BOWIE CENTRAL APPRAISAL DISTRICT

INVESTMENT POLICY

I. INVESTMENT SCOPE

Bowie Central Appraisal District (District) has established this investment policy in accordance with Chapter 6 of the Texas Property Tax Code and Chapter 2256 of the Texas Government Code. This investment policy applies to the investment activities of the District.

As required by Chapter 2256 of the Texas Government Code, the District hereby defines and adopts its formal investment policy. The District shall administer all present and future funds in accordance with the provisions of this policy to the extent permitted by law and the District's depository contracts.

II. INVESTMENT OBJECTIVES

A. Standard of Care

The District shall exercise due care, caution and good judgment in making its investments. All investments shall consider the safety of capital, liquidity and a reasonable return of interest income for the District.

Section 2256.006 of the Public Funds Investment Act provides that investments shall be made with judgment and care, under prevailing circumstances, that a person of prudence, discretion, and intelligence would exercise in the management of the person's own affairs, not for speculation, but for investment, considering the probable safety of capital and the probable income to be derived. Investment of funds shall be governed by the following investment objectives, in order of priority:

- 1. preservation and safety of principal;
- 2. liquidity; and
- 3. yield

B. Preservation and Safety of Principal

One of the primary objectives of this policy is the safety of principal. In no event shall an investment and earned interest exceed the maximum amount insured by the Federal Deposit Insurance Corporation combined with U. S. Government securities pledged as collateral. All investments by the District shall be made in the name of the District, and may not be combined with any funds that are not assets of the District. Any investments made through Repurchase Agreements are fully guaranteed as to principal and interest by the U. S. Government or an agency thereof, or are collateralized mortgage obligations directly issued by a Federal Agency or instrumentality of the United States.

C. Liquidity

The District shall structure its investments in a manner that will provide the liquidity necessary to correspond with the cash flow needs of the District.

D. Yield

The District shall invest its funds to earn the maximum interest rate allowed with the constraints of safety, liquidity and convenience.

E. Maturity

The investments of the District will be staggered in a way to achieve the highest return of interest and provide for the necessary liquidity to meet the cash needs of the District. At no time will the maturity date of any investment extend beyond the last day of the current budget year in which the investment was made.

F. Legal Compliance

The District shall make all of its investments in a manner that complies with all applicable laws and with its depository contracts.

G. Investment Officer

The Board of Directors Chairperson will perform the activities of Investment Officer for the District. Pursuant to Section 6.05(3), Property Tax Code, this authority may be delegated to designated employees of the Bowie Central Appraisal District by the Board of Directors.

III. INVESTMENT INSTRUMENTS

To the extent an investment, including principal and interest, exceeds the amount insured by the Federal Depository Insurance Corporation or other federal agency, the excess must be collateralized by a pledge of obligations, letters of credit or securities of the United States, its agencies or instrumentalities, the principal and interest of which are unconditionally guaranteed or insured by, or back by the full faith and credit of the United States government. District funds may be invested in the following instruments:

- Certificates of Deposit issued by banks located in Bowie County, Texas. Payment of the certificates
 must be insured in full by the Federal Depository Insurance Corporation (FDIC) and/or collateralized
 by securities as herein provided.
- Overnight Investments. The District may invest excess cash held in the District's reserve holding in
 overnight investments. These overnight investments may be in the form of Money Market accounts,
 NOW accounts, or Public Fund Repurchase Agreements.

Adopted 2006 Bowie Central Appraisal District

BOWIE CENTRAL APPRAISAL DISTRICT RATIO STUDY PROCEDURES

INTRODUCTION

Sales ratio studies are an integral part of establishing equitable and accurate market value estimates, and ultimately appraisals for the Bowie Central Appraisal District. The primary uses of sale ratio studies include the determination of a need for general reappraisal; prioritizing selected groups of property types for reappraisal; identification of potential problems with appraisal procedures; assist in market analyses; and, to calibrate models used to derive at appraised values during reappraisal cycles. However, these studies cannot be used to judge the accuracy of an individual property's appraised value. The Bowie Central Appraisal District's Appraisal Review Board may make individual value adjustments based on unequal appraisal (ratio) protest evidence submitted on a case-by-case basis during its hearing process.

SALES RATIO STUDY

The Bowie Central Appraisal District's appraisal/sales ratio study is conducted in accordance with the relevant state statutes, administrative rules, and using the applicable guidelines recommended for such studies by the International Association of Assessing Officers (IAAO). (See IAAOs Standard on Ratio Studies attached.)

The purpose of the study is to measure the overall appraisal performance and effectiveness of the Appraisal District. Two general rules are employed.

First the "level of appraisal" test evaluates the tendency of appraisals to be at, above, or below market value. The mean and median are used to estimate the county wide level of appraisals for each class of property. The weighted mean is also calculated to aid in the analysis of appraisal levels.

Second, the "uniformity" test addresses the degree of variability of appraisal, whether tightly grouped near the average level of appraisal or widely dispersed above and below. Uniformity is measured statistically using the coefficient of dispersion (COD) and the coefficient of variation (COV). These measures are important in evaluating appraisal performance because they indicate how consistently property is being appraised within the District. A high degree of dispersion among ratios indicates a lack of equity in assessments.

The mean and the median are not only used to measure the level of appraisal, county-wide, but also to measure uniformity of equity within each school district. This is

accomplished through the process of "class stratification", where the classes are stratified into smaller samples to identify specific valuation characteristics

METHODOLOGY

Overview

The sample for the study consists of properties that have recently sold. Two values are necessary to construct an appraisal/sale ratio for a specific property. The first is the District's appraised value. The second is the sale price of the property, which is obtained from MLS listings, realtors, grantors, grantees and other sources available.

The appraised value is divided by the sale price to obtain each property's appraisal/sale ratio. The entire sample of ratios is then analyzed statistically to evaluate the District's appraisal performance.

Sale Data Collection

The study begins with the identification of properties that have sold. Recorded deeds are the basis for identifying potential sales to be included in the study. Sales data is gathered from all sources available and appropriate. All sales received are entered into the computer system. Each sale transaction is screened, verified before it is considered to be an arms-length representation of the market.

Care is taken to achieve an accurate match between the sold property and the property as appraised by the District to insure that an appropriate comparison can be made between the two.

Adjustments to the Sale Price

The sale prices may require adjustment so that they represent only the values of the real estate under current market conditions. The following are conditions under which sale prices require adjustment:

- 1. The sale included a significant amount of personal property for which a value is known.
- 2. The market conditions on the date of sale were different that they were on January 1, and evidence supports a "time adjustment".

Statistical Analysis

The appraisal/sale ratio for each sold property in the sample is calculated by dividing the appraised value by the sale price. The ratios are then stratified into classes for analysis. Each class is further stratified into sub-classes based on location, age or effective age and

size. Statistics for sub-class stratifications form a basis for issuing corrective action orders.

Three averages or measures of central tendency are analyzed: the mean, the median, and the weighted mean. Two measures of dispersion are analyzed as a test for uniformity: the coefficient of dispersion (COD) and the coefficient of variation (COV).

The 'mean' is the arithmetic average of the ratios and is calculated by summing the ratios and dividing by the number of ratios in that sample. The District's computer system automatically computes the mean in its statistical report of sales information.

The 'median' is simply the middle ratio of the sorted or arrayed appraisal/sale ratios. If there is an even number of ratios, the median is the average of the two middle ratios. The median divides the data into two equal parts and is less affected by the extreme ratios on either side of the distribution than other measures of central tendency. The District's computer system automatically computes the median in its statistical report of sales information.

The 'weighted mean' is calculated by dividing the sum of the District's appraised values for the sold properties in the sample by the sum of the sale prices for those properties. Weighted mean does not give equal weight to each ratio, rather, it gives weight to each sale and thus is more affected by ratios with high sale prices. The weighted mean is calculated by the District's computer system in its statistical report of sales.

Since a measure of central tendency simply calculates the average for one single instance, it is conceivable that each new sample, theoretically speaking, could produce a different measure of central tendency within a given range. The central tendency of the entire population that the samples represent can only be assumed to fall within a certain range. The wider the range, the more confident that the 'true' measure of central tendency lies within it. This range is the confidence interval. For our study, the 95% confidence interval is used, meaning we are 95% confident that the 'true' measure of central tendency lies within it. A detailed presentation of the calculation of the 95% confidence intervals is presented in IAAO's 'Property Appraisal and Assessment Administration'.

The COD is the average absolute deviation divided by the measure of central tendency. In this study, the COD is calculated about the median. The average absolute deviation is defined as the sum of the absolute differences between the individual observation and the measure of central tendency, divided by the number of observations. The COD is calculated by the District's computer system in its statistical report of sales.

The COV is the standard deviation expressed as a percentage of the mean. The standard deviation is the square root of the variance. The variance is the summation of the squared deviations from the mean divided by the number in the sample minus one. The District's computer system calculates the COV in its statistical report of sales.

The Price-Related Differential (PRD) describes to what degree appraisals are regressive or progressive. It is calculated by dividing the mean ratio by the weighted mean ratio. An appraisal is said to be regressive if higher priced properties are under-appraised relative to lower priced properties. Conversely, a progressive appraisal is when higher priced properties are over-appraised relative to lower priced properties. The PRD is typically expressed in decimal form. If the PRD is greater than 1, the appraisal is regressive; if the PRD is less than 1, it is progressive. The PRD is calculated by the District's computer system in its statistical report of sales.

Performance Standards

The Texas Comptroller's property tax division has adopted standards of performance developed primarily from those recommended by the IAAO.