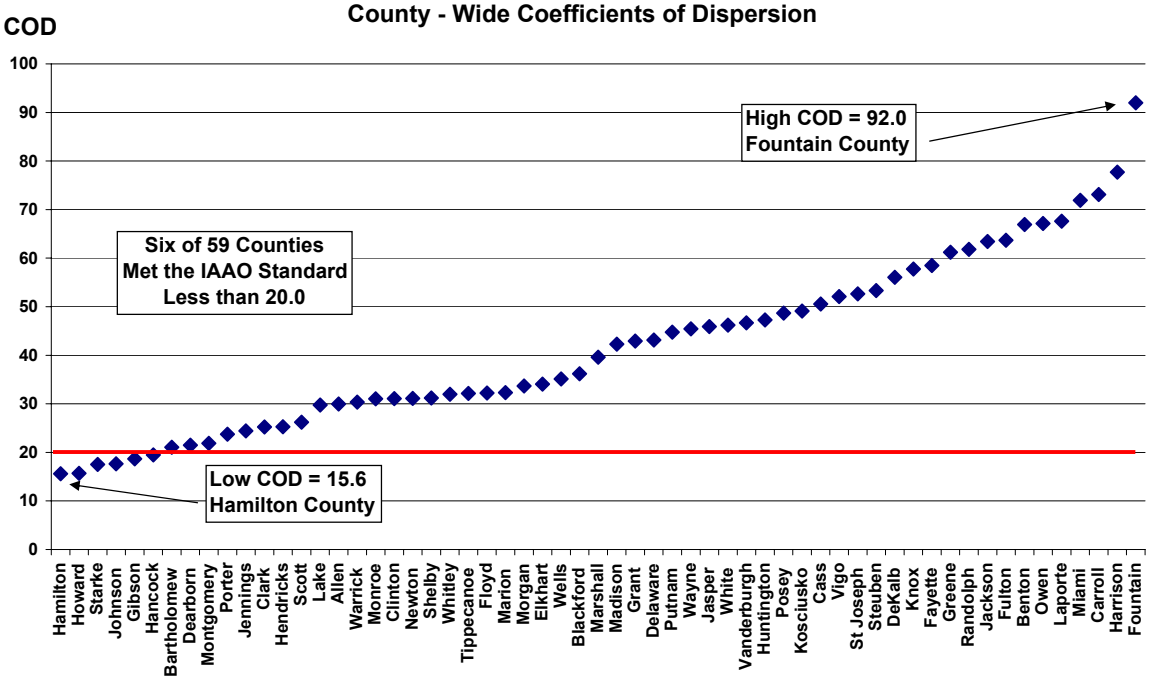


Figure 8-6
Commercial & Industrial Improved
County - Wide Coefficients of Dispersion



sessed at a level consistent with their own.

Figure 8-6 displays the CoDs for commercial and industrial property for the 59 counties. Only six of 59 counties met the IAAO standard for uniformity of assessments. Hamilton County had the lowest CoD, at 15.6. The other five counties with CoDs below 20.0 were Howard, Starke, Johnson, Gibson, and Hancock. Fifty three counties, or 89.8%, did not meet the standard. The highest CoD belonged to Fountain County, at 92.0. Eighteen counties had CoDs of greater than 50.

As with residential property, the overwhelming non-attainment of the CoD standard means that a property tax payer cannot have confidence that their property is being assessed at a level that is consistent with other similarly valued properties within the county.

Section 8.4: Township Residential

A constitutionally applied and uniformly administered property tax assessment system must meet acceptable standards at its basic jurisdictional level: the township. Assessed values must be consistent with market value standards and meet the horizontal equity test of uniformity within townships and among the townships within a county. Of course, level and uniformity of assessed values matter across townships across county lines, as well. However, this section focuses on the level and uniformity of township assessments within townships and across townships within counties.

Six-hundred seventeen (or 64%) of the townships in 87 counties provided 20 or more sales proxies that were usable in our analysis. Three-hundred forty-seven townships in those 87 counties did not provide at least 20 sales proxies, therefore, those townships are excluded from our analysis.

Figure 8-7 displays the median ratios of the 617 townships, ranked from lowest to highest, left to right. As with the 87 counties, a large percentage of the townships met the IAAO standard for level of assessment, with their median ratios being between 0.9 and 1.1. Specifically, 535, or 86.7%, of the 617 townships met the IAAO standard. This compares with 94.3% of the counties meeting the standard.

While overall the townships met the IAAO standard at a rate comparable with counties, the range between the townships' lowest and highest ratios is much greater. The lowest median ratio was 0.44, in Driftwood Township, Jackson County while the highest median ratio was 1.32 in Cass Township, Sullivan County. Therefore, the median ratio in Cass Township, Sullivan County is three times the ratio in Driftwood Township, Jackson County. In other words, a residential property with a market value of $100,000 will have an assessed value of about $44,000 in Driftwood Township, Jackson County while a residential property with that same market value of $100,000 will have an assessed value of about $132,000 in Cass Township, Sullivan County.

This wide variance across townships is evident when we evaluate the townships' median ratios relative to the statewide average of all 617 township median ratios. The IAAO recommendation is that individual jurisdictions have median ratios that are within plus or minus 5% of the larger taxing authority's median ratio, which is, in this case, again the State.[68] Of the 617 townships, 402 had median ratios within +/- 5% of the statewide township median ratio, while 215 townships did not. More than one in three of the townships (34.8%) did not meet the IAAO recommendation.

Township performance with regard to the CoD was, again, similar to but of lesser quality than counties as a whole. One-hundred twenty-seven townships had CoDs of 15.0 or less, while 490 had CoDs greater than 15.0. Seventy-one of 216 "urban" or "suburban" townships[69] had CoDs of less than 15.0; the other 145 were greater than 15.0. Fifty-six of the 601 rural townships had CoDs less than 15.0. Another 80 of the rural townships had CoDs less than 20.0. Including those rural townships whose CoDs were less than 20.0, 207 of 617 townships met

68 In a subsequent section, we will evaluate townships in the context of their individual counties.

69 As with determining the characteristics of counties, placing a township in the categories of urban, suburban, or rural is somewhat arbitrary. For our purposes, we characterize urban or suburban as those townships with more than 1,500 parcels. This includes townships such as Mill Grove Township in Steuben County (Orland), White River Township in Johnson County and Richland Township in Greene County (Bloomfield). Townships with fewer than 1,500 parcels are characterized as rural.

Figure 8-7.
Township Median Ratios
Residential Improved Property, Sample Size Greater than 20

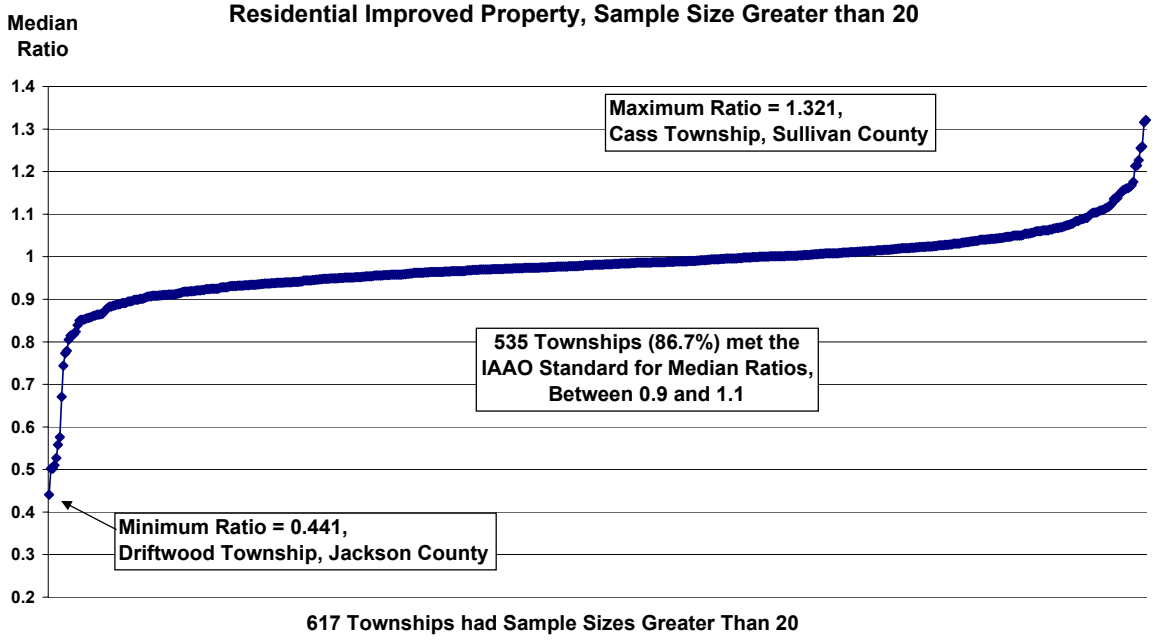
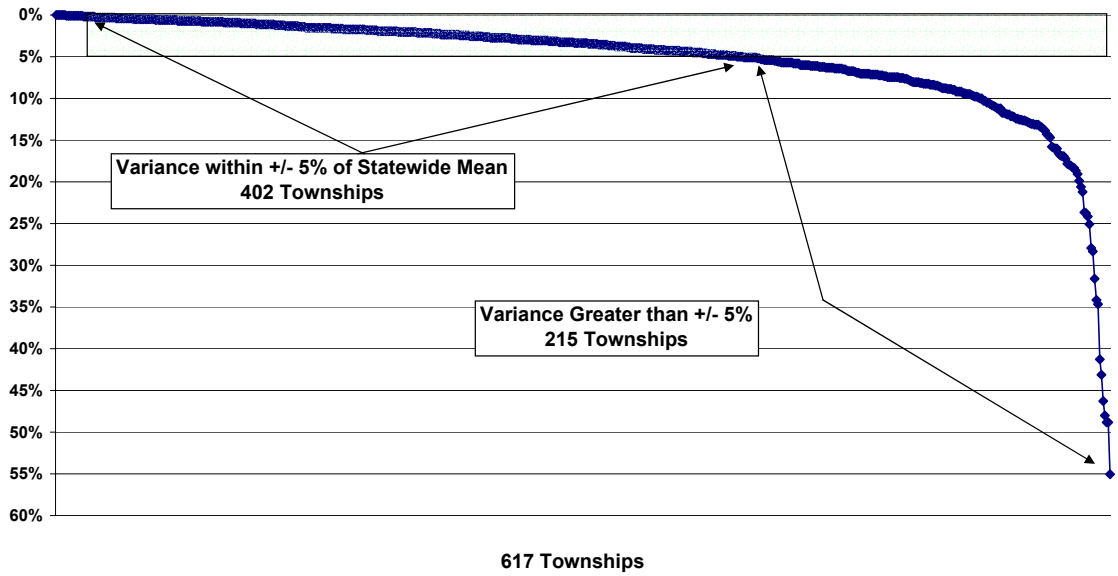


Figure 8-8
Township Median Ratio Residential Improved Property
Variance from Statewide Median

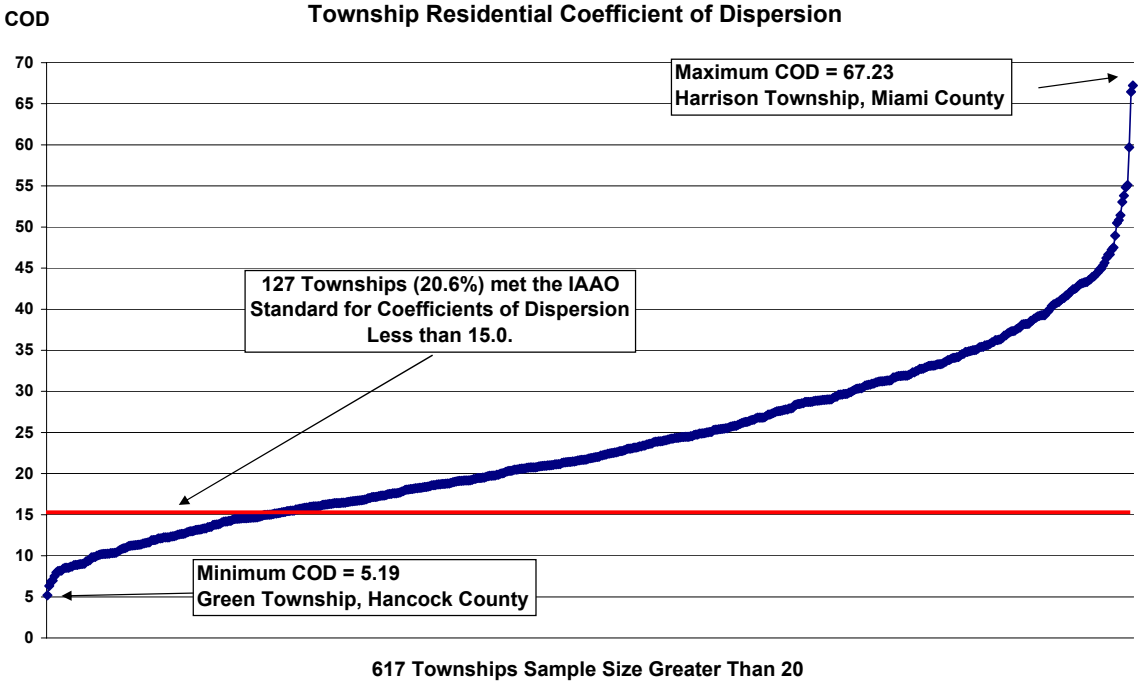


the IAAO standard. Conversely, 410 of 617, or 66.5%, did not meet the standard. In two-thirds of the townships, a property tax payer cannot have confidence that similar property within the same township is assessed similarly.

Section 8.5: Township Commercial and Industrial

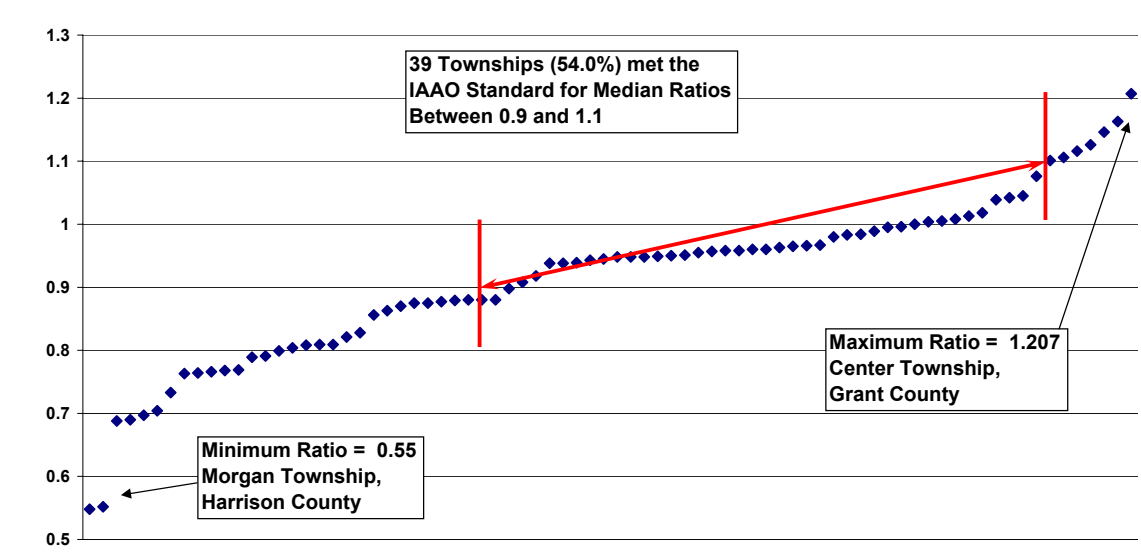
As with counties, there are fewer townships with 20 or more sales of commercial and industrial property. Across the State, we

Figure 8-9
Township Residential Coefficient of Dispersion



617 Townships Sample Size Greater Than 20

Figure 8-10
Township Commercial and Industrial Improved Median Ratios



Only 78 Townships had Sample Sizes Greater Than 20

obtained adequate sample sizes from only 78 townships.[70] Of those 78 townships, 39 of them,or 50.0%, met the IAAO standard for level of assessment. The lowest median ratio was 0.55 in Morgan Township, Harrison County and the highest median ratio was 1.21 in Center Township, Grant County.

Commercial and Industrial property tax payers' in Grant County assessed values are likely more than twice similarly valued properties in Morgan County. A commercial or industrial property with a market value of $500,000 could be assessed at $275,000 in Morgan Township, Harrison County, while a similarly valued property in Center Township, Grant County could be assessed at $605,000.

Well over half of the townships (47 out of 78) had median ratios that were not within +/- 5% of the statewide median. As has been the case throughout our findings, a property tax payer with commercial or industrial property in one township knows that other properties in other townships are not assessed at a level consistent with their own.

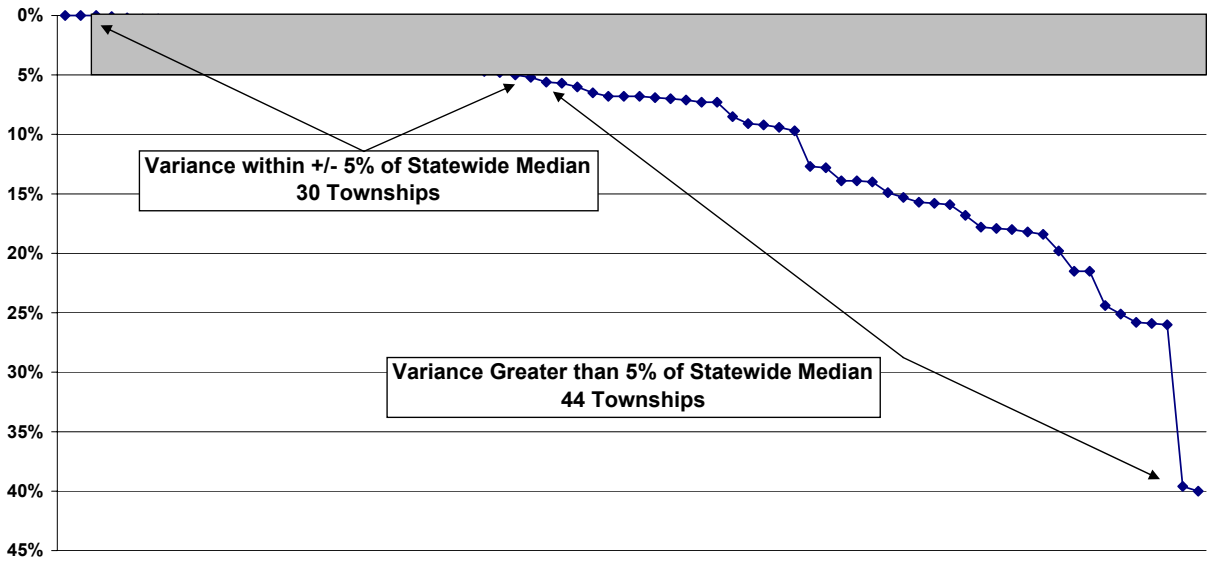
Figure 8-12 displays the CoDs for commercial and industrial property for the 78 townships. Only 9 of the 78 townships met the IAAO standard for uniformity of assessments. Washington Township, Hamilton County had the lowest CoD, at 5.25. The highest CoD belonged to Union Township, Dekalb County, at 77.0. Sixty-five townships, or 87.8%, did not meet the standard. Fifteen townships had CoDs of greater than 50.

As we have seen in residential property in townships, the overwhelming non-attainment of the CoD standard means that a property tax payer cannot have confidence that their property is being assessed at a level that is consistent with other similarly valued properties within the township.

Section 8.6: Townships within Counties

Our statewide analysis of townships revealed inconsistent assessment in the 2002 pay 2003 reassessment. The Study's individual county reports examine the level and uniformity of as-

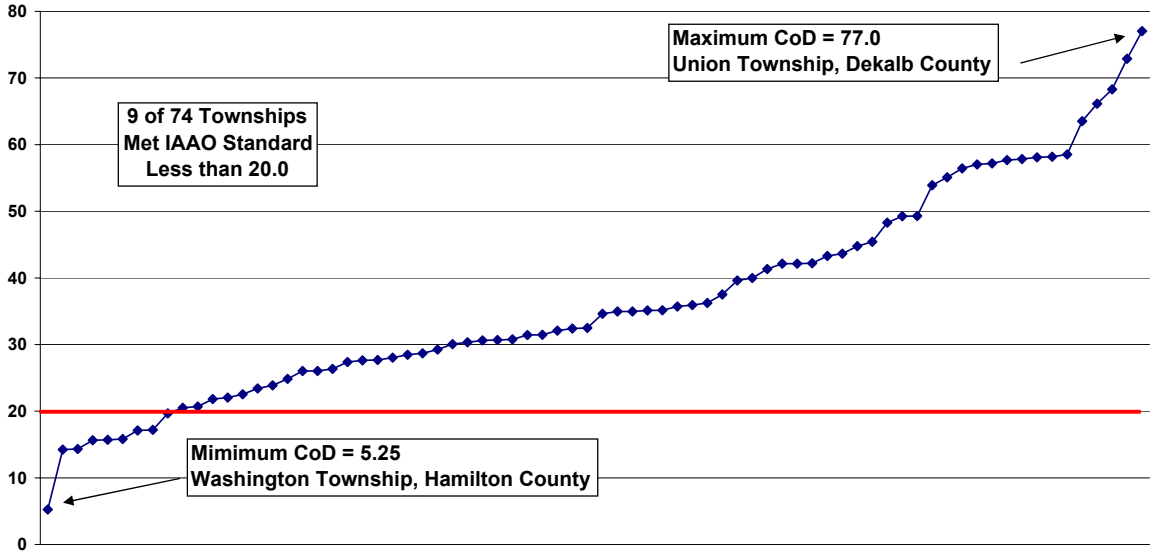
Figure 8-11
Township Commercial and Industrial Median Ratio
Variance from Statewide Median



Only 74 Townships had Sample Sizes Greater Than 20

70 The 78 townships were in 52 counties. In the county analysis, there were 59 counties in which the sample size (from combined township stratification) reached 20.

Figure 8-12
Townships Commercial and Industrial Property
Coefficients of Dispersion



Only 74 Townships had Sample Sizes Greater Than 20

sessment for townships within individual counties and across townships within individual counties. The pattern of inconsistent assessment continued at this level.

Statewide, there were 167 townships whose median ratios were more than a plus or minus 5% from the county-wide median ratio (See Table 8-4) for residential improved property. The 166 represented 27.0% of those townships for which the sales sample size was greater than 20. Six-hundred eighteen townships had more than 20 usable sales. In commercial and industrial property, 34 of 78 townships in which the sample size was greater than 20 had median ratios that varied from the county-wide median ratio by more than 5%. In percentage terms, 43% of townships did not meet the 5% standard for commercial and industrial improved property.

While, for residential improved property, only about one in four of the townships did not meet the 5% standard; those townships affected many counties. The problems are widespread, as 63 of the 87 counties in the analysis (72.4%) had at least one township not meet the standard of consistency. For commercial and industrial improved property, 48.1%, or 25 of 52 counties (in which there was at least one township with a sales sample size of greater than 20), met the standard.

In this section, we present equalization analysis results for four counties and the townships within them that are representative of our findings statewide. The four counties are Marion, Hancock, Knox, and Benton. They were chosen to represent a cross-section of different types of counties: urban, suburban, mixed urban and rural, and rural. Our analysis here confirms the statewide findings and reveals that the inconsistencies are not limited, but occur in all types and sizes of counties, urban, rural, small, large, and north, south, east, and west.

Marion County, the most populous county, performed well in residential property assessment in terms of township median ratios with all nine townships meeting the IAAO standard. Eight of nine townships median ratios were within 5% of the county's median ratio; only Decatur Township did not meet that standard. However, only four of nine townships met the IAAO coefficient of dispersion standard of less than 15.0.

In Center Township, the median ratio was 0.94, which means that a residential property in Cen-

Table 8-4: Number of Townships within Counties Not Meeting Standard of Consistency Across Townships					
	Residential Improved		Commercial and Industrial Improved		
County Name	Townships Not Within +/- 5%	Number of Townships in Analysis	Townships Not Within +/- 5%	Number of Townships in Analysis	Number of Townships in County
Adams	0	2	n/a	n/a	12
Allen	3	18	1	5	20
Bartholomew	1	11	0	1	12
Benton	2	6	n/a	n/a	11
Blackford	0	2	0	1	4
Boone	2	8	n/a	n/a	12
Brown	n/a	n/a	n/a	n/a	4
Carroll	6	10	n/a	n/a	14
Cass	1	12	1	1	14
Clark	1	7	0	1	12
Clay	0	1	n/a	n/a	11
Clinton	4	13	0	1	14
Crawford	2	3	n/a	n/a	9
Daviess	0	1	n/a	n/a	10
Dearborn	0	10	1	2	14
Decatur	2	5	n/a	n/a	9
DeKalb	5	13	2	2	15
Delaware	1	10	0	1	12
Dubois	0	5	n/a	n/a	12
Elkhart	4	16	1	3	16
Fayette	2	7	1	1	9
Floyd	2	5	0	1	5
Fountain	0	4	n/a	n/a	11
Franklin	1	5	n/a	n/a	13
Fulton	5	7	0	1	8
Gibson	0	6	0	1	10
Grant	2	11	1	1	12
Greene	5	8	1	1	15
Hamilton	0	9	0	4	9
Hancock	1	9	0	1	9
Harrison	3	9	2	2	12
Hendricks	2	11	0	1	12
Henry	n/a	n/a	n/a	n/a	13
Howard	0	9	0	1	11
Huntington	3	8	n/a	n/a	12
Jackson	8	8	0	1	12
Jasper	0	8	0	1	13
Jay	1	2	n/a	n/a	12

Table 8-4, continued

County Name	Residential Improved		Commercial and Industrial Improved		
	Townships Not Within +/- 5%	Number of Townships in Analysis	Townships Not Within +/- 5%	Number of Townships in Analysis	Number of Townships in County
Jefferson	1	4	n/a	n/a	10
Jennings	2	8	0	1	11
Johnson	3	9	0	2	9
Knox	4	7	0	1	10
Kosciusko	5	15	0	1	17
Lagrange	2	4	n/a	n/a	11
Lake	1	10	2	4	11
Laporte	6	18	2	2	21
Lawrence	0	3	n/a	n/a	9
Madison	3	9	1	1	14
Marion	1	9	0	1	9
Marshall	2	8	2	2	10
Martin	0	1	n/a	n/a	6
Miami	7	13	1	1	14
Monroe	1	10	1	2	11
Montgomery	1	10	0	1	11
Morgan	7	13	0	2	14
Newton	1	6	n/a	n/a	10
Noble	n/a	n/a	n/a	n/a	13
Ohio	1	2	n/a	n/a	4
Orange	3	3	n/a	n/a	10
Owen	1	8	1	1	13
Parke	3	6	n/a	n/a	13
Perry	n/a	n/a	n/a	n/a	7
Pike	0	2	n/a	n/a	9
Porter	2	12	n/a	n/a	12
Posey	4	7	n/a	n/a	10
Pulaski	0	1	n/a	n/a	12
Putnam	4	10	1	1	13
Randolph	4	11	2	2	12
Ripley	0	1	n/a	n/a	11
Rush	2	4	n/a	n/a	12
St Joseph	1	5	2	2	13
Scott	1	4	0	1	5
Shelby	2	14	0	1	14
Spencer	0	1	n/a	n/a	9
Starke	0	6	n/a	n/a	9
Steuben	4	10	0	1	12
Sullivan	1	3	n/a	n/a	9

Table 8-4, continued

County Name	Residential Improved: Townships Not Within +/- 5%	Residential Improved: Number of Townships in Analysis	Commercial and Industrial Improved: Townships Not Within +/- 5%	Commercial and Industrial Improved: Number of Townships in Analysis	Commercial and Industrial Improved: Number of Townships in County
Switzerland	0	1	n/a	n/a	6
Tippecanoe	0	4	1	1	13
Tipton	2	4	n/a	n/a	6
Union	0	1	0	1	6
Vanderburgh	2	7	2	4	8
Vermillion	3	4	n/a	n/a	5
Vigo	5	12	2	3	12
Wabash	n/a	n/a	n/a	n/a	7
Warren	0	3	n/a	n/a	12
Warrick	0	3	1	1	10
Washington	2	4	n/a	n/a	13
Wayne	0	5	1	1	15
Wells	1	7	0	1	9
White	2	8	1	1	12
Whitley	1	9	0	1	9
Totals	167	618	34	79	1,008

Table 8-5: Standards Compliance Matrix-Townships in Marion County

Class: Residential Improved						
Township	Sample Size	Median	Median Meets Standard?	Within +/- 5% of County?	COD	COD Meets Standard?
Center	4210	0.940	x	x	37.047	
Decatur	780	1.008	x		15.128	
Franklin	1145	0.989	x	x	9.858	x
Lawrence	4907	0.951	x	x	12.473	x
Perry	3138	0.962	x	x	12.343	x
Pike	3992	0.963	x	x	9.013	x
Warren	3872	0.977	x	x	16.310	
Washington	5756	0.921	x	x	16.868	
Wayne	4544	0.966	x	x	19.150	

ter Township with a market value of $100,000 and was assessed at the median ratio would have an assessed value of $94,000. The CoD tells us to what extent property assessments vary from the median ratio. In Center Township, the CoD of 37.0 means that, on average, one could expect their property to be assessed either 37% higher or 37% lower than $94,000. If a property's assessed value were 37% higher than the median, the assessed value would be

Figure 8-13
Hancock County - Range of Township Confidence Intervals, Residential Improved Property

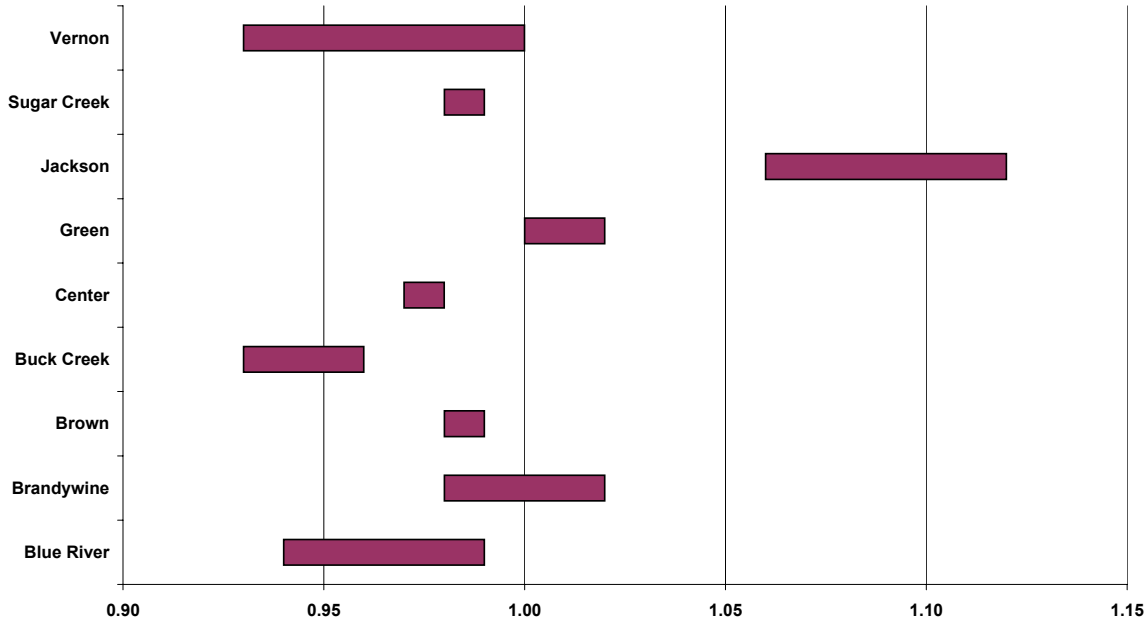
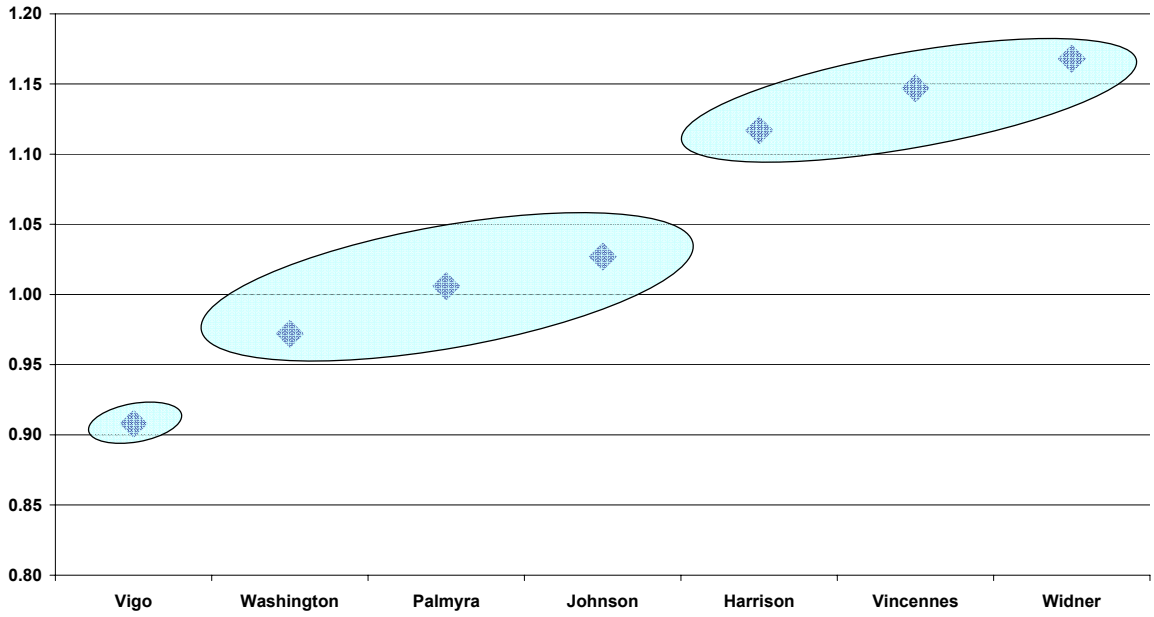


Figure 8-14
Knox County Residential Improved Median Ratio by Township

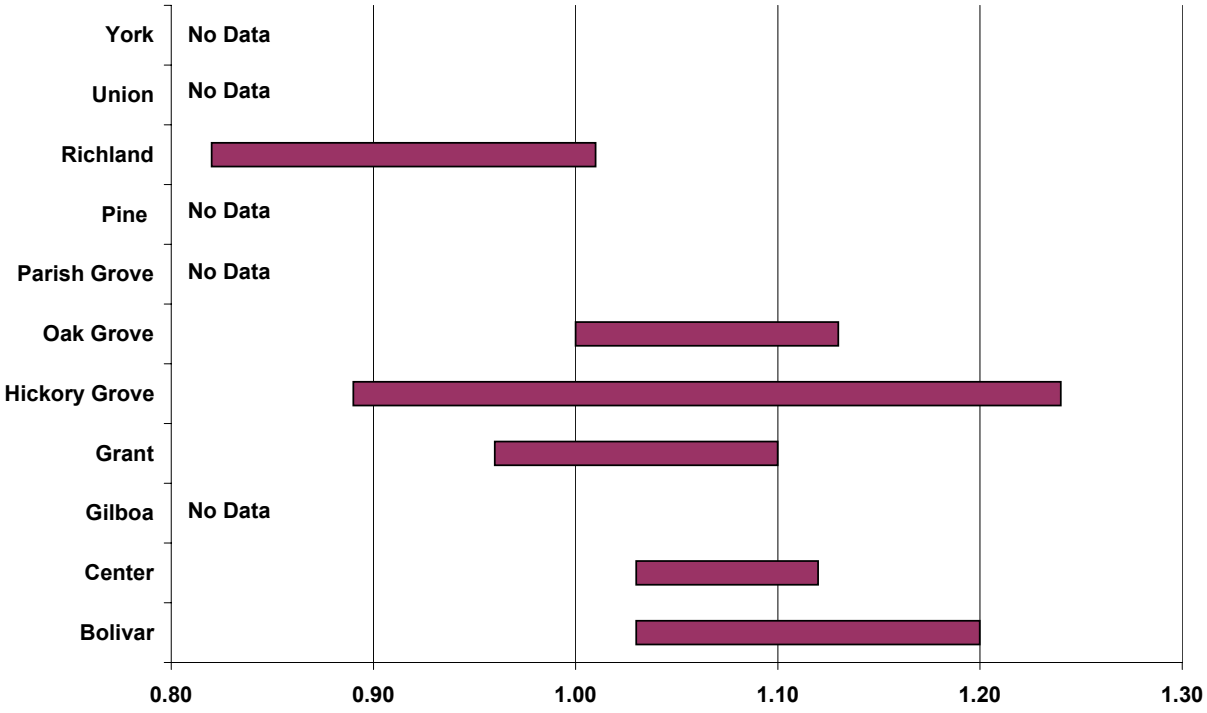


$128,780; 37% lower would be $59,220.

Hancock County exhibits one township out of nine which is inconsistent with the other eight. Jackson Township's median ratio for residential property is 1.084, while the county's median ratio is 0.986. The deviation from the county's ratio is 9.9%. Using a chart of the range of the confidence interval[71] around the township me-

[71] The confidence interval, a measure of the uniformity of assessments around the

Figure 8-15
Benton County Median Ratio Confidence Intervals for Townships



dian ratios in Hancock County clearly demonstrates that assessed values in Jackson Township are systematically different from the other eight townships.

In Knox County, there is a somewhat different pattern to the inconsistency. Figure 8-14 charts the median ratios for the townships in which the sample size was greater than 20. The pattern of differences across the townships displays three groups.

First, Vigo Township's median ratio is 0.908, which is not only the lowest, but it is 6.6% lower than the next lowest ratio. Washington Township has the next lowest median ratio, 0.972, which is relatively similar to ratios in Johnson and Palmyra townships. Johnson and Palmyra townships' median ratios are 1.027 and 1.006, respectively. At the high end, Harrison, Vincennes, and Widner townships' median ratios are 1.117, 1.149, and 1.168, respectively. Those ratios are between 8% and 20% higher than the ratios in Johnson and Palmyra townships and from 23% to 28% higher than Vigo Township.

In Benton County, there is a similar pattern to that seen in Hancock County, but with a different result. Richland Township has clearly assessed residential property differently than the other five townships for which we have obtained data. Richland Township's median ratio is 0.947, while the other five townships' median ratios are greater than 1.04.

Oak Grove's median ratio is 1.05, Hickory Grove's is 1.049, Grant's is 1.041, Center's is 1.067, and Bolivar Township's median ratio is 1.115.

We can infer, then, that Richland Township's residential improved property assessments are 10% or more lower than all of the other townships for which we have data.

Section 8.7: Performance of Data Collection Contractors

Finally, the data collection for the 2002 pay 2003 reassessment was performed by a variety

median ratio, is described more fully in Appendix A, Background ToolKit.

of vendors across 64 of the 87 counties, with 23 counties performing their data collection "in house." Charting the median ratios by the data collection vendor (and lumping the 23 in-house counties as one) provides the picture in Figure 8-16 below.

With only a few exceptions, the median ratios fell within the IAAO standard, which, of course, is the same result as when we analyzed the county-wide median ratios. Four of the five counties whose median ratios fell below the standard used Appraisal Research as their data collection vendor. Those counties are: Crawford, LaGrange, Ohio and Rush. The other county that fell below the standard was Union, who performed data collection in-house. Three counties median ratios exceeded the standard: Knox, Martin, and Sullivan. Knox performed data collection in-house, Martin County used Southern Indiana Appraisal, and Sullivan County used Appraisal Research. Of the eight counties that did not meet the IAAO standard, five of them used Appraisal Research for their data collection.

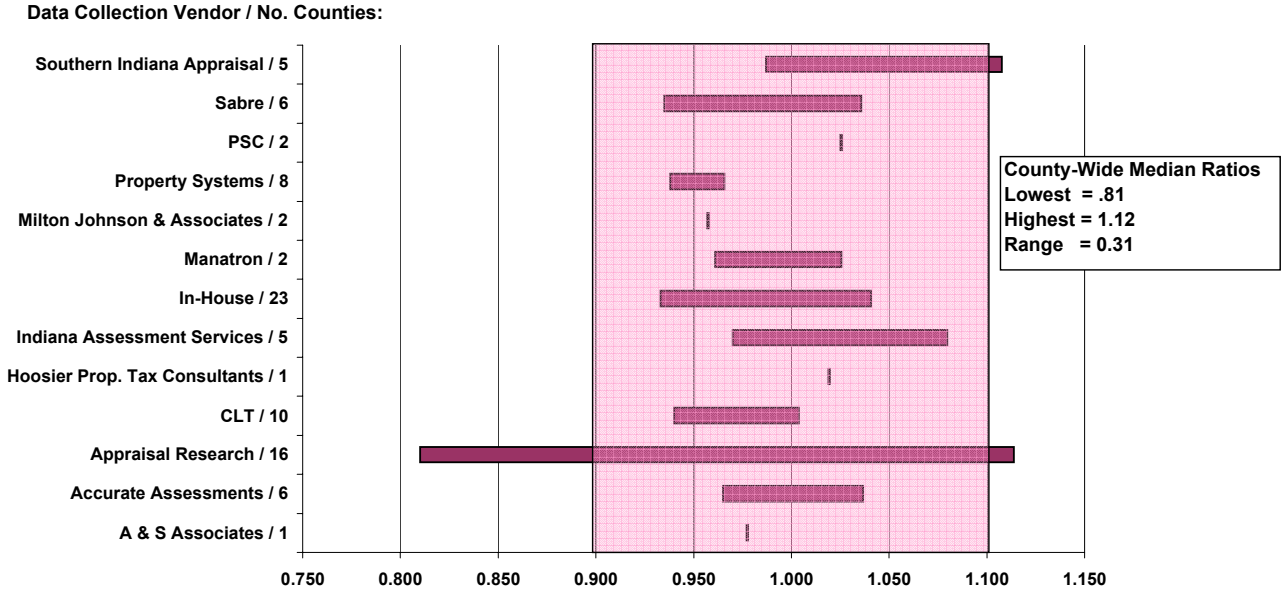
Section 8.8: Sales Chasing

Sales chasing is a term used to describe the practice of setting a property's assessment value based on the price for which it recently sold, and not on professional appraisal methods as described by law. The practice results in biased treatment of sold and unsold properties which, in turn, leads to systematic differences in the assessment of property. If the bias is not detected in equalization analysis, the equalization analysis results are not reliable. Sales chasing is described in some detail in Section 7.4.

Our analysis found widespread evidence of sales chasing. We obtained sufficient data to perform the Mann-Whitney statistical test[72] to determine whether properties that had sold were treated differently than those which did not sell in 65 of the 87 counties. There were 733 townships in those 65 counties in which sufficient data was available to perform the test.

We found evidence of sales chasing in 201, or 27.4%, of the townships. We found evidence of sales chasing in at least one township in 51 counties. In other words, sales chasing likely

Figure 8-16
Range of County Residential Median Ratios,
by Residential Data Collection Vendor



72 Discussed in detail in Section 7-4.

exists in 78.5% of the counties in the State, based on our analysis of the 65 counties where data was available.

From this evidence, we can state that the median ratio estimates in a significant number of townships and in the majority of the counties are unreliable and likely overstate the quality of the assessments in those townships and counties.

Section 8.9: Conclusion

The IFPI's equalization analysis of 87 counties revealed that a majority of counties and townships met the IAAO standard for level of assessment as measured by the median ratio. However, that level of attainment masks widespread inconsistencies in assessments across counties and townships, in both residential and commercial and industrial property.

Table 8-6: Summary of Sales Chasing Analysis

Sales Chasing	*Townships*	*Counties*
Number of Jurisdictions Tested	**733**	**65**
Number of Jurisdictions in Which Sales Chasing Evidence Found	**201**	**51**
Percentage of Jurisdictions Affected	**27.4%**	**78.5%**

CHAPTER 4: FINDINGS AND RECOMMENDATIONS

Section 9
Findings

Even though a majority of counties and townships met the IAAO standard for median ratios—the median ratio should fall between 0.9 and 1.1—there was wide variation in those ratios across counties and townships. Our analysis demonstrates that two residential properties with the same market value could be assessed at vastly different assessed values, depending on the township in which county the property was located. Likewise, two commercial or industrial properties located in different parts of the State could have assessed values that vary by a wide margin.

What is particularly problematic about the inconsistencies is that they are so widespread. One out of every four counties' and one out of every three townships' median ratios are more than 5% from the statewide median ratio. Even more serious, three out of every four counties and two out of every three townships did not meet the IAAO standard for assessment uniformity as measured by the coefficient of dispersion.

➢ **The current structure does not provide for accountability across assessing jurisdictions, resulting in systematic lack of uniformity in assessment practice and assessment results. These problems plague townships within counties and cross county borders.**

Township assessors are not accountable to county assessors and neither are held accountable by the State. Each township trustee/assessor or elected assessor makes decisions concerning the method and practice used for assessment administration. They can perform the assessment function in house, they can contract with a vendor either individually or in cooperation with other township assessors in their county, or they can cede the responsibility to the county assessor. While county assessors are to perform equalization analysis by class and by township, the results of the most recent analyses demonstrate that county assessors are not willing or able to perform adequate equalization.

The State, too, has not been willing or able to perform its oversight function. It has not chosen to make or order adjustments to assessments in any county or township. The DLGF currently does not and cannot make an independent ratio study as the law requires. The current equalization system is a sham. The DLGF accepted, without exception, all county generated equalization studies from the 2002 pay 2003 reassessment. Our analysis has shown those studies to be incorrect in many cases and not an accurate measure of the quality of the reassessment.

Hence, there is no accountability, nor has there been, which has resulted in the state of affairs that led to the Supreme Court mandated market value-based reassessment. While the standard upon which valuation is based has changed, the underlying administrative structure has not. This structure, as we have demonstrated in our analysis, results in a systematic lack of uniformity in assessment practice, even under a market value system.

➢ **The role of assessing within the property tax system is not well understood.**

The property tax system, its valuation methodology and ultimate accountability, is a responsibility of state government. It is the State Constitution and State statutes that undergird and form the foundation for the property tax system and the policies that flow from it. It is the State's responsibility to write the reassessment rule that governs each general reassessment. And it is the State that has now formulated the annual trending rule to govern updates that will account for gradual changes in the property tax base like inflation.

Therefore, the role of the local assessment

offices—whether at the township or the county level—is to determine, according to state policies and rules, the true and accurate tax base in accordance with the state enacted standards and policies. The assessment function applies those standards and policies without regard to the assessing officials' opinions, beliefs, or philosophy. The assessor, then, must follow the state written rules without regard to parochial or differing philosophical views of tax policy or tax burden considerations. In other words, the assessment function is a ministerial one.

➢ **Local governmental assessment officials and their contractors do not understand that they have a responsibility for assessment quality that extends beyond their own county.**

The uniformity and consistency of the assessment system matters not only at the local (township and county) level. A lack of uniformity and consistency has impacts across the State as well. The State appropriates over $6.0 billion per year to support local schools and reduce local property tax levies. These appropriations are made based on tax assessment information–in the case of the schools–and based on property tax liabilities determined to some extent by the shares of total assessed value born by the various classes of property. Non-uniform and inconsistent assessments in one part of the State impacts taxpayers in other parts of the State.

Our analysis demonstrates that there has been and continues to be, on the part of township and county officials and their vendors, an unwillingness to "do things differently," often because they have "always done it this way."

➢ **The type, quantity, and quality of data currently collected will not support a market value assessment system.**

Counties do not adhere to required data standards. Moreover, the DLGF does not receive all sales disclosure forms from the counties. A larger problem is the inability of the DLGF to analyze the sales samples used in the county studies. In our analysis, only 8.6% of those sales which we were able to obtain were usable. Normally, in a robust market value assessment system, about half of all sales proxies prove usable.

Without the collection, evaluation, and storage of market value information, the market value assessment process breaks down. The over-reliance of the current real property assessment on the cost basis masks the need for market value information. However, our analysis demonstrates that more and higher quality market data will improve not only the ability to equalize, but assessment practice results as well.

➢ **Many counties and townships did not meet the IAAO standards for level of assessment, uniformity of assessments, or consistency of assessments across assessing jurisdictions.**

Table 9-1 on the following page summarizes the evaluation of assessment results from our equalization analysis.

While counties' and townships' results for residential improved property were reasonably good for level of assessment as measured by the median ratios, the quality stopped there. Only about half of the counties and townships met the IAAO standard for median ratios in commercial and industrial improved property. With regard to uniformity of assessment, as measured by the coefficient of dispersion, only about 15% of counties and 20% of townships met the standard for residential improved property. Only about one in ten counties and one in eight townships met the CoD standard for commercial and industrial improved property.

Overall, counties and townships did not meet IAAO standards for either level or uniformity of assessment. With regard to consistency of assessment across counties and townships, the results are not better. While 66 of 87 counties had residential improved property median ratios within +/- 5% of the statewide median ratio, 166 townships in 63 counties did not meet the +/- 5% standard. In 63 of 87 counties (72.4%), at least one township's assessments differed materially from the other townships. For commercial and industrial property, 34 of 79 townships, representing 25 of 52 counties, varied materially from the other townships in the county.

➢ **There is inconsistency in assessment interpretation and administrative practice between the counties.**

The results demonstrate, with statistical certainty, that there is a systematic inconsistency in interpretation of the assessment statutes and rules and assessment practice throughout the State.

Table 9-1: Summary of Equalization Results			
Median Ratio		*Met IAAO Standard*	*Did Not Meet IAAO Standard*
Counties:	Residential Improved	90.8%	9.2%
	Commercial & Industrial Improved	54.2%	45.8%
Townships:	Residential Improved	86.7%	13.3%
	Commercial & Industrial Improved	54.1%	45.9%
Coefficient of Dispersion		*Met IAAO Standard*	*Did Not Meet IAAO Standard*
Counties:	Residential Improved	14.9%	85.1%
	Commercial & Industrial Improved	10.2%	89.8%
Townships:	Residential Improved	20.6%	79.4%
	Commercial & Industrial Improved	12.2%	87.8%
Consistency Across Jurisdictions		*Within +/- 5%*	*Not Within +/- 5%*
Townships within Counties	Residential Improved	73.0%	27.0%
	Commercial & Industrial Improved	56.2%	43.8%
Percentage of Counties Affected	Residential Improved	27.6%	72.4%
	Commercial & Industrial Improved	12.2%	87.8%

Section 10: Recommendations

Our charge, as we performed the Statewide Property Tax Equalization Study, was to provide the State with the strengths, weaknesses, and accuracy of the Supreme Court ordered, first ever, market value-based general reassessment process and its results. To meet that charge, we have:

- ✓ **Conducted an analysis, by jurisdiction, of the quality of the reassessment by property class**
- ✓ **Studied the assessment methodology and process**
- ✓ **Analyzed the data requirements for future property tax reassessments, and**
- ✓ **Performed a school assessment sales ratio study**

The final piece was to bring the result of our work together in the form of recommendations that will improve the State's property tax assessment and administration system. We now, respectfully, present those recommendations.

We recommend that the State take the following coordinated actions:

- ✓ Ensure complete and accurate collection and transmission of sales data
- ✓ Develop and enforce compliance with a statewide assessment data standard
- ✓ Move primary responsibility for assessment to the county level
- ✓ Introduce an effective annual ratio study at the state level
- ✓ Reinforce support for the market value standard by rewriting the assessment rule to continue the transition
- ✓ Upgrade assessment training and certification programs and increase certification standards

We elaborate them below:

1. Ensure Complete and Accurate Collection and Transmission of Sales Data

A quality assessment requires independent evaluation of results. Having timely access to pertinent and accurate information about the price, terms, and circumstances of every sale is essential in a competent equalization study. Here we make recommendations regarding the main source of sales data, Form 46021, the sales disclosure form (SDF) and the transmittal of those forms to the DLGF.

Sales disclosure forms appear to be reasonably well designed (and were recently redesigned to facilitate reading by optical character recognition—OCR—equipment). However, we believe that the design of the form should be reevaluated with the aim of incorporating lessons learned from the use of OCR and of implementing our recommendations. Certainly our experience with scanned SDFs in the previous format revealed that they often are poorly executed. This suggests that the DLGF should (1) do more to inform buyers, sellers, and their agents about the importance of the forms and the proper way to complete them, and (2) work with county auditors on ways to ensure that inadequately completed SDFs are not accepted. In addition, the DLGF, in cooperation with county auditors, should develop a control system designed to account for all SDFs accepted by the auditors so that the DLGF can follow up when an SDF is not received from the assessor.

We could not ascertain whether SDFs were transmitted to the DLGF in a timely fashion (see Figure 5-1 for our understanding of the process). However, the problem of the county assessors selectively forwarding SDFs to the DLGF needs to be remedied if our recommendations about the DLGF making effective annual ratio studies are accepted.

The State should control which sales are included or excluded, not the assessors. This means that the DLGF should develop a sales data processing manual.[73] It should provide instructions for the timely transmittal of SDFs and backup documentation in convenient-to-process batches. It should instruct assessors on how to annotate the SDFs with their (coded) recommendations regarding the usability of each sale and the assessed value in effect on the date of sale. Electronic filing of SDFs with the State or electronic transmittal of sales information should explored.

2. Develop and Enforce Compliance with a Statewide Assessment Data Standard

On the surface, current assessment data standards (50 IAC 12) appear reasonable. However, our experience with county assessment data during the course of this equalization study suggests that they were widely ignored. Optimistically, many of the bugs in the design of county assessment data files have been worked out, and the counties have begun to use proper codes. However, widespread continued data problems are intolerable. The following actions would seem appropriate:

- ✓ Seek county input regarding problems with existing standards and ways to improve them.
- ✓ Make adherence with assessment data standards a standard provision of county reassessment and IT contracts.
- ✓ Institute financial penalties for failures to comply with the standards.

3. Move Primary Responsibility for Assessment to the County Level

The delegation of responsibility for property assessment to township officials essentially is an artifact of the early 19th Century.

Although reasonable when Indiana was being settled, this assignment is no longer optimal. Townships no longer are the primary provider of government services. Township boundaries are of negligible importance in the formation of property markets. The geographic proximity of the assessor is less important to taxpayers who have automobiles and access to the Internet and telephones. As noted, assessment is a ministerial function requiring technical expertise and equipment, not a fiscal policy-making function. When such a function is overly decentralized, it is difficult to maintain assessment accuracy and to achieve economies of scale, implying that taxpayers are forced to pay more for less. State-level supervisory burdens are commensurately increased.

The State should uniformly transfer responsibility for assessment from townships to counties.

4. Introduce an Effective Equalization Study at the State Level

The DLGF should thoroughly study the adequacy of the standards and procedures that are to be used in equalization (50 IAC 14) and in annual adjustments (50 IAC 21). The recognition accorded the 1999 IAAO *Standard on Ratio Studies* is commendable. However, the deference paid the standard in 50 IAC 14-2-1 (and elsewhere) is excessive, because the IAAO standard itself does not deal concretely with some issues that are important in equalization (and some of its advice is of dubious merit).[74] Technical issues that need to be explicitly addressed in Indiana ratio study regulations include:

- ✓ Guidance on (a) the minimal period from which sales must be drawn for consideration in ratio studies for a given year, and (b) longer periods from which sales may be drawn if the initial period results in an inadequate sample of sales
- ✓ Instructions concerning which categories of sales must be included in ratio studies for equalization purposes, which categories may be included, and which categories should not be included
- ✓ Professionally acceptable rules for trimming outliers or extremes
- ✓ Guidance on determining sample adequacy and on combining strata to produce a larger sample

73 Chapter 25 of the former assessor's operations manual dealt unsatisfactorily with SDFs.

74 The IAAO is scheduled to review the 1999 standard this year.

- ✓ Strict requirement that ALL sales, regardless of whether they should be included in a ratio study or not, be transferred to the State (see recommendation 1)

If not defined in regulations, the statistics to be calculated in ratio studies should be defined and illustrated in guidelines to preclude the numerous errors noted in county equalization studies.

State equalization should not be built in any way on the data and conclusions in county ratio studies, but there should be a clear, understandable, and uniform county ratio study standard. The reason why the DLGF should not rely on county studies is that it has no way of independently verifying whether all appropriate strata have been studied, whether sales samples comply with regulations, and indeed whether statistics have been computed correctly.

Since annual adjustments and county equalization, if diligently performed, essentially would accomplish the same thing, the DLGF should decide how the two rules should be reconciled (if not combined) and make appropriate recommendations to the General Assembly.

5. Complete the transition to market value standard by rewriting the assessment rule

The State should set as a goal the adoption of a current market value standard, which would imply changes to assessments whenever warranted by physical and economic changes. Frequently updated assessments made in accordance with generally accepted mass appraisal practices optimize property tax uniformity. The *Standard on Property Tax Policy* (IAAO 2004) in section 4.2.2 calls for annual reassessments. The foundation of an effective annual assessment program is a well-executed base-line revaluation. Such a revaluation would have the characteristics described in Exhibit 10-1. The ensuing annual assessment program would have the characteristics described in Exhibit 10-2.

It should be underscored that an annual reassessment program does not require an assessor to change the assessment of every property every year. Assessments only need to be changed when there is a clear indication based on market evidence that valuations no longer meet level and uniformity standards or when there are significant physical changes.

Changing from doing revaluations on a periodic project basis to an annual reassessment program basis offers major benefits. Most important, by maintaining accurate, up-to-date valuations, tax burdens are proportional. Changes in the composition of the tax base are more gradual. Political opposition to revaluations abates. Property owners can more easily predict what their taxes will be, and taxing districts can better judge their tax capacity. The annual costs of an ongoing reassessment program compare favorably with the annualized costs of periodic revaluations and justify the maintenance of a considerably higher level of in-house expertise.

Several steps would be required to implement this recommendation:

- ✓ Statutorily redefine true tax value as market value (although current use assumption in manual would be acceptable).
- ✓ Establish the legislative framework for continuous market monitoring, appropriate valuation adjustments, and a verifiable program of property re-inspections.
- ✓ The standard contracts produced pursuant to IC 6-1.1-4-19.5 should contain meaningful technical and performance standards in addition to the legal "boilerplate" that the current contract contains.

We suggest that the annual reassessment requirement begin after the general reassessment currently scheduled to begin in 2007 under IC 6-1.1-4-4. This would allow time to increase the mass appraisal skills of assessors (see next recommendation) and to design and introduce inspection programs and the like.

Although annual assessment updates would eliminate much of the assessment "sticker shock" associated with less frequent reassessments, there may be a need to guard against

unwarranted (and unwanted) yearly fluctuations in property tax obligations caused by essentially unpredictable, stochastic fluctuations in sales ratios and the like used in trending. Otherwise, any popular support for market value assessment will be jeopardized.

6. Upgrade Assessment Training and Certification Programs and Increase Certification Standards

Although a commendable beginning has been made, the Indiana assessing officer education, examination, and certification programs need to be strengthened. First, the scope of the education and examination process needs to be broadened to include at least the following: (1) mass appraisal applications of the sales comparison and income capitalization approaches; (2) monitoring property price trends statistically so that defensible indexing factors can be developed; and (3) making sales ratio studies. Second, an evaluation should be made of the testing process to ensure that it actually tests the examinees' mastery of the subjects covered, particularly of analytical topics like ratio studies. Third, certification needs to be made mandatory. In the event that requiring elected assessors to possess professional qualifications is unconstitutional (as is the case in some states), consideration should be given to allowing assessment districts to appoint assessors. Otherwise, the law should require that a certified assessing officer (whether a member of the staff or a contractor) attest that assessments meet legal and professional standards (as would appear to be the case now under IC 6-1.1-35-1.1).

Exhibit 10-1

CHARACTERISTICS OF A HIGH-QUALITY REVALUATION PROJECT

- **A powerful computer-assisted mass appraisal (CAMA) system. Modern CAMA systems support the functions described below.**
- **Effective market data collection program. Sales data should be collected from reliable, verifiable sources, such as sales disclosure forms. Rental property income and expense data should be collected from property owners, managers, or tenants using well-designed questionnaires. Cost data should come from credible sources. Data should be verified and screened as appropriate.**
- **An adequate market database. All bona fide sales for several years should be recorded in a computerized sales file that includes the attributes of the properties at the time of sale. Income and expense data also should be recorded in a fashion that facilitates analysis.**
- **A readily available, flexible ratio study routine. The routine should allow the assessor to choose the period from which sales are drawn and should allow the assessor to select the strata to be analyzed.**
- **Well-documented preliminary market analyses. Before property is appraised, the assessor (or contractor) should conduct a thorough analysis of market patterns and trends. This should include the delineation of any market areas to be used as variables in mass appraisal models.**
- **Use of all appropriate valuation approaches and well-documented valuation models that demonstrably produce acceptable results. The sales comparison approach should be used whenever ample sales can be obtained (not all sales need be from within the jurisdiction if adjustments can be made for differences in market factors). The income approach should be used for types of property that typically are rented. The cost approach should be used when there are insufficient sales or rents, or as a crosscheck against values produced by the sales comparison and income approaches.**
- **Well-designed value review procedures. Values should be reviewed in the field for reasonableness and consistency. Value adjustments made during the review and reconciliation process should be supported and documented.**

Exhibit 10-2

CHARACTERISTICS OF A HIGH-QUALITY REASSESSMENT PROGRAM

- Market monitoring. Using the market data collection procedures established during the revaluation, the assessor would continue to monitor real estate market activity with the aim of detecting significant trends. This would include the on-going collection and maintenance of sales, income, and other market data.

- Time trend analyses. Using the analytical capabilities of the CAMA system, the assessor would make trend analyses and, as necessary, adjust older sales to the current valuation date.

- Ratio studies. At the same time, the assessor would use ratio studies to determine whether valuation accuracy standards are still being met. As with trend analyses, ratio studies should be made at least annually.

- Property inventory maintenance. In addition, the assessor would carry out an effective property inventory maintenance program. Building permits would be monitored, and the assessor would inspect every property at least once every four to six years on a regular schedule (usually the jurisdiction would be divided into regions and the properties in the regions would be inspected in succeeding years). Characteristics of recently sold properties would be verified.

- Value updates. When the assessor detected significant trends in property prices in any segment of the property market or when ratio studies revealed that appraised values no longer meet level and uniformity standards, the assessor would decide on an appropriate course of action. There are three basic options: (1) indexing (or trending) existing valuations, (2) re-calibrating existing models and reapplying them, and (3) calibrating new valuation models. Different update strategies could be used in different segments of a community. Trending is appropriate as long as uniformity standards are met. Market comparison, income, and cost models can be recalibrated using recent market data and older, time-adjusted sales. However, a full reappraisal or remodeling effort (see below) is required when there have been fundamental changes in the local market. For example, trending may produce satisfactory results in recently developed subdivisions, but it may be necessary to do a full revaluation of property in the commercial core or in older areas characterized by renovations and infill.

- Mass appraisal modeling. With the assistance of CAMA system tools, assessors have the capability of updating existing mass appraisal models and developing new models based on the sales comparison and income approaches to value. Cost schedules and indexes must also be kept current.

- Value review. An effective value review program would accompany the value updates or the development of new mass appraisal models. Preliminary value estimates should be reviewed on a case-by-case basis for reasonableness and consistency. In addition, standards recommend that the different approaches to value be used to develop separate value estimates whenever feasible and appropriate. This requires the assessor to “reconcile” the various indicators of value and select *the* estimate that is considered most accurate.

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INDIANA FISCAL POLICY INSTITUTE
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Setting Fiscal Integrity Standards—Three Benchmarks The House of Representatives Budget

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Budget Brief 2007:2

SETTING FISCAL INTEGRITY STANDARDS—THREE BENCHMARKS

THE HOUSE OF REPRESENTATIVES BUDGET

On February 23, the Indiana House of Representatives voted to send their version of the 2008-2009 Biennial Budget to the Indiana Senate, completing the first of three steps in the Indiana General Assembly. Now the Senate will revise and craft their vision for the State's next two years and, once they have completed their work, the Budget will undergo its final revisions in the conference committee process. When these steps are completed, the budget will pass in its final form–subject to the Governor's signature or veto–by April 29.[1]

This Indiana Fiscal Policy Institute (IFPI) Budget Brief is the second in a series of four. These Briefs analyze the status of the Budget at each step in the process. This year, the IFPI is evaluating the Budget through the lens of three benchmarks:

I. The enacted budget must be structurally balanced;
II. The payment delays must be completely reversed; and
III. The combined reserves must be a minimum of 10% of operating revenue.

As we stated in the first Budget Brief ("Setting Fiscal Integrity Standards – Three Benchmarks," at http://www.indianafiscal.org/docs/BudgetBrief2007-01.pdf), Indiana finds itself in structural budgetary balance as we approach the end of the FY 2006-2007 biennium. Yet, some delayed payments to local governments and higher education institutions remain in place and reserve balances are not at prudent levels. In short, the State is not yet fully prepared to withstand the next recession.

While there are clearly many worthwhile proposals under consideration during in the current budget debate and the State has many unmet needs, it is paramount that the General Assembly completes the recovery from the last recession. Meeting the three benchmarks will accomplish that task.

The House Passed Budget

The House Passed Budget plans to spend $13.0 billion in FY 2008 and $13.4 billion in FY 2009.[2] The base budget (adjusting for the reversal of payment delays in FY 2007) increases by 5.3% and 3.4% each year, respectively. Total spending increases by 2.7% in FY 2008 and by 3.4% in FY 2009.[3]

As does the Governor's budget, the House Passed budget clearly sets Education as a top priority. The House Passed budget includes funding for the first phases of a Full Day Kindergarten program and increases in the tuition support formula by approximately 4% each calendar year.[4] Combining the expenditures for the tuition support formula and the amount for full day kindergarten, that part of the Budget increases by 3.3% in FY 2008 and by 5.1% in FY 2009.

Table 1
House Passed Budget
Revenue and Expenditures - Fiscal Years 2008 - 2009

	2008		2009	
	Dollars (mil.)	Percent Increase over Prior Year	Dollars (mil.)	Percent Increase over Prior Year
Total Revenue	$ 12,954.6	4.2%	$ 13,494.5	4.2%
Base Appropriations	$ 12,961.7	5.6%	$ 13,396.1	3.4%
Other Expenditures	$ 31.1		$ 31.1	
Total Expenditures	$ 12,992.8	2.9%	$ 13,427.2	3.3%

Higher education receives increases of 9.9% in FY 2008 and of 2.2% in FY 2009. It is noteworthy that the debt service component of higher education funding will increase by almost 20% in FY 2008. The House Passed budget includes a provision that bonding authority authorized in this budget will not receive any debt service appropriations until at least FY 2010. Therefore, the higher education debt service appropriation in FY 2009 actually decreases by 0.4% from FY 2008.[5]

The House Passed budget holds the Medicaid appropriation level over the biennium. This clearly does not fund the Medicaid Forecast, which projected annual increases in expenditures of 8%-9% over the biennium.

The Governor's budget did not fully fund the forecast, either. It would have increased the appropriation by approximately 5% each year. The Indiana Fiscal Policy Institute considers any underfunding risky budgeting practice. The IFPI strongly recommends that as the Budget proceeds, serious consideration be given to either fully funding the forecast or identifying actions that will reduce expenditures. For purposes of this analysis, the IFPI has added to the House Passed Budget an estimate of expenditures for Medicaid that would result if those expenditures increased by 5% in each year of the biennium.

The House Passed budget increases appropriations for property tax subsidies. The Family and Childrens' Fund levy will be capped at the calendar year 2007 level and any increases in subsequent years will be funded by a state appropriation. In addition, the budget includes a one-time retroactive subsidy of the Family and Childrens' Fund levy to be used for certain county debt service obligations and reduction of overall property tax levies.[6] Combined, these initiatives increase the property tax subsidy category of the Budget by 1.7% in FY 2008 and by 2.4% in FY 2009.

The Health and Social Services component of the budget receives a 6.2% increase over its base in FY 2008. That increase is in part a function of funding additional caseworkers in the Department of Child Services and increases in the Community and Home Options to Institutional Care for the Elderly and Disabled (CHOICE) program and funding for Community Health Centers.

Payments to retired teachers will continue to increase at a rate greater than 6.0% per year during the biennium.[7] The House Passed budget keeps the General Fund's contribution to a 6.0% increase and relies upon the Pension Stabilization Fund (within the Teachers' Retirement Fund) to provide the additional benefits. Those benefits are approximately $23.9 million in FY 2008 and $39.0 million in FY 2009.

Evaluating the House Passed Budget

As we described in the first Budget Brief ("Setting Fiscal Integrity Standards – Three Benchmarks," See at http://www.indianafiscal.org/docs/BudgetBrief2007-01.pdf), there is more than one definition of budgetary "balance." Structural balance is desirable in periods of economic expansion, with one major purpose being to build reserve balances. Of course, to build reserve balances, a budget must be structurally balanced and it must create a surplus (revenue greater than expenditures) that can be transferred to reserve funds. Once adequate reserve balances are in place, structural balance insures that those balances are not eroded through excess spending.

In periods of economic decline, governments use those balances to maintain the ability to provide vital services even

Table 2
The House Passed Budget
Percent Increase in Select Budget Categories

Category	2008	2009
K-12 Education (Tuition Support & FDK)	3.3%	5.1%
Higher Education	9.9%	2.2%
Higher Education - Debt Service Only	19.8%	-0.4%
Medicaid	0.0%	0.0%
PTRC + Homestead	1.7%	2.4%
Health and Social Services	6.2%	3.5%
Teachers' Pensions	6.0%	6.0%

Source: State Budget Agency, House Democratic Fiscal Staff, IFPI Calculations.

Table 3 Structural Surplus or (Deficit) General Fund / Property Tax Replacement Fund	2007	2008	2009
Current Year "Base" Revenue	12,433.6	12,924.6	13,494.5
Current Year "Base" Expenditures	12,278.0	12,961.7	13,396.1
Structural Surplus / (Deficit)	155.6	(37.1)	98.4

when revenue collections fall short of what is needed.

The drawing upon reserve balances to fund necessary expenditures was an important part of Indiana's budget during the period following the last recession in 2001. The State also relied upon the budget management technique of delaying payments as well as limiting the growth in appropriations. Some may argue—as the IFPI has—that a lack of spending restraint leading up to the 2001 recession contributed to the severity of its impact. Some may also believe that additional spending restraint could have been practiced in the years since the 2001 recession.

What should not be at issue, however, is that the State finds itself with an opportunity to complete the recovery from the impact of the 2001 recession. The economic expansion that began with the end of the recession in 2001 is now in its sixth year. Revenue collections are forecast to continue solid, though somewhat moderate, growth through the FY 2008-2009 biennium. That is why the IFPI believes that adherence to the three benchmarks–structural balance, reversing payment delays, and building adequate reserve balances–is so important. By completing the recovery, needed investments will be possible in the FY 2008-2009 biennium and beyond.

As stated above, structural balance is necessary in order to build reserves. Obviously, once the budget achieves balance, any surpluses should go first to reverse the payment delays and then to build the reserve balances. Simply achieving balance is not enough; the budget must produce a surplus.

Let us then, evaluate the House Passed budget.

To calculate the structural balance (surplus or deficit) for FY 2008 and 2009, the IFPI made adjustments to total resources and total expenditures for those resources and expenditures that are not part of the ongoing base budget. The adjustments included reversal of payment delays and transfers from other funds or reserves into the General Fund. Comparing the adjusted revenue to adjusted expenditures yields a structural deficit of $37.1 million in FY 2008 and a structural surplus of $98.4 million in FY 2009. While the House Passed Budget does not achieve structural balance in FY 2008, it does achieve that balance in FY 2009.

Table 4 Condensed Surplus Statement General Fund / Property Tax Replacement Fund	2007	2008	2009
GF / PTRF Balance at July 1	410.7	193.3	155.1
Current Year Resources	12,433.6	12,954.6	13,494.5
Total Resources	12,844.3	13,147.9	13,649.6
Appropriations	12,246.0	12,842.3	13,208.2
Other Expenditures, Adjustments, & Reversions	405.0	150.5	219.0
Total Net Expenditures	12,651.0	12,992.8	13,427.2
General Fund Reserve Balance at June 30	193.3	155.1	222.4
Other Reserve Balances	693.3	678.8	698.3
Combined Balances	886.6	833.9	920.7
Combined Balances as a Percent of Revenue	7.1%	6.4%	6.8%

Source: House Democratic Fiscal Staff & Indiana State Budget Agency, IFPI Calcuations.

The House Passed Budget reverses the payment delays to higher education institutions. It does so in the same fashion as the Governor's Budget, by increasing the appropriation for capital repair and rehabilitation to state-funded colleges and universities. It does not, however, reverse the payment delays to local units of government. This liability totals $223.3 million.

Combined reserve balances start the biennial budget period at $886.6 million, or 7.1% of revenue. In FY 2008, the surplus decreases slightly, to $833.9 million, or 6.4% of revenue. The House Passed Budget increases the combined balances to $920.7 billion, or 6.8% of operating revenue, at the end of FY 2009.

Over the biennium, the House Passed Budget increases combined balances from $886.6 million to $920.7 million, or $34.1 million. However, in percentage terms, combined balances decrease from 7.1% to 6.8% of operating revenue. This is well below the IFPI benchmark of 10%. To reach the benchmark, the House Passed Budget would have to reduce spending or increase revenue by approximately $430 million.

The House Passed Budget does not score well when measured against the three IFPI benchmarks. It is not structurally balanced in FY 2008, although it returns to structural balance in FY 2009. It reverses the higher education portion of the payment delays, but it leaves a $223.3 million payment delay liability to local units of government unpaid. Finally, it does not increase reserve balances as a percentage of operating revenue.

Should this Budget become law, it would place Indiana's fiscal integrity at significant risk. The State would not, even at the end of FY 2009, be prepared for the next economic downturn. Developing and enacting the FY 2008-2009 Budget is a challenging and difficult task. There is never enough money; budgeting is, after all, the allocation of scarce resources. But prudent planning and cautious decision-making in good economic times is necessary if Indiana is to avoid crisis when the next recession arrives.

As budgets reflect priorities, this one reflects the House of Representatives' priorities. The Senate will now have the opportunity to demonstrate its priorities. The IFPI hopes that as the process of debating and crafting the Budget continues, the debaters and crafters heed the three benchmarks.

A note about "outside acts." This analysis does not contemplate the impact of legislation that spends money but is progressing "outside" the budget bill. Between now and the end, all of the legislation that spends money must become part of the total budget debate, as passing expenditures without incorporating them into the budget is fiscally irresponsible. It has always been done before, so we would expect it to be done this time, too.

(Endnotes)

1 Of course, should the two Houses not agree, the Governor will call a Special Session in order to complete the constitutionally required task of enacting a budget. If this happens, it will be a fourth step.

2 The House Passed Budget did not provide for any increase in the appropriation for Medicaid. The State's Medicaid Forecast projects increases of 7%-8% over the next two years. In the IFPI's opinion, prudent budgeting requires an appropriation that at least recognizes the likelihood of these expenditures. Therefore, in this analysis, the IFPI has increased the House Passed Budget Medicaid appropriation by 5% each year.

3 The IFPI obtained data for this Budget Brief from the House Democratic fiscal staff and the State Budget Agency. Both were incredibly helpful and forthcoming. We emphatically thank them for their assistance, knowledge, insights, and above all, patience as the IFPI prepared this Brief. It would not have been possible without them. All calculations and interpretation of the data, as well as any errors, are the responsibility of the IFPI.

4 The tuition support distribution is appropriated on a fiscal year basis, but implemented on a calendar year basis. The increases stated here are based on the calendar year implementation.

5 Higher education "debt service" is appropriated through a line item entitled "fee replacement." When the State grants bonding authority to state-supported institutions, the state pledges to provide the funds for the institution to make the debt service payments.

6 This retroactive subsidy equals the amount that the Family and Childrens' Fund levy increased in CY 2006 and 2007 over what the levy was in CY 2005. The amount of those increases is approximately $171 million, which is equally distributed over the two years of the biennium.

7 See the IFPI report # 23: The Teachers' Retirement Fund's Pension Stabilization Fund: A Trust Fund Insuring Indiana's Commitments. Web URL: http://www.indianafiscal.org/docs/IFPI%20Report%2023-TRF_PSF.pdf.

INDIANA FISCAL POLICY INSTITUTE
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Setting Fiscal Integrity Standards—Three Benchmarks The Senate Budget

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Setting Fiscal Integrity Standards -- Three Benchmarks
The Senate Budget

Mark D. Brown

The Indiana Senate passed its proposed state General Fund Budget (Budget) on April 11th by a vote of 36 -13. In a somewhat unusual step the on same day, the Senate passed a separate bill containing several significant K-12 school funding and local government funding provisions that are linked with the Budget. In addition, provisions in a third bill regarding the use of revenue from limited gaming at the state's two horse racing tracks are also linked to the Budget. Finally, the Budget Committee, on April 16th, received the revenue forecast update.

Combined, these events require attention as the Indiana Fiscal Policy Institute (IFPI) evaluates the Senate Passed Budget. A substantial policy shift in the state's use of its resources to subsidize funding for K-12 education and local governments and a reduction in the revenue forecast impact our evaluation. However, we will still employ the three benchmarks we used for the Governor's initial proposal and the House of Representatives' passed budget. Those three benchmarks are:

1) The Budget must be structurally balanced,
2) The Budget must reverse all remaining payment delays, and
3) The Budget must set aside a combined surplus of at least 10% of operating revenue – or about $1.35 billion – at the end of the biennium.

A Complex Senate Budget Plan with an Updated Revenue Forecast

The Senate Budget was based on the revenue forecast of December 14, 2006. The Budget would spend $13.0 billion FY 2008 and $13.3 billion in FY 2009. Based on the revenue forecast information the Senate had as they developed the budget proposal, the Budget was structurally balanced, it reversed all remaining payment delays, and increased total reserves to just over $1.1 billion, or 8.3% of operating revenue.[1]

Table 1. Total Expenditures, Structural Surplus or (Deficit) and Combined Surplus Balance
(Senate Passed Budget Based on Revenue Forecast December, 2006)

	2007	2008	2009
Total Expenditures	***12,651.0***	***13,015.1***	***13,299.5***
Structural Surplus / (Deficit)	***155.6***	***191.3***	***296.7***
Ending Combined Balance	***886.6***	***839.4***	***1,124.5***
Balance as Percent of Revenue	***7.1%***	***6.5%***	***8.3%***

Source: Indiana State Budget Agency, IFPI Calculations

The Budget, as it passed out of the Senate, met two of the three benchmarks, but fell short of the minimum balance benchmark of $1.35 billion.

However, the April 16th revenue forecast update lowered projected revenue by $150 million. The forecasters reduced overall revenue growth in all three years of the forecast period.[2] These projected revenue growth rates are the slowest since the April 2001 revenue forecast update entering the final days of the FY 2002-2003 budget debate.

For those with short memories, the FY 2002 – 2003 biennium was the worst – in terms of revenue results – in the history of the State. As a result of the 2001 recession, revenue collections *declined* in both FY 2002 and FY 2003, by 1.0% and 3.8% respectively.

Table 2. Comparison of Revenue Forecasts
Total Revenue Percent Increase Over Prior Year

	2007	2008	2009
December 14, 2006	2.5%	4.2%	4.5%
April 6, 2007	2.3%	3.9%	4.4%
Amount of Reduction	$ 22.8	$55.8	$71.2

Source: Indiana State Budget Agency

Returning to the impact of the Revenue Forecast update on the FY 2008 – 2009 budget, what was a budget that required much discipline to meet the three benchmarks became an even "tighter" one.

The expenditure side of the Senate Budget was not changed by the revenue forecast; but that forecast reduced the total surplus balance by $150 million, to approximately $975 million. By way of comparison, the Governor's budget end-of-biennium combined balance would have been reduced from $1.2 billion to $1.05 billion and the House passed budget combined balance would have been reduced from $921 million to $771 million.

Table 3. Condensed Surplus Statement
(Senate Passed Budget Based on Revenue Forecast December, 2006)

	2007	2008	2009
GF / PTRF Balance at July 1	410.7	70.5	(48.1)
Current Year Resources (from April 16, 2007 Forecast Update)	12,310.8	12,896.5	13,493.9
Total Resources	12,721.5	12,967.0	13,445.8
Appropriations	12,246.0	13,032.1	13,316.5
Other Expenditures, Adjustments, & Reversions	405.0	(17.0)	(17.0)
Total Net Expenditures	12,651.0	13,015.1	13,299.5
General Fund Reserve Balance at June 30	70.5	(48.1)	146.3
Other Reserve Balances	793.3	808.8	828.3
Combined Balances	863.8	760.8	974.7
Combined Balances as a Percent of Revenue	7.1%	5.9%	7.2%

Source: Indiana State Budget Agency, IFPI Calcuations.

Senate Budget Priorities

While the Senate Budget proposed dramatic changes in how the state distributes over $2.0 billion dollars of property tax subsidies, its programmatic funding priorities are similar to the Governor's budget (see Table 3). Higher education receives total funding increases of about

5.0% per year and large increases in funding to pay debt service on capital building projects approved in prior budgets. The Senate Budget funds the Governor's request in the categories of health and social services and correction with the exception of the additional Department of Child Services caseworkers.

Unlike the House passed budget, the Senate Budget does not fund Full Day Kindergarten at the amount requested by the Governor.

Table 3. Senate Passed Budget
Percentage Increase in Select Budget Categories

	2008	2009
Higher Education	5.1%	5.0%
Higher Education - Debt Service Only	19.8%	8.5%
Medicaid	4.8%	4.9%
Health and Social Services	5.1%	2.0%
Correction	4.4%	3.1%
Teachers' Pensions	5.25%	5.25%

Source: Indiana State Budget Agency, IFPI Calculations.

Another difference in the education budget occurs in the appropriation for benefits paid from the Teachers' Retirement Fund. The Senate reduces the General Fund appropriation for benefit payments to retired teachers from a six percent increase to a 5.25% increase each year. To fund this, the Senate Budget requires additional transfers from the Pension Stabilization Fund (within the Teachers' Retirement Fund). Current analysis shows that this change will not adversely affect the Pension Stabilization Fund and, in fact, is consistent with the original intent. If the resources of the Pension Stabilization Fund allow it, the IFPI would recommend further reduction in the annual percentage increase of the General Fund appropriation.

Medicaid receives the amount it requested, about 5.0% per year. This amount, while consistent with the Governor's request, does not fully fund the State's Medicaid Forecast, which estimates total expenditures to increase by approximately 8% in each year of the biennium. Mitch Roob, the Secretary of the Family and Social Services Administration (FSSA) stated that he intends to make the changes necessary to hold expenditures within the 5% appropriation. The IFPI considers this a risky budgeting approach.

K-12 Education Funding and Property Taxes

The majority of the complexity within the Senate Budget comes from the elimination of the Property Tax Replacement Credit and Homestead Credit to fund 100% of the expenditures from local public schools' General Fund and (eventually) 100% of the Family and Childrens' Fund. Obviously, this proposal, authored by Senator Luke Kenley, has generated much interest and debate, as it should.

Two years ago, in the IFPI analysis of the enacted budget for fiscal years 2006 – 2007, we characterized the capping of the state subsidies for local schools and governments as a "monumental shift" in policy. It was. And so is Senator Kenley's proposal.

Under current law, state subsidies to local units of government via property tax replacement credits and state homestead credits are broadly applied; that is, all local schools and all local units of government receive relatively similar shares. Distributions are determined through a

method that spread the subsidy across all units in relatively proportional shares. The total amount distributed is equal to the total amount of reduction applied to property tax payer's bills.

Senator Kenley's proposal changes the policy from a general subsidy to a focused one. The over $2.0 billion that had been spread across all local governments and public schools would be targeted to local public schools, the Family and Childrens' Fund, and the Juvenile Incarceration Fund. The rationale is that the State makes most of the decisions that affect the spending levels and therefore, state taxes should be used to pay for them.

To be clear, state Property Tax Replacement Credits (PTRC) and state Homestead Credits reduce property taxes, but they do not reduce the overall tax burden. Likewise, eliminating the PTRC and state Homestead Credits and using those state resources to pay for school general fund levies, Family and Children's fund levies, and Juvenile Incarceration levies will not reduce the overall tax burden.

In both cases, the amount of property tax reduction is replaced entirely by state appropriations. Those state appropriations are funded through state levied taxes, primarily the sales tax and the income tax. Therefore, the historical description of increases in property tax replacement and/or homestead credits as "relief" is misleading. It is a shift of tax burden from property tax payers to sales and income tax payers. There are "winners" in that some tax payers may pay less sales and income taxes than they paid property taxes, but those are offset by "losers" who pay more sales and income taxes than they paid property taxes.

On the local government side, the entire cost of government funded by property taxes will now be paid by property tax payers. There will be no property tax replacement credit or state homestead credit, save a temporary homestead credit.

A final observation about the proposal to eliminate the PTRC and state homestead credit and use those resources to fund public school's general funds, the Family and Childrens' Fund, and the Juvenile Incarceration Fund. It has been characterized as major property tax "reform." It does not reform property taxes. It does shift the use of state dollars from general local government subsidies to subsidies focused on the three specific programs. But it does not significantly change or reduce property taxpayer's tax bills, nor does it significantly reduce overall reliance on property taxes.

There are other provisions in the legislation that allows local units of government to levy local income taxes instead of property taxes. That provision, if enacted, would reduce local government's reliance on the property tax, but the overall tax burden would not decrease.

The IFPI does not intend the above comments to be critical of Senator Kenley's proposal eliminating the PTRC and focusing state subsidies to public schools, the Family and Childrens' Fund, and Juvenile Incarceration. On the contrary, the proposal is a positive policy change. Responsibility and decision making for public school general funds, the family and children's fund, and juvenile incarceration are primarily made by the State. Therefore, funding resources should be state resources, not local property taxes.

However, the underlying property tax assessment system – its practice and administration – remains seriously flawed and is in need of reform.

True property tax reform would improve the underlying assessment system, and would start by determining and recognizing the current inconsistent assessment practice across the state and the inconsistent and inequitable burdens borne by taxpayers and classes of property. True reform would provide for assessed values more reflective of a property's market value and more consistent across taxpayers' properties, regardless of the location of their property. True reform would include the elimination of township assessing jurisdictions and a reduced number of local governmental entities.

While property tax reform is not directly linked to the state budget, it needs to happen. If not in this session, soon.

Recommendations for the Enacted Budget

The three IFPI benchmarks still apply:

1) The Budget must be structurally balanced,
2) The Budget must reverse all remaining payment delays, and
3) The Budget must set aside a combined surplus of at least 10% of operating revenue – or about $1.35 billion – at the end of the biennium.

An updated revenue forecast that reduces total revenue available by $150 million makes meeting the benchmarks more challenging but, at the same time, makes meeting them even more important. The nation's – and Indiana's – economy is at a mature stage. It is now six and one-half years since the end of the 2001 recession, making this expansion the third longest since World War II.

The IFPI recognizes the challenge faced by the House, the Senate, and the Governor as they negotiate the final version of the Budget. The fiscal integrity of the State of Indiana, integrity that will allow necessary investments in Indiana's future, is at stake.

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[1] As has been the IFPI's practice, we exclude from our analysis legislation "outside" the budget process. Since not all of the revenue producing or appropriation making bills will ultimately become part of the budget at the end, the IFPI makes no effort to decide which will make it and which won't. There are, of course, exceptions. The K-12 funding changes, the elimination of the property tax replacement fund and state homestead credit, and the temporary state homestead proposals are such exceptions and we have included those impacts in this analysis.

[2] The forecast period starts with the last months of FY 2007 and includes FYs 2008 and 2009.

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Report 24
The Enacted Budget for Fiscal Years 2008 and 2009: Much More than Meets the Eye

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Research Director

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Fiscal Policy Report 24

The Enacted Budget for Fiscal Years 2008 and 2009: Much More than Meets the Eye

Mark D. Brown

Introduction:

On April 29th, 2007, the Indiana General Assembly enacted the State's fiscal years 2008 and 2009 Biennial Budget (Budget). On May 11th, Governor Daniels signed the Budget into law.

Strictly speaking, the Budget's general fund and property tax replacement fund[1] appropriates $26.4 billion for the two years. In addition, the Budget (including appropriations in legislation passed outside the budget act) appropriated $23.6 billion of dedicated funds and federal funds.[2] In total and from all sources of funds, then, the state of Indiana's Budget appropriated $50 billion for expenditures that will be made in fiscal years 2008 and 2009.

The major funding sources – sales tax, individual and corporate income taxes, and gaming taxes – are used primarily to fund general and property tax replacement fund appropriations. Dedicated and federal funding sources are just that – "dedicated" for specific programs. This Budget Report will focus primarily on the general fund and property tax replacement fund portion of the Budget.

In the Indiana Fiscal Policy Institute's (IFPI) Budget Brief published in January 2007,[3] we constructed three benchmarks for the purpose of evaluating the Budget. In this Budget Report, we will analyze the enacted budget and associated legislation from the perspective of what the Budget says about the State's priorities and evaluate it using the three benchmarks.

Those benchmarks are:

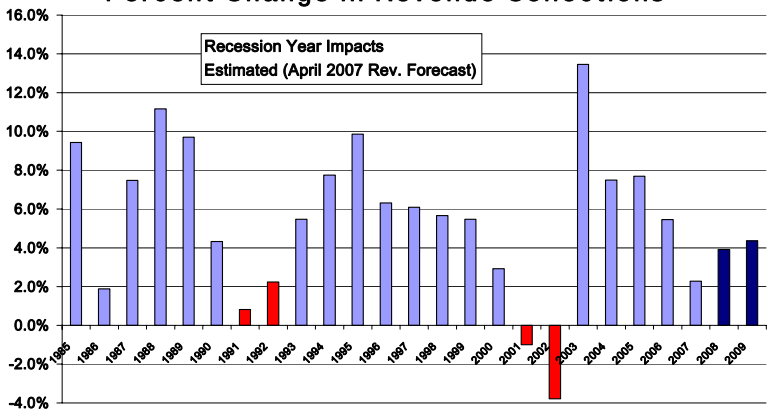
1. The Budget must be structurally balanced.
2. The Budget must reverse the payment delays remaining from the last recession in 2001.
3. The Budget must build total reserve balances to at least 10% of revenue (or $1.35 billion) by the end of the biennium on June 30, 2009.

Finally, because the property tax was such an integral part of the budget debate entering the Legislative Session – and became the single most important factor at the end of the Session – this report will evaluate the current state of the property tax "issue" and make some recommendations for future action.

The Revenue Outlook:

Since the State's revenue collection nadir in FY 2002, when revenue collections were 3.8% less than in FY 2001, Indiana has experienced four consecutive years of revenue growth. Tax restructuring, enacted in 2002, jump-started revenue increases, with total revenue collections growing by more than 13%. Revenue growth averaged nearly 7% in the next three fiscal years.

Figure 1.
Percent Change in Revenue Collections



Source: Indiana State Budget Agency, IFPI Calculations.

The most recent revenue forecast (April 16, 2007) projects revenue growth in FY 2007 of only 2.3%, but revenue collections as of the date of this Report indicate that actual FY 2007 revenue growth may exceed 4%. That revenue forecast projected modest revenue growth of 3.9% and 4.4% in FYs 2008 and 2009. Those increases are consistent with historical revenue growth in Indiana at this point – several years removed from the last recession - in the business cycle.

Table 1
Revenue Forecast Update - April 16, 2007

Revenue Source	State FY 2007	State FY 2008			State FY 2009		
General & PTR Funds	Forecast Dollars	Forecast Dollars	Increase in Dollars	Increase in Percent	Forecast Dollars	Increase in Dollars	Increase in Percent
Sales	5,341.2	5,577.5	236.3	4.4%	5,827.1	249.6	4.5%
Individual	4,477.3	4,681.4	204.1	4.6%	4,933.6	252.2	5.4%
Corporate	908.0	924.3	16.3	1.8%	947.1	22.8	2.5%
Subtotal "Big Three"	10,726.5	11,183.2	456.7	4.3%	11,707.8	524.6	4.7%
Gaming	625.4	647.3	21.9	3.5%	677.9	30.6	4.7%
Cigarette	300.9	303.9	3.0	1.0%	307.8	3.9	1.3%
AB Taxes	15.1	15.4	0.3	2.0%	15.7	0.3	1.9%
Inheritance	147.5	147.5	-	0.0%	147.5	-	0.0%
Insurance	177.2	177.2	-	0.0%	177.2	-	0.0%
Interest	130.6	130.6	-	0.0%	130.6	-	0.0%
Other	212.5	212.5	-	0.0%	212.5	-	0.0%
Subtotal	983.8	987.1	3.3	0.3%	991.3	4.2	0.4%
Total General & PTR Funds	12,335.7	12,817.6	481.9	3.9%	13,377.0	559.4	4.4%

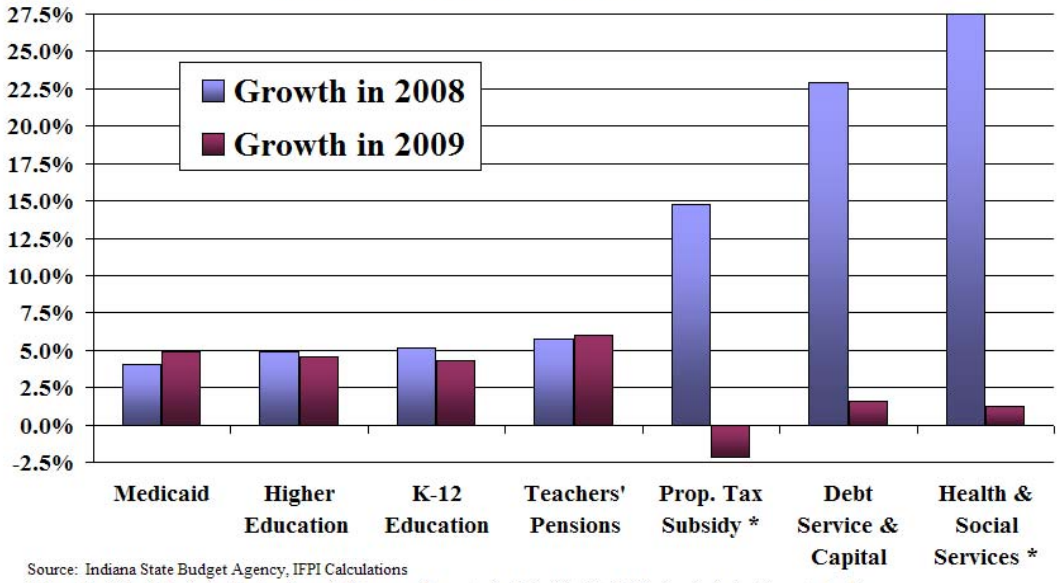
Source: Indiana State Budget Agency.

Yet, precisely because Indiana is now nearly six years from the end of the 2001 recession, the revenue forecast should be viewed with caution. As was the case in 2000 and 2001, the "turn" from economic expansion to recession almost always comes quickly and is often without warning. As Dr. Gary Baxter, the Chairman of the State's Economic Forecast Committee, stated in his remarks at the revenue forecast in April,

> *Although our forecast, particularly near-term, is not especially upbeat, the risks seem mostly to the downside. The housing sector continues to be a source of danger… A return to much higher energy prices could carry the same risk. In either case, there would be a risk of recession*[4].

The Budget's Spending Priorities:

Figure 2
Where the Budget Appropriated the Money
Annual Percent Change over Prior Year



Source: Indiana State Budget Agency, IFPI Calculations
* Prop. Tax Subsidy includes funding from slot licenses at horse tracks & Health & Social Services includes Cigarette Tax Revenue.

For the first time since before the 2001 recession, the General Assembly provided significant budget increases in most budget categories. Specifically, K-12 and higher education, property tax subsidies to local governments that lower property taxes, and the myriad of state government programs and services included in the "other" category received appropriation increases of 5% or more.[5]

Medicaid and teachers' pensions received essentially the same increases as they did in the FYs 2006 and 2007 budget. Other health and social services and state and higher education debt service received increases greater than they received two years ago.

As has been the case historically, education receives the majority of the State's general fund appropriations. K-12 education appropriations total over $4.2 billion in FY 2008 and nearly $4.4 billion in FY 2009. K-12 education remains, by far, the single largest category of budget expenditures, with appropriations encompassing nearly a third of the budget. Higher education appropriations require about 11.5% of the budget in each year.

Property tax replacement, the category that includes state subsidies to local governments and schools which reduce property taxes paid by individuals and businesses, are the second largest category of appropriations. Although the FYs 2006 and 2007 budget capped state expenditures for property tax relief, legislation that directed the proceeds from the sale of slot machine licenses to property tax relief ended that brief attempt to restrain this major budget category's growth.[6]

Table 2
Appropriations & Percent of Total Budget
Selected Budget Categories

Budget Category	Fiscal Year 2008 millions of $$$	Fiscal Year 2008 Percent of Total	Fiscal Year 2009 millions of $$$	Fiscal Year 2009 Percent of Total
K-12 Education	4,209.3	31.4%	4,389.3	32.3%
Higher Education	1,528.5	11.4%	1,598.6	11.8%
Medicaid	1,586.6	11.8%	1,663.7	12.2%
Property Tax Replacement*	2,440.4	18.2%	2,166.5	16.0%
Other FSSA & Health*	1,096.7	8.2%	1,110.1	8.2%
Correction	616.0	4.6%	635.5	4.7%
Teachers' Pensions	621.2	4.6%	658.4	4.8%
Other	915.9	6.8%	947.3	7.0%
Total Debt Service & Capital	406.4	3.0%	413.3	3.0%
Total Appropriations	13,421.0		13,582.6	

Source: Indiana State Budget Agency, IFPI calculations.

* Property Tax Replacement includes funding from slot licenses at horse tracks & Health & Social Services includes Cigarette Tax Revenue.

The enactment of the Governor's cigarette tax funded health care initiative increased spending in the category of "other FSSA and health." For the first time, this budget category will spend in excess of $1.0 billion per year. It now comprises over eight percent of the budget.

Priorities within Budget Categories:

After three Governors proposed its funding and more than a decade of debate, the General Assembly enacted the beginnings of funding for full day kindergarten. The Budget provides $25 million in FY 2008 and $50 million in FY 2009 specifically for full

Table 3
Increases in K-12 Line Item Programs

Program	FY 2007	FY 2008	Increase from FY 2007 to FY 2008	FY 2009	Increase from FY 2008 to FY 2009
Full Day Kindergarten	8,500,000	33,500,000	25,000,000	58,500,000	25,000,000
Textbook Reimbursement	19,902,644	39,000,000	19,097,356	39,000,000	-
Testing and Remediation	31,410,450	41,000,000	9,589,550	41,000,000	-
Gifted and Talented	5,836,340	13,000,000	7,163,660	13,000,000	-
Non-English Speaking Program	700,000	6,929,246	6,229,246	6,965,055	35,809
Special Education (S-5)	27,173,300	32,400,000	5,226,700	32,400,000	-
Totals (for these programs only)	93,522,734	165,829,246	72,306,512	190,865,055	25,035,809

Source: Indiana State Budget Agency

day kindergarten. In addition, the Budget funds increases in textbook reimbursement, testing and remediation, gifted and talented programs, non-english speaking programs, and special education.

The school formula appropriates $3.89 billion in FY 2008 and $4.04 billion in FY 2009. The school formula provides funding to local schools on a calendar year (CY) basis, and the formula increases funding by 3.9% in CY 2008 and CY 2009. If local schools choose to "fully fund" the formula, the property tax share of the formula will increase by approximately the same amounts in each year.

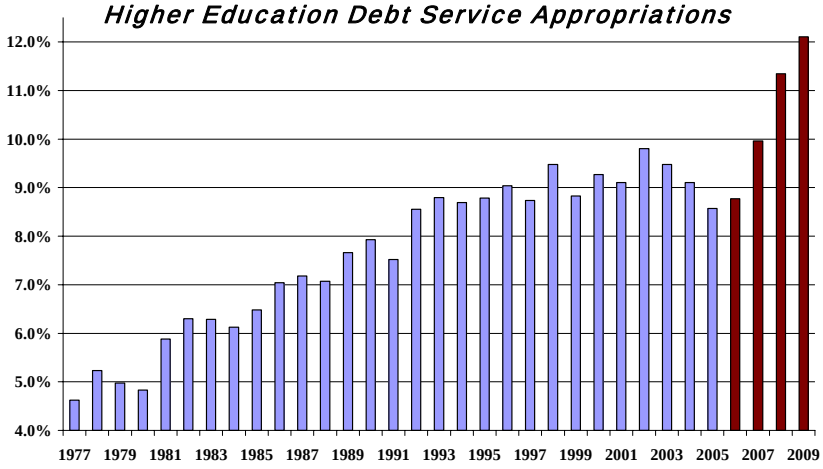
Table 4
Percentage Increases in Higher Education Appropriations

Institution	Operating + R&R 2008	Operating + R&R 2009	Debt 2008	Debt 2009	Total 2008	Total 2009
Indiana University	3.3%	4.0%	9.1%	5.3%	4.0%	4.2%
Purdue University	3.9%	4.6%	13.8%	12.2%	4.6%	5.2%
Indiana State University	1.8%	4.7%	30.1%	7.4%	4.3%	3.2%
University of Southern Indiana	7.6%	4.0%	61.0%	15.8%	15.2%	8.8%
Ball State University	3.4%	8.0%	14.8%	13.7%	4.3%	4.7%
Vincennes University	2.9%	3.4%	38.5%	24.1%	6.3%	6.6%
Ivy Tech Community College	6.6%	4.6%	58.0%	35.3%	10.8%	9.4%
Total	3.9%	4.4%	19.8%	12.6%	5.4%	5.3%

Source: Indiana Commission for Higher Education, IFPI Calculations.

In total, appropriations for the seven state supported institutions of higher education increased by 5.4% in FY 2008 and by 5.3% in FY 2009. The largest increases were to fund new debt service payments from bonded construction authorized in this and previous budgets. Overall, debt service appropriations increased by 19.8% in FY 2008 and by 12.6% in FY 2009.

Figure 3
Higher Education Debt Service Appropriations



Source: Indiana Commission for Higher Education, IFPI Calculations.

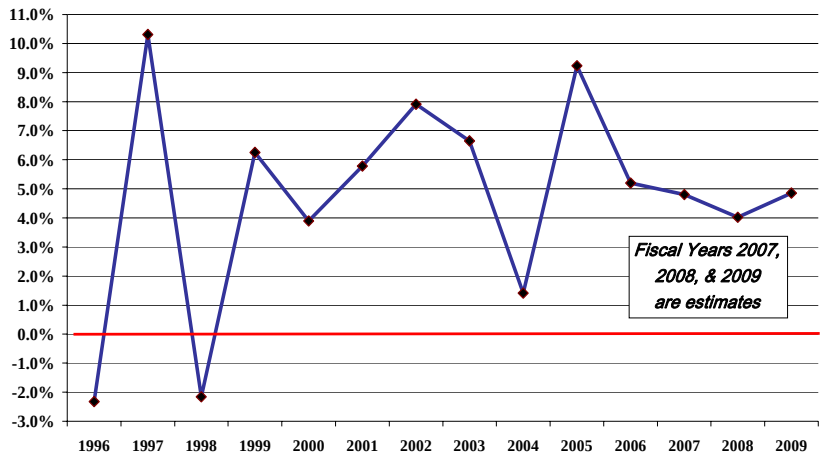
Over the past 30 years, the use of bonding authority – the General Assembly grants higher education institutions the ability to borrow for the purpose of constructing new buildings and other facilities – has increased steadily and unabated. In 1977, debt service appropriations for higher education institutions were about 4.6% of operating appropriations (including debt service). By 2002, that percentage had increased to 9.8%, before the

impact of the 2001 recession reduced state appropriations for debt service. The impact lasted for three years until, in 2006, the upward trend returned. The last two budgets, enacted in 2005 and 2007, increased debt service appropriations by over 60%, from $110.2 million in FY 2006 to $176.6 million in FY 2009.

Medicaid appropriations increased by about 5% in each year, making FYs 2008 and 2009 the third and fourth years in which appropriation increases have been at 5%. In the ten years from 1997 through 2007, Medicaid expenditures have increased at a compound average annual rate of just below 5.0%. The annual changes are volatile, however, ranging from a decrease in 1998 of about 2.0% to increases of over 10.0% in FY 1997 and 9.0% in FY 2005.

Figure 4

Annual Percentage Change in Medicaid Expenditures



Indiana State Budget Agency, IFPI Calculations.

The last decade has seen Medicaid expenditures increase much more slowly than in earlier years, particularly the late 1980s and early 1990s. But, the Centers for Medicare and Medicaid Services project that Medicaid spending nationally will increase by an average of 8.1% percent per year from 2008 through 2016.[7]

Medicaid could become, once again, a budget challenge for Indiana, as well as for the rest of the states and the federal government. It is a budget category that bears watching closely during the budget biennium.

Table 5 (next page) presents the components of the Indiana Check-up Plan, which provides health care coverage for Indiana's working poor. The program is funded with funding from a 44 cent increase in the cigarette tax.

Other priorities in the health and social services category include additional funding to complete the commitment to add 400 additional caseworkers in the Department of Child Services. The amount of additional appropriation is $34.0 million in FY 2008 (which will carry over into FY 2009).

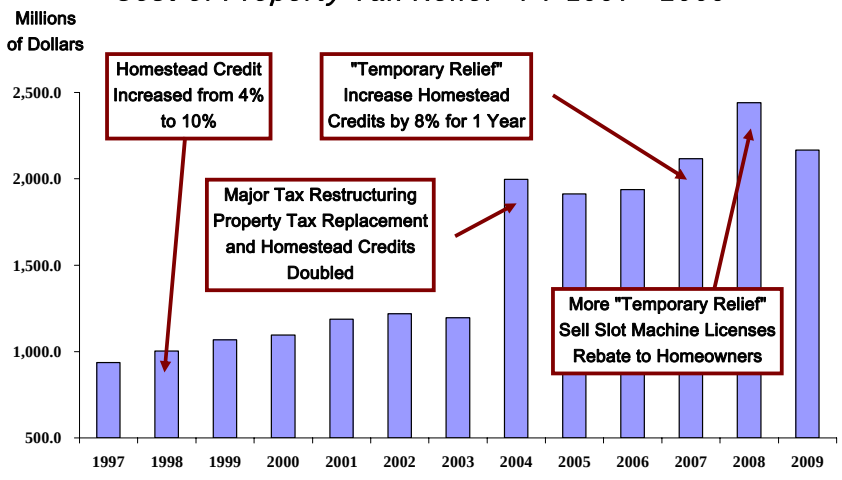
Table 5
Components of the Indiana Check-up Plan
Breakdown of 44 cent per pack Cigarette Tax Increase

Cigarette Tax Increase	Annual Revenue Estimate	Programmatic Obligations
$0.05	$23.5 mil.	$1.2 mil. for ITPC, $22.3 mil. for retiree healthcare plan
$0.03	$14.1 mil.	Covers revenue loss to General Fund from employer tax credit for establishment of Section 125 Plan for health care coverage
$0.03	$14.1 mil.	Supports Medicaid - current obligations spending related to provider rate reimbursement increases.
$0.33	$155.1 mil.	Deposited in Indiana Check-up Plan Trust Fund. $11.0 mil. each year appropriated from Trust Fund to Departmet of Health for Immunizations, leaving $144.1 annually to support Indiana Check-up Plan.

IPTC refers to the Indiana Tobacco and Prevention Cessation Trust Fund
Source: Indiana State Budget Agency

Property taxes continue to be a major issue facing the General Assembly. Updated estimates projecting that homeowner property taxes would increase by an average of nearly 24% in 2007 provided legislators the impetus to find yet another "temporary solution." They enacted legislation that allows the sale of licenses to operate slot machines at the two horse tracks. The revenue from the sale of those licenses and tax revenue from the income tax imposed on the license owners was used to fund a one-time rebate of property taxes paid by homeowners in CY 2007 and to fund an increase in the homestead credit in CY 2009.

Figure 5
Cost of Property Tax Relief - FY 1997 - 2009



Source: Indiana State Budget Agency, IFPI Calculations.

The total cost of the program will be $300 million in CY 2008 and $250 million in CY 2009. As with many prior "one-time" or "temporary" programs, this one does not identify funding for state fiscal years 2010 and beyond. Yet, when the estimates of property tax bills are performed for those years, they will almost certainly predict another "crisis," with homeowner property taxes increasing at overly burdensome rates.

A New Budget Wrinkle – "Off-Budget" Spending Programs:

The additional property tax subsidies and the cigarette tax funded Indiana Check-up Plan are "off-budget." What off-budget means in this context is that the revenue from the funding sources – cigarette tax and slot machine licenses and taxes – are deposited in funds other than the general fund and property tax replacement fund. The effect of this seemingly straightforward decision is to keep additional spending of over $550 million in FY 2008 and nearly $300 million in FY 2009 out of the general fund and property tax replacement fund budget.

These two programs – property tax subsidies and health care assistance for low income Hoosiers – are expansions and additions to programs already in place and funded through the general fund and property tax replacement fund. Even the cigarette tax, used to fund the Indiana Check-up Plan, is primarily a general fund revenue source. But the General Assembly chose in this Budget to keep the funding of these programs outside of the general fund.

Total Expenditures:

The state of Indiana's total budget has historically included revenue from general, dedicated, and federal funds. Dedicated funds are used for programs such as transportation and some public safety, health and social services, natural resources, and environmental programs. For the first time in many years, though, two major new programs were added to the budget but funded through dedicated funds. Those two programs – the Indiana Check-up Plan and the latest temporary property tax subsidies – were described above.

The Indiana Check-up Plan will become a "base budget" program and become a permanent fixture in the budget. History has shown that all increases in expenditures for the purpose of property tax relief or replacement become permanent, as well. Therefore, to illustrate the total impact of the Budget on Indiana's budget expenditures, we have included those two programs as part of the general fund and property tax replacement fund Budget. See Table 6 on the following page.

When including the two off-budget expenditures, this Budget increases total budget expenditures by 9.6% in FY 2008 and by 1.2% in FY 2009.

The inclusion of the two programs in our analysis results in a different presentation of the "surplus" statement, as well. The stated intention of the General Assembly was to provide $300 million of property tax rebates in CY 2008 and $250 million of additional homestead credits in CY 2009. Because the state operates on a fiscal year basis, assigning an amount of this program to each fiscal year is problematic. In addition, the revenue from the sales of the slot machine licenses will clearly be obtainable only one time.

Table 6 Combined Expenditures - General Fund, Property Tax Replacement Fund, Cigarette Tax Increase, & Slot Licenses	2007	2008	2009
Appropriations (Base)	12,246.0	12,853.9	13,289.5
Non-GF Appropriations			
Indiana Check Up Program		155.1	155.1
Property Tax Subsidy to Homeowners	-	412.0	138.0
Total On/Off Budget Expenditures	12,246.0	13,421.0	13,582.6
Percentage Increase in Budgeted Expenditures		9.6%	1.2%

Source: Indiana State Budget Agency, IFPI Calcuations.

Due to the "off-budget" nature of the two programs, we will exclude them from our analysis of the structural balance of the Budget and, accordingly, they are not included in our presentation of a "Condensed Surplus Statement" below.

However, the IFPI does not advocate the "off-budget" treatment of these, or any other, new program. It understates the total cost of providing state programs and services. In addition, additional revenue will have to be identified in order to continue the programs – particularly the property tax subsidy, into the next biennium. And finally, should the additional revenue not be forthcoming, the state will find itself in the position of returning to deficit budgets.

Evaluating the Budget – Three Benchmarks:

The Budget is structurally balanced. Ongoing revenue of $12.9 billion in FY 2008 and $13.5 billion in FY 2009 exceeds base expenditures of $12.85 billion in FY 2008 and $13.3 billion in FY 2009. Structural balance, achieved in FY 2007 after several years of deficits, continues through the next biennium. At least, that is this Budget's plan.

Table 7 Condensed Surplus Statement	2007	2008	2009
GF / PTRF Balance at July 1	410.7	70.1	120.7
Current Year Resource	12,310.4	12,908.1	13,456.3
Transfers of Balances (Medicaid, Rainy Day Fund)		130.0	0.0
Total Resources	12,721.1	13,108.2	13,577.0
Appropriations (Base)	12,246.0	12,853.9	13,289.5
Other Expenditures, Adjustments, & Reversions	405.0	133.6	120.9
Total Net Expenditures	12,651.0	12,987.5	13,410.4
General Fund Reserve Balance at June 30	70.1	120.7	166.6
Other Reserve Balances	793.3	678.8	698.3
Combined Balances	863.4	799.6	864.9
Combined Balances as a Percent of Revenue	7.1%	6.2%	6.5%

Source: Indiana State Budget Agency, IFPI Calcuations.

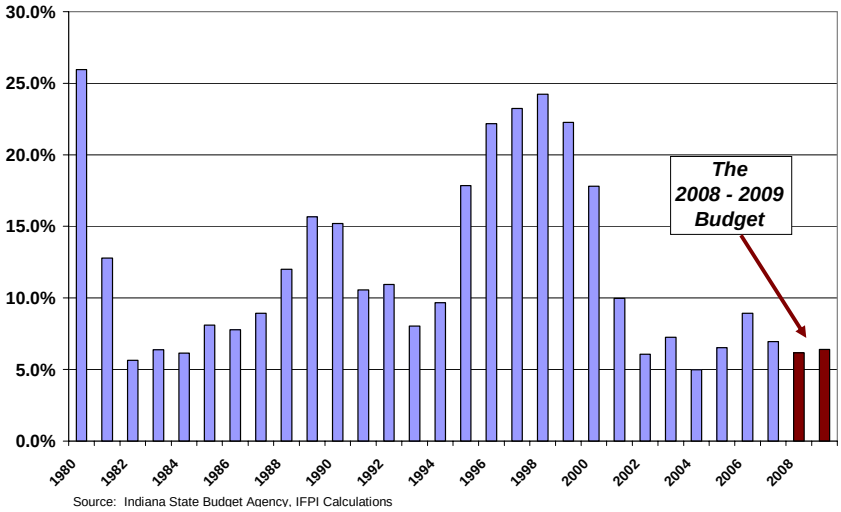
The Budget reverses the remaining payment delays to higher education institutions and local governments. The reversal is accomplished in part in FY 2008 and in part in FY 2009. Unfortunately, the Budget fails with regard to building adequate reserve balances. From a combined balance starting point of $863.4 million – 7.1% of revenue – on July 1, 2007, the budget spends every dollar of revenue, and then some, in FY 2008. Combined balances at the end of FY 2008 are $63.8 million lower: they total $799.6 million, or 6.2% of revenue. The combined balances increase during FY 2009, ending the year at approximately the same amount they were entering the biennium – at $864.9 million.

However, as a percent of revenue, the ending balances are only 6.5% of revenue, far short of the 10% we set as a benchmark in January.

In dollar terms, the IFPI benchmark meant that combined balances should have reached $1.34 billion at the end of the biennium. The Budget falls $475 million short of the mark. Reserve balances, as a percentage of revenue, have been in excess of 10% of revenue in the year preceding each of last three recessions, yet the state had to raise taxes in two of the three downturns.[8] Fiscal prudence, integrity, and sound fiscal management require that the State increase its reserve balances – and soon. Waiting for the next budget in FY 2009 might be too late.

Figure 6

Reserve Balances - 1980 - 2009



Source: Indiana State Budget Agency, IFPI Calculations

The Indiana Fiscal Policy Institute's overall evaluation of the Budget? While the Budget is balanced and the payment delays were reversed, it spends too much money and does not adequately prepare the State to move forward. Reserves are historically low for this point in the economic cycle and there are large commitments made to keep homeowner property taxes from increasing that, to keep those increases at bay in the next biennium, will require resources not currently identified.

Moving forward means being able to invest in our economic future – which, for the past two budgets, has clearly been a priority, and some progress has been made. But whether

a recession comes sooner or later, that recession could take the state backward, unless we are fiscally prepared.

The new Director of OMB and the new Budget Director – Ryan Kitchell and Chris Ruhl, respectively – have significant challenges ahead. In addition to helping the Governor guide the state toward economic success, they must protect our fiscal integrity. While in most cases the two tasks complement each other, fiscal integrity must come first. Without the discipline to achieve and maintain fiscal integrity, choices that contribute to economic growth become limited.

The IFPI recommends:

- ***If revenue exceeds forecast, don't spend it.***
- ***If revenue meets forecast, limit spending to below budget***
- ***If revenue falls short of forecast, stop spending***

While the fiscal years 2008 and 2009 budget makes important progress on several issues – full day kindergarten, health care for low income Hoosiers, case workers for child welfare, among others – many issues remain. In addition to the property tax issue discussed below, our analysis of the Budget raises several issues that should be monitored as the biennium unfolds. Questions include:

- From where will funding to expand full day kindergarten to all come?
- Is the level of borrowing to fund higher education capital too high, and what will be the impact of that construction on operating budgets?
- Will the state (and federal government) be able to contain the cost increases in Medicaid below the rates of growth commonly forecast?
- What further steps to provide health care and health care coverage to low income working Hoosiers and their families are needed, and from where will the funding for those programs come?
- When will the next recession come, and when it does, will the progress made since the last recession be undone, or will the state be able to weather the storm?

These important questions, among others, will have to be answered. The best answers, and the best choices for those answers, become available when long term vision and short term discipline work in tandem.

Epilog: The <u>Real</u> Looming Property Tax Crisis

Thirty-five years after the enactment of the Bowen Property Tax Reform package, property taxes are still one the most difficult issues for the General Assembly. In nearly every non-recession legislative session since at least 1983 (the year of the creation of the Homestead Credit), there is discussion, debate, and more legislation proposed to "reform"

property taxes. If not "reform," "relief" has been proposed. Often, debate rises to the consideration of "true reform" and enactment of a "permanent solution."

One "true reform" occurred when, for property taxes payable in 2003, the state completed the first ever market value based general reassessment. The Supreme Court-ordered change in the assessment standard was supposed to improve the underlying assessment system upon which property taxes are built. It was supposed to result in a simpler, more understandable, more equitable method for valuing property for tax purposes.

In conjunction with the major tax restructuring enacted in the 2002 legislative session, the hope of many was that true reform would be accomplished and a permanent solution might be achievable. Unfortunately, an improved property assessment system that delivers understandable, correct, and consistent assessments is not yet in place. Indeed, since 2002, the call continues for reform and relief. In the years before restructuring and certainly in the years since, legislative action has been largely limited to temporary, one-time measures.

Some sort of reform or relief has been enacted every budget session going back at least 16 years. In addition, legislation was passed in several non-budget sessions to provide property tax relief. The cost to taxpayers – sales and income tax payers, primarily – of this relief now totals well in excess of $2.0 billion per year. That total does not include direct state support of local public schools.

The reality today: the assessment system remains broken. The promise of reforming the assessment system to a market value standard has not been met. Local assessors & auditors are unable to complete assessment updates and complete tax bills on time. As the IFPI demonstrated in the November, 2005 Statewide Tax Equalization Study (Study),[9] inconsistent and incorrect assessments are rampant across the state. The Study provides evidence of systematic differences in assessment practice across property classes, across townships, and across counties.

The estimates of property tax increases for homeowners that lead to the enactment of the latest property tax relief demonstrate the need not only to fix the assessment system, but to require the collection and transmission of complete, accurate, and timely property tax data from local assessors and auditors to the state. It is precisely the lack of data – due in part to the tardiness of local officials in charge of assessments and property tax billing and collection and in part to their inadequate data systems – that lead to the 11th hour estimates from the Legislative Services Agency sounding a property tax crisis alarm.

In order to truly reform the property tax system, to find a permanent solution, the work needs to start at the very base of the system – at the foundation.

That foundation is the assessment system, and it must be fixed. Without accurate and consistent assessments, some taxpayers will pay more than their "fair share" while others will pay less. When taxpayers know that they are not treated equitably and / or they do

not understand how their tax bill is determined, they rightfully complain. Without complete, accurate and timely data, state officials cannot determine with accuracy what the problems are, and where.

To fix the foundation, The IFPI recommends truly reforming the assessment process by

- Eliminating townships as assessment jurisdictions,
- Professionalizing Administration
- Ensuring Property Valuation is done correctly and consistently
  - By conducting independent sales ratio studies
  - By equalizing property assessed values where necessary
- Obtaining good data and analyze it
  - To understand who actually pays what
  - To identify and understand the impact of existing policies

Only after the above reforms and improvements are made, can the General Assembly target any "relief" based on rational public policy and know that it will have the intended effect. Only then, will there not be unintended consequences of the kind that require a new "fix" each and every year.

With the cost of property tax "reform," "relief," and "replacement" in excess of $2.0 billion per year to the state, it is time for true reform of Indiana's property tax system. But that reform must begin at the property tax system's foundation, the assessment system that sets the values upon which the rest of the structure is built. Without shoring up the foundation, the General Assembly will continue to find itself patching and fixing problems one year, only to find other problems, in other parts of the structure, cropping up the next year, and the next, and the next, and the next….

Acknowledgements:

Many thanks go out to the Office of Management and Budget and the staffs of the four legislative caucuses. In particular, the IFPI would like to thank the State Budget Agency, the House Ways and Means fiscal staff, and the Senate fiscal staff. Without their cooperation, their intimate knowledge of the varying versions of the budget – along with their willingness to share that knowledge – and the insights into the thinking behind the policies the budget appropriations were intended to pursue, the IFPI budget brief series and this report would not have been possible.

The IFPI is greatly indebted to these people and our ability to provide analysis of state fiscal matters would be greatly diminished without their help.

Of course, any errors are the responsibility of the IFPI.

A final, personal, note: To the President and the supporters, members, and Board of Directors of the Indiana Fiscal Policy Institute, my heartfelt thanks. I have thoroughly enjoyed the opportunity to be a part of the unique and valuable organization that is the IFPI. It has been an honor to research, analyze, and report on the very important fiscal issues facing the state of Indiana. The IFPI has historically played an integral part in keeping state and local government in Indiana cognizant of the strategic and economic importance of long term stability and fiscal prudence and preparedness. I am grateful to have been a part of that mission.

The organization which I will now join – the Indiana Association of Realtors – has been a long time supporter and member of the IFPI.

Endnotes:

[1] The State spends its "budget" through its general fund, the property tax replacement fund, several "dedicated" funds, and federal funds. While dedicated and federal fund spending will approach $10 billion annually in fiscal years 2008 and 2009, most observers are referring to the general and property tax replacement funds when discussing the "budget."

[2] These appropriations include funding for transportation (including Major Moves), public safety and health and human services funded from dedicated revenue sources. Those sources include fuel taxes, vehicle licenses, and numerous charges, fess, fines, penalties, and sales.

[3] IFPI Budget Brief 2007:1 "Setting Fiscal Integrity Standards - Three Benchmarks." See at http://www.indianafiscal.org/docs/BudgetBrief2007-01.pdf

[4] Dr. Gary Baxter, Chairman, Economic Forecast Committee. Remarks to the Indiana State Budget Committee at the Revenue Forecast on April 16, 2007. See submitted testimony at http://www.in.gov/sba/budget/revforecast07_09/rev_forecast_20070416_projection.pdf

[5] The "other" category includes everything not specifically described in the major budget categories. It includes, among many other functions, state police and correction, state parks, environmental management, the administration of state government, including all elected officials, and the legislative and judicial branches of state government.

[6] For this table, the property tax subsidies funded by revenue from the sale of licenses to operate slot machines at horse tracks is included. In addition, the Indiana Check-up Plan expenditures are included in Other FSSA and Health. These programs are identical, or nearly so, to those historically funded from general fund revenue. At some point in the future, these programs and their funding sources should become part of the general fund budget.

[7] Centers for Medicare and Medicaid Services. National Health Care Expenditure Projections: 2006 – 2016, Forecast Summary, page 2. See at http://www.cms.hhs.gov/NationalHealthExpendData/downloads/proj2006.pdf

[8] Major tax increases were enacted during the "double dip" recessions of 1980 – 1982. A portion of the sales tax increase in the 2002 tax restructuring was directed at closing the budget gap.

[9] Brown, Mark D. with Almy, Richard, and Denne, Robert. "Indiana Statewide Property Tax Equalization Study." Indiana Fiscal Policy Institute, November, 2005. See at http://www.indianafiscal.org/study.html

For questions or additional information, contact Mark Brown or Steve Johnson at the IFPI.

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