STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

A PERFORMANCE AUDIT
OF THE

ARIZONA HOUSING FINANCE REVIEW BOARD

OCTOBER 1983

A REPORT TO THE
ARIZONA STATE LEGISLATURE

REPORT 83-20

DOUGLAS R. NORTON, CPA
AUDITOR GENERAL

STATE OF ARIZONA
OFFICE OF THE
AUDITOR GENERAL

October 25, 1983

Members of the Arizona Legislature
The Honorable Bruce Babbitt, Governor
Mr. Cary Marmis, Chairman
Arizona Housing Finance Review Board

Transmitted herewith is a report of the Auditor General, A Performance Audit of the Arizona Housing Finance Review Board. This report is in response to a January 18, 1982, resolution of the Joint Legislative Oversight Committee. The performance audit was conducted as a part of the Sunset Review set forth in A.R.S. §§41-2351 through 41-2379.

The blue pages present a summary of the report; a response from the Arizona Housing Finance Review Board is found on the yellow pages preceding the appendix.

My staff and I will be pleased to discuss or clarify items in the report.

Respectfully submitted,

Douglas R. Norton

Douglas R. Norton
Auditor General

Enclosure

Staff: William Thomson
Peter N. Francis
Karen C. Holloway

OFFICE OF THE AUDITOR GENERAL

A PERFORMANCE AUDIT OF THE ARIZONA HOUSING FINANCE REVIEW BOARD

A REPORT TO THE
ARIZONA STATE LEGISLATURE

REPORT 83-20

TABLE OF CONTENTS

	Page
SUMMARY	i
INTRODUCTION AND BACKGROUND	1
SUNSET FACTORS	7
FINDINGS	
FINDING I	11
The Housing Finance Review Board has not provided effective review of mortgage revenue bond proposals.	
CONCLUSION	23
RECOMMENDATIONS	23
FINDING II	25
Board minutes do not conform to Open Meeting Law requirements.	
CONCLUSION	29
RECOMMENDATIONS	30
OTHER PERTINENT INFORMATION	31
Problems inherent in the federal mortgage revenue bond program.	
WRITTEN RESPONSE TO AUDITOR GENERAL'S REPORT	41
APPENDIX	
Consultant's Report and Resume	

LIST OF TABLES

		PAGE
TABLE 1 -	Arizona Single Family Mortgage Revenue Bond Issues	4
TABLE 2 -	Success of 1982 Bond Issues	12
TABLE 3 -	Average Cost and Subsidy per MRB Loan by Income Group	35

SUMMARY

The Office of the Auditor General has conducted a performance audit of the Arizona Housing Finance Review Board in response to a January 18, 1982, resolution of the Joint Legislative Oversight Committee. This performance audit was conducted as a part of the Sunset Review set forth in A.R.S. §§41-2351 through 41-2379.

The Housing Finance Review Board (HFRB) was created in 1979 by A.R.S. §9-1174 et seq to assist in making home mortgages more affordable for low and moderate income families and to stimulate activity in the housing construction industry. The Board has three statutory functions. The Board must review mortgage revenue bond (MRB) proposals submitted by metropolitan Industrial Development Authorities (IDAs) to finance the purchase of single family residences. The Board has sole authority to issue MRBs for the nonmetropolitan counties when petitioned by two or more counties. Furthermore, the Board may allocate Federal housing monies to political subdivisions and qualified participants through the Office of Economic Planning and Development (OEPAD).

The Board's five members are appointed by the Governor subject to confirmation by the Senate and serve three-year terms. Although representation is not specified by the statutes, both business and lay interests currently are represented. Unlike most other boards, members do not receive compensation nor are they reimbursed for travel expenses related to Board activities.

Board Review Has Been Inadequate (See Page 11)

Although several factors beyond the Board's control, such as declining interest rates and unemployment, have adversely impacted recent mortgage revenue bond issues, the Board's review of proposed issues has also been inadequate. Arizona MRB issues of 1982 have been largely unsuccessful in providing low and moderate income housing, and most of the bonds may have to be recalled. This lack of success is due in part to 1) Federal amendments in 1980 to the MRB program; 2) adverse economic conditions, especially the dramatic drop in mortgage interest rates in 1982; and 3) problems experienced marketing the program in the home building and financial communities. However, the Board approved two of the 1982 issues even though feasibility studies overestimated mortgage demand.

A consultant hired by the Auditor General's Office found serious problems with the feasibility study done on the Board's own nonmetro bond issue. For example, many assumptions used in the study were questionable, computational errors were made, a metropolitan analytic format was inappropriately used and the condition of the nonmetropolitan housing finance market was not adequately assessed.

Several changes are needed to make the Board's review of MRB proposals meaningful and effective. The Board needs 1) authority to specify information to be provided in demand feasibility studies, 2) staffing, and 3) more time to evaluate studies submitted for review.

Board Minutes Do Not Meet Statutory Requirements (See Page 25)

The Board is not in compliance with Open Meeting Law requirements regarding the keeping of minutes. Board minutes are not available for one-third of its meetings, and recorded minutes available do not meet all requirements. Moreover, prior to our audit the Board did not maintain conflict of interest disclosure statements in a separate file as required by law. Assigning an Attorney General representative to the Board would aid in resolving these problems.

Inherent Problems in Federal MRB Program (See Page 31)

Finally, we examined other information pertinent to our review of the Housing Finance Review Board. Several problems inherent in the Federal mortgage revenue bond program limit its effectiveness as a means of providing affordable housing for low and moderate income families. Recent

Federal restrictions make the program less attractive and difficult to market in comparison to other mortgage finance programs. A person generally cannot qualify for the program, regardless of income, if the individual owned a home within the past three years. The U.S. Treasury's recent reduction in the maximum price of homes eligible for purchase under the program has also adversely impacted the nonmetro MRB program.

At the national level, the U.S. General Accounting Office (GAO) has issued studies indicating that the MRB program is inequitable and costly in comparison to alternatives. Although its preliminary findings were challenged by the Council of State Housing Agencies, GAO has not retracted its criticism of the program in subsequent testimony before the Congress. Because the program is inflexible, higher income participants receive a greater subsidy under the program than lower income participants. Most of the benefits of the program, moreover, are distributed to individuals in upper income brackets. According to GAO, MRB issues of 1982 primarily benefitted bond holders, bond underwriters, attorneys and other intermediaries, not homebuyers.

INTRODUCTION AND BACKGROUND

The Office of the Auditor General has conducted a performance audit of the Arizona Housing Finance Review Board in response to a January 18, 1982, resolution of the Joint Legislative Oversight Committee. This performance audit was conducted as a part of the Sunset Review set forth in A.R.S. §§41-2351 through 41-2379.

The Housing Finance Review Board (HFRB) was created in 1979 by A.R.S. §9-1174 et seq to assist in making home mortgages more affordable for low and moderate income families and to stimulate activity in the housing construction industry. The Board accomplishes its purpose through the issuance of tax-exempt mortgage revenue bonds (MRBs).

The Board's five members are appointed by the Governor subject to confirmation by the Senate and serve three-year terms. Although representation is not specified by the statutes, both business and lay interests currently are represented. Unlike most other boards, members do not receive compensation nor are they reimbursed for travel expenses related to Board activities.

Board Functions

The Board has three statutory functions. The Board must review mortgage revenue bond proposals submitted by metropolitan Industrial Development Authorities (IDAs) to finance the purchase of single family residences. The Board has sole authority to issue MRBs for the nonmetropolitan counties when petitioned by two or more counties. Furthermore, the Board may allocate Federal housing monies to political subdivisions and qualified participants through the Office of Economic Planning and Development (OEPAD). In this regard, the Board has been involved in the State's Housing and Urban Development (HUD) Section 8 activity.

In 1982 OEPAD, as Arizona's designated State housing agency, had received contract authority to allocate U.S. Housing and Urban Development (HUD) Section 8 discretionary funds to subsidize rentals of multifamily units. Approximately 242 units were assigned to Arizona. The Federal government intends that, following construction of these new projects, certain allocated rental units will be subsidized with these Section 8 funds for a period of 20 years. Although OEPAD staff did much of the work in allocating these Federal funds and in getting the projects underway, the Board was involved in making the policy decisions. Because the HUD Section 8 program has been discontinued, the Board will not perform this function in the future.

Mortgage Revenue Bond Authority and Process

The Federal government, under Section 103A of the Internal Revenue Code, allows state or local governmental entities to issue tax-exempt bonds as a way of attracting capital for public purposes. Under Federal law, tax-exempt bonds may be issued to subsidize mortgage interest rates thereby making home-ownership more affordable. Federal law requires that the mortgage revenue bonds be issued by resolution of a state or political subdivision. Approval by a state agency of a local IDA's bond issue plan is not required although requiring such approval had been considered by Congress in 1979 proposed legislation.

The process of issuing bonds begins with a bond underwriter or investment banker working with an IDA or the HFRB to structure a bond issue which will have the lowest possible bond interest rate. The issuing government's primary role is in issuing the bonds and establishing the guidelines for eligibility for the mortgage loans. Bond counsel is retained to ensure that the bond issue complies with all pertinent Federal and state laws. Lenders and developers are encouraged to participate in the program. They put up in advance a commitment fee, usually a percentage of the total value of the loans they expect to make or houses they expect to sell. Arrangements are made with a mortgage insurer to protect bondholders. The insurance guarantees against losses due to mortgage defaults. Arrangements are made with a bank to act as trustee for the bond proceeds. The trustee invests the proceeds until they are used to purchase mortgages. The trustee also receives principal and interest payments and redeems the bonds according to the trust indenture as funds accumulate in the reserve accounts.

Once the issue is fully structured, the bonds are rated by an independent rating agency and sold to investment bankers. The latter then sell the bonds to individual and institutional investors. The proceeds from the sale of the bonds 1) create the loan fund, 2) set up reserves for such things as bond interest, and 3) cover costs of bond issuance and the underwriter's discount. The loan fund is drawn down as participating lenders make loans (mortgages) which later are purchased with bond proceeds. Monthly mortgage payments of principal and interest and prepayments of mortgages generate the cash flow necessary to meet the debt service, such as the interest on the bonds.

Investors buy tax-exempt bonds, even though the interest rate is lower than the interest rate on taxable bonds of comparable quality and term, because the interest income is exempt from Federal taxation. Issuers of tax-exempt MRBs pass the interest savings obtained from the tax exemption on to home buyers in the form of below-market interest rate mortgages.

Level of Activity

As shown in Table 1, a total of $324,235,000 of mortgage revenue bonds have been issued since the Board was created. $27.2 million has been raised under the Board's non-metro issue. Nearly $300 million has been approved by the Board and sold by other IDAs.

TABLE 1

ARIZONA SINGLE FAMILY MORTGAGE REVENUE BOND ISSUES

Issuer	Date of Review	Size of Issue
Metropolitan		
Pima County	12/79	$ 40,000,000
Maricopa County	07/80	63,160,000
Tucson/Pima County	07/82	50,875,000
Phoenix/Maricopa County	09/82	113,000,000
Nonmetropolitan		
Pinal, Gila, Mohave Counties Joint Issue	11/80	30,000,000
Nonmetro - Bond issue	11/82	27,200,000
Total		$324,235,000

Source: HFRB Annual Reports

In addition to the above issues, the Board had reviewed two other MRB issues in 1980 for the City of Tucson and Pima County. They were canceled before issuance due to adverse conditions in the bond market.

Staffing and Funding

Although A.R.S. §9-1174.A. states that the Department of Economic Security should furnish clerical and secretarial staff for the Board, the Board is staffed by OEPAD.* This staffing includes both professional and clerical help.

The Board has no budget. No State funds are available to reimburse Board members nor to cover any costs of OEPAD's staffing of the Board. Certain fees of the Board's legal and financial consultants may be paid out of bond

* OEPAD staff maintain that OEPAD is the logical agency to provide staffing support because OEPAD is the designated State agency for Federal housing programs.

proceeds. In addition, $8,600 of the issuance costs for the Board's nonmetro issue (see page 11) has been earmarked to cover some of OEPAD's staffing costs related to the issue. A.R.S. §9-1174 was amended in 1981 to grant the Board the authority to charge an issuer a fee (up to $3,000 per proposal) to cover Board expenses related to the review of an IDA's bond proposal. Fees can be assessed, however, only if bonds are issued. Thus, experts hired by the Board to provide independent analysis cannot be paid with these funds unless the bond proposals are approved.

Scope of Audit

Our audit of the Housing Finance Review Board addressed issues set forth in the 11 Sunset factors in A.R.S. §41-2354. Additional detailed work was conducted on the following issues:

- Whether the Board's review of MRB proposals is adequate, and

- Whether the Board has complied with Open Meeting Law and conflict of interest disclosure requirements.

As part of our audit, we examined other information pertinent to the Housing Finance Review Board. This includes problems inherent in the federal Mortgage Revenue Bond Program which limit its effectiveness and more cost effective alternatives which have been recommended by the U.S. General Accounting Office. These problems and alternatives are discussed on page 31.

The Auditor General and staff express appreciation to the members of the Housing Finance Review Board and Office of Economic Planning and Development staff for their cooperation and assistance during the course of this audit.

SUNSET FACTORS

In accordance with A.R.S. §41-2354, the Legislature should consider the following 11 factors in determining whether the Housing Finance Review Board should be continued or terminated.

1. Objective and purpose in establishing the Board

   The Housing Finance Review Board was established pursuant to A.R.S. §9-1174 et seq to provide affordable home mortgages for low and moderate income families and to stimulate economic development and home construction activity in Arizona. The Board accomplishes these purposes by reviewing mortgage revenue bond proposals submitted by metropolitan Industrial Development Authorities (IDA's) and by issuing mortgage revenue bonds for the State's nonmetropolitan counties. Through the Board's bond program, mortgage financing is made available to eligible homebuyers at below-market interest rates.

   The Board also allocates Federal housing (HUD Section 8) funds to political subdivisions and qualified participants in cooperation with the Office of Economic Planning and Development. Because the Section 8 program is being phased out, however, the Board will no longer perform this function.

2. The effectiveness with which the Board has met its objective and purpose and the efficiency with which the Board has operated

   The Board's effectiveness in reviewing bond proposals has been limited. Bond proposals have been approved despite the fact that feasibility studies overestimated demand. Changes are needed to make Board review of bond proposals meaningful and effective (see Finding I, page 11).

According to the Board, it has performed its Federal allocation function effectively. The Board allocated 242 Section 8 rental subsidy units among 8 projects. Thirty-nine of those units have proceeded smoothly toward construction. The Board recently initiated special monitoring and reporting requirements to facilitate successful completions of the remaining units.

3. <u>The extent to which the Board has operated within the public interest</u>

The Board's function of reviewing proposals and issuing bonds can serve the public interest by raising needed mortgage finance funds. However, the Board has not provided effective bond proposal review. The Board did act in the public interest when it sought and obtained lower fee payments for the parties receiving fees from the bond issuances.

4. <u>The extent to which rules and regulations promulgated by the Board are consistent with the legislative mandate</u>

The Board does not have specific rule-making authority, and no rules and regulations have been promulgated.

5. <u>The extent to which the Board has encouraged input from the public before promulgating its rules and regulations and the extent to which it has informed the public as to its actions and their expected impact on the public</u>

The Board posts public notices of its meetings in accordance with the Open Meeting Law. Its minutes, however, do not satisfy statutory requirements. No minutes are available for one-third of the Board's meetings. Tape recordings of other meetings do not meet all requirements (see Finding II, page 25).

6. <u>The extent to which the Board has been able to investigate and resolve complaints that are within its jurisdiction</u>

Because the Board is not a regulatory agency, this factor does not apply.

7. <u>The extent to which the Attorney General or any other applicable agency of State Government has the authority to prosecute actions under enabling legislation</u>

Board statutes do not define violations nor prescribe penalties. Therefore, no prosecutable actions are specified in the enabling legislation.

8. <u>The extent to which the Board has addressed deficiencies in the enabling statutes which prevent it from fulfilling its statutory mandate</u>

Each year since its establishment, the Board has supported legislation to enhance its performance. Through its participation on the State Housing Task Force, the Board supported House Bill 2335 in 1983 which would have authorized staffing for the Board, expanded its powers and made other changes in its operations. Portions of this Bill were enacted by the Legislature and signed by the Governor.

9. <u>The extent to which changes are necessary in the laws of the Board to adequately comply with the factors listed in the Sunset law</u>

The Legislature should consider granting the Board rule-making authority to specify the type of information to be included in general plans and feasibility studies submitted to the Board for review (see page 20).

10. <u>The extent to which termination of the Board would significantly harm the public health, safety or welfare</u>

Termination of the Board would not significantly harm the public health, safety or welfare. However, if the Board were terminated the State would not have an entity authorized to issue mortgage revenue bonds in multicounty, nonmetropolitan areas of the State where affordable housing is needed.

11. <u>The extent to which the level of regulation exercised by the Board is appropriate and whether less or more stringent levels of regulation would be appropriate</u>

This factor does not apply to the Housing Finance Review Board.

FINDING I

THE HOUSING FINANCE REVIEW BOARD HAS NOT PROVIDED EFFECTIVE REVIEW OF MORTGAGE REVENUE BOND PROPOSALS.

The lack of success of recent mortgage revenue bond issues can be attributed in part to the limited effectiveness of the Housing Finance Review Board. Although several factors outside Board control adversely impacted recent MRB issues, the Board's review of these proposed issues has also been inadequate. If the Board is continued, changes are needed to make the Board's review of bond proposals more meaningful and effective.

Recent Issues Not Successful

The Arizona MRB issues of 1982 have largely been unsuccessful in getting low and moderate income families into homes. As a result, most of the bonds will have to be recalled early, thus disappointing some program participants.

The first three MRB issues approved by the Board were successful. According to the Board, the 1979 Pima County issue of $40 million, the 1980 Maricopa County issue of $63 million and the 1980 Pinal-Gila-Mohave Counties joint issue of $30 million all resulted in virtually all available funds being committed to mortgage purchases. These issues, however, preceeded the MRB program changes resulting from the 1980 Federal amendments (see page 31). Thus, the Board's 1982 issues represent not only its most recent activity but also its only experience under current MRB program requirements and restrictions.

In 1982 the Board reviewed and approved two MRB programs issued by political subdivisions. The Industrial Development Authorities (IDAs) of Pima County and the City of Tucson had a joint issue of approximately $51 million and the IDAs of the City of Phoenix and Maricopa County jointly issued $113 million in mortgage revenue bonds. The Board itself was the issuer of MRBs for the nonmetro counties. This bond issue was sold November 2, 1982, for $27.2 million.

To date it appears that these 1982 issues have been unsuccessful or have had only limited success. Less than 2 percent of the Pima/Tucson $51 million issue had been committed to purchase mortgages by the end of the commitment period, and less than 5 percent of the Phoenix/Maricopa $113 million issue has been committed. The Board's own nonmetro issue with a mortgage interest rate of 11.05 percent has performed slightly better; yet, with less than three months remaining in the original commitment period, less than 15 percent of the bond revenues have been committed.* Table 2 indicates the levels of activity in the three 1982 issues the costs which are deducted from bond proceeds and the amount of funds committed to purchase mortgages.

TABLE 2

SUCCESS OF 1982 BOND ISSUES

Issuer	Date Issued	Size	Total Cost(1)	Bond Proceeds Committed To Purchase Mortgages	Percentage of Total Issue Used
Pima/Tucson	7-82	$ 51,000,000	$1,746,500	$ 672,750	1.3
Phoenix/ Maricopa	9-82	113,000,000	3,281,500	5,561,600(2)	4.9
Nonmetro	11-82	27,000,000	913,000	4,078,450(3)	14.9
		$191,000,000	$5,940,500	$10,312,800	5.4

Source: Auditor General analysis of data furnished by bond issue trustees.

(1) Total cost includes issuance costs to legal counsel, financial advisors, etc., as well as the discount fee on the sale of the bonds. GAO found that the cost of issuance of MRBs were high in other states and that the biggest beneficiaries of the program were the intermediaries (see page 36).
(2) Up to 7/12/83
(3) Up to 8/26/83

* On August 22, 1983, the Board extended the commitment period for the nonmetro issue to May 2, 1984.

Although the amount of funds committed in the nonmetro program is low, the $4 million in mortgages sold thus far have been used to benefit families of low and moderate income. As of May 17, 1983, 58 mortgages had been committed. The average mortgage was approximately $45,000, the average income was $21,855 and the average purchase price was $47,311.

Because the Pima/Tucson issue and the Phoenix/Maricopa issue were unsuccessful, most of the bonds will have to be recalled. If the bonds are recalled, bondholders may not realize the full yield or return on their investments.

Boards' Review Is Inadequate

Although several factors beyond the Board's control have adversely impacted recent MRB issues, the Board's review of bond proposals has also been inadequate and ineffective. Lack of success of recent issues is due in part to 1) Federal amendments in 1980 to the MRB program, 2) economic conditions, and 3) marketing problems. However, the Board approved the bond proposals despite the fact that feasiblity studies overestimated mortgage demand and contained several technical flaws.

Outside Factors Limit Success - The 1980 amendments to the Federal mortgage subsidy bond program; economic conditions, including declining interest rates and unemployment; and marketing problems all adversely impacted the success of the 1982 MRB issues in Arizona. Virtually all these factors were beyond the Board's direct control.

Federal statutes and U.S. Treasury pronouncements have affected the success of the 1982 Arizona issues. Abuses of the MRB program in the 1970s in some states led Congress to pass legislation in 1980 which attempted to restrict this program to first-time homebuyers of low and moderate income. U.S. Treasury regulations which limited arbitrage* and lowered limits on the purchase prices of houses also had an impact on recent bond programs. For a more detailed discussion of these restrictions and other inherent problems in the Federal MRB program, see page 31.

Economic factors in operation in 1982 also had a negative effect on the success of the MRB issues. Although the 1982 issues had been judged to be attractive issues because of low bond interest rates achieved, a subsequent fall in competitive mortgage interest rates following each issuance precluded sufficient demand for mortgages. In fact, the Board argues that the decline in interest rates accounts almost exclusively for the lack of success of the 1982 issues. According to the Board, the volatility of interest rates reached unprecedented levels in 1982. Uncertainties about employment and the economy in 1982 and 1983 probably have also dampened mortgage demand.

Bond rates generally are set at a point in time and do not change for the life of the bond issue, whereas competitive market mortgage interest rates vary and cannot be predicted. The objective of pricing a bond issue is to obtain the lowest marketable interest rate possible for the issuer. This price then establishes the mortgage rate. The success of the program, such as, making housing finance more affordable, <u>depends</u> on what happens

---

* According to <u>Black's Law Dictionary</u>, arbitrage is defined as:

> "Transactions of bankers and mercantile houses by which stocks or bills are bought in one market and sold in another for the sake of the profit arising from a difference in price in the two markets."

to other mortgage interest rates following issuance of the bonds. If the spread between the MRB mortgate rate and competitive rates, for example FHA, is at least 2 percent, buyers are supposed* to be attracted to the program. If interest rates rise the program becomes even more attractive. However, if interest rates fall as they did following all three 1982 issues, the issue becomes less attractive.

At least one bond issue, the nonmetro issue, has also experienced marketing problems which affected its success. Little advance marketing was done with developers, many of whom did not commit to the nonmetro bond program because they did not understand the program's restrictions and because commitment fees were too high.** In addition, little marketing was done with lenders who were also reluctant to participate because of program restrictions and because servicing fees were too low. In addition, once the bonds were sold, little effort was made to advertise the program to real estate agents, developers and potential homebuyers until seven and one-half months into the program. Few developers were ready to sell houses until three or four months into the program.

Board Approved Proposals Despite Problems - The Board approved one 1982 MRB proposal despite the fact that it was aware the feasibility study overestimated mortgage demand. A review by our consultant of the feasibility study for a second bond issue has also pointed out serious factual and methodological problems which resulted in an overstatement of mortgage demand for this issue as well.

The Housing Finance Review Board has statutory authority to disapprove a bond issue if certain criteria are not met. A.R.S. §9-1174.C. spells out the Board's duties, which includes:

---

* See page 31. Federal restrictions, excessive processing time, etc., all have an impact on the program. Some lenders stated that a 2 percent spread for the nonmetro issue may not overcome the problems caused by program constraints and ineffective marketing of the MRB program.

** Developers were required to pay a 3 percent commitment fee up front.

"C. The housing finance review board shall meet to review general plans. . . . In reviewing such plans the housing finance review board shall consider:

1. Whether the amount of the mortgage money proposed to be made available is reasonably related to the demand therefor."

In accordance with A.R.S. §9-1174, Subsection E, the Board also may allow the bonds to be issued by not taking any action within 30 days after receipt of the general plan.

The Board has utilized a demand feasibility study for each proposed issue as the document which purports to show the level of demand for mortgages from the proposed bond issue. The demand feasibility study is not a legal requirement under either Federal or State regulations but is usually required to obtain a bond rating. Standard and Poor's, a corporation which rates bonds, stated that although they have no written criteria of what a feasibility study should include, it looks for general indicators of housing activity.

Problems with Pima/Tucson Issue - OEPAD's economic research staff reviewed the feasibility study for the Pima/Tucson bond proposal, pointing out several serious problems. In a memorandum to the Board dated May 27, 1982, regarding the proposed Pima/Tucson issue, OEPAD's chief of economic research stated:

"1. In its review of economic conditions, the report makes no mention of current economic difficulties facing Pima County. In particular, the copper industry is in its most severe downturn of the post-World War II period. . . .

"2. Although a complete check of all data used in the report has not been made, at least one serious error has been found. Table 9 lists 137,249 households in Tucson in 1980. There were only 125,266 households. . ..

"3. The most serious problems with the report . . . an attempt is made to estimate the incomes of renters in Tucson and Pima County. No details on methodology are given and the sources listed do not contain the income data shown per se. . . ."

OEPAD as the Board's staff, concluded that although the feasibility study identified over 70,000 eligible households, the demand was greatly overstated:

> "Since the eligible households will be restricted to those not having owned a home within three years, the approximately 1,000 housing units to be financed with the bond issue could substantially exhaust the available market."

Although both individual Board members and the Board's staff challenged the validity of the demand study, the Board did not act on this information. In its letters to the IDAs of Pima County and the City of Tucson, the Board stated:

> "While the Board has approved the Pima County/City of Tucson issue at the $50,875,000 level requested, we believe this may be high for the following reasons:
>
> ". . . Although the issue has been fully subscribed to by participating builders, the market feasibility study prepared by (a private firm) presents inconclusive evidence as to the magnitude of housing demand given restrictive federal qualifying regulations (especially the new homeowner requirement); and
>
> "in the event builder allocations are not fully utilized, it is also inconclusive as to whether the existing housing market could effectively absorb this program funding given the same restrictive federal regulations."

In discussing why this issue was approved, Board members told us the Board is reluctant to disapprove an issue because 1) even if the MRBs only result in few mortgage purchases, it still helps some homebuyers, and 2) the only people whose money is at risk are sophisticated developers who understand the risk.* However, if the Board intends to approve all proposals despite reservations about their possible success, then the purpose and value of its IDA proposal review function is open to question and may be unnecessary.

---

* Developers and lenders bear much of the cost of an unsuccessful MRB issue. If bonds are recalled, developers and lenders forfeit some or all of their 3 percent commitment fee depending upon the amount of unsold mortgages.

Nonmetro Study Overstated Demand - The Board's feasibility study of its own nonmetro bond proposal also contained serious technical problems. We contracted with an independent financial consultant to review the nonmetro feasibility study.* He stated that the feasibility study contained serious problems in methodology and its conclusions overstate demand for mortgages under this program. Some of his concerns were as follows:

- Many of the assumptions either could have been challenged or should have been more carefully checked.

- Technical errors were found of a computational nature.

- The report utilized the format for a metropolitan study instead of one for a nonhomogeneous region of 12 "mini-states."

- Neither the people preparing the study nor the Board itself interviewed enough people to obtain adequate information about the housing finance market in the nonmetro area. In addition, when Board staff interviewed homebuilders in October 1982, the results of the survey were either not relayed to the Board or were disregarded by it.

Four other technical problems with the feasibility study are detailed below.

- High Vacancy Rates and Alternative Housing Costs - Our consultant stated that the feasibility study did not adequately address rental housing:

  > "The availability of rental accommodations and their quality and price levels must be considered in a major way in any evaluation of this type."

  The consultant noted that the study used a "more-than-average" vacancy rate in single family housing, namely 14.9 percent versus an average

* See Appendix for consultant's report and resume.

rate of 5 percent. The study reported an average monthly rent of $162.50 for occupied dwellings in the nonmetro area. When one compares the average rent to the average monthly mortgage payment under this program, the mortgage payment is at least two and one-half times the average rent. Multiplying the 168,614 single family units by the vacancy rate of 14.9 percent produces over 25,000 vacant single family dwellings in the nonmetro area. Our consultant went on to say:

> "This is a startling statistic when compared to rental prices, on the average, and average house purchase prices and payments as noted above. In summary, this points out that if housing alternatives are roughly equal, why not rent for a smaller monthly outflow versus a higher purchasing price payment which would weld affiliation to an area where employment possibilities might not be as to create interest in buying by all family units qualified?"

- Employment and Unemployment Statistics - The consultant stated that the nature of employment growth is important to an assessment of mortgage demand in the area. He noted that information on unemployment, the variation in unemployment rates among counties and the psychological effect of unemployment rates on homebuyer decisions are necessary and appropriate considerations in assessing mortgage demand. This was not done, however, in the feasibility study.

- New Residents Not Potential MRB Homebuyers - The consultant criticized the assumption made by the demand study that all individuals in-migrating to Arizona would be potential homebuyers under the program. Most of the in-migration into the nonmetro area is not employment-related in the nonmetro counties. These people are retired and would not qualify for the program because they probably have owned a home in the last three years.

- Income Statistics too Old - The consultant also noted that some data used in the study was outdated. Information on income levels was developed from 1979 income statistics. He concluded:

". . . here is a critical series on income over 22 months old at the time of issuance of the bonds, this preceding span containing the most severe recession nationwide since the late 1920's. In summary, the past, present and anticipated future income of prospective home buyers is a major element in the appraisal of housing demand and considering the past deep recession this series of numbers should have been updated in some way."

Changes Are Needed to Provide for Effective Review

If the Housing Finance Review Board is continued, changes are needed to make the Board's review of bond proposals more meaningful and effective. The Board needs: 1) authority to specify the detail and format of information included in feasibility studies, 2) staffing, and 3) more time to evaluate studies submitted for review.

Guidelines for Studies - Currently the Board does not specify the format and type of information to be provided in feasibility studies submitted for review. The Board needs rule making authority to specify such requirements for IDAs.

To review bond proposals effectively, the Board needs to specify information to be included in feasibility studies. As noted earlier, the Board relies primarily on feasibility studies to assess the need for housing and the demand for proposed mortgage financing. Without sufficient information presented in proper format, however, the Board cannot provide an adequate assessment.

The Board needs rule-making authority to specify the detail and format of information to be included in feasibility studies submitted by IDAs. Board statutes outline broad criteria governing general plans submitted to the Board, but do not allow the Board to require additional detail nor to specify what must be included in feasibility studies.* In an informal opinion, Legislative Council staff stated that the Board needs specific rule-making authority to require additional detail in general plans or to specify the criteria which should be addressed in feasibility studies submitted for review. According to Legislative Council, however, the Board does not need any additional statutory authority to specify information and establish guidelines governing feasibility studies of its own issues.

Staffing for the Board - To provide effective review, the Board also needs staff. The Auditor General's consultant stated:

> ". . . it is suggested that a Financial Analyst be retained by the Housing Review Board to either impartially evaluate draft documents or generate internally such foundation as would give the Board more appropriate directional material for analysis."

The Board acknowledges its need for staff. Senate Bill 1238 supported by the Board in 1982 would have granted the Board authority to hire financial consultants and to conduct studies necessary to carry out its functions. This provision of the Bill, however, was not enacted.

---

* A.R.S. §9-1174, Subsection B states:

> ". . . The general plan shall briefly describe:
> 1. The amount of the proposed bonds.
> 2. The maximum term of the bonds.
> 3. The maximum interest rate on the bonds.
> 4. The need for the bond issue.
> 5. The terms and conditions for originating or purchasing mortgage loans or making loans to lenders.
> 6. The area in which the single family dwelling units to be financed may be located.
> 7. The proposed fees, charges and expenditures to be paid for originators, servicers, trustees, custodians, mortgage administrators and others.
> 8. All insurance requirements with respect to mortgage loans, mortgaged property, mortgagors, originators, servicers and trustees.
> 9. The anticipated date of issuance of the bonds."

OEPAD estimates that the Board needs approximately $15,000 annually to hire independent experts to evaluate MRB plans and proposals. This estimate assumes that the Board reviews three proposals per year at a cost of $5,000 per review and does not include OEPAD's staffing costs. If experts are also needed to develop guidelines governing feasibility studies, additional costs would be incurred.

The Board would need an appropriation from the Legislature for staff because it does not have a source of funds which is not contingent on the sale of bonds. Currently, the Board does not have an operating budget, however, it can charge IDAs for review of bond proposals. A.R.S. §9-1174, Subsection G states:

> "The housing finance review board may charge any corporation submitting a general plan for review a fee not to exceed three thousand dollars and payable solely from bond proceeds to reimburse the board for its expenses in reviewing the general plan."

Fees can be assessed, however, only if bonds are issued. Thus, experts hired by the Board to provide independent analysis cannot be paid with these funds unless the bond proposals are approved.

The Board has not used IDA funds to evaluate demand feasibility studies. The Board has collected $6,000 from IDAs. As of September 8, 1983, $4,000 of these funds have been paid out for review of bond issue fees. As a result of these reviews, the Board has reduced some of the bond fees, thereby lowering the cost of issuance. OEPAD staff estimate that approximately $80,000 in costs were saved on the 1982 Phoenix/Maricopa County issue and approximately $255,000 on the 1982 Tucson/Pima County issue.

<u>Demand Study too Late</u> - The demand feasibility study is received too late in the review process to be useful. By the time the study has been sent to the Board, the issue has been fully structured, and reviewed and approved by the local IDAs. Bond counsel, underwriters and financial

consultants, whose pay is contingent on approval of the issues, have all completed their work. Tentative commitments from developers and lenders may also have been obtained. Board members stated that, because the feasibility study is submitted so late in the process, they do not have enough time to review the study and do not have authority to make changes in the proposed issue. Board members stated that the Board also needs more time to consider changes to the general plan which is submitted to the Board earlier in the review process.

CONCLUSION

The Housing Finance Review Board has not provided adequate review of mortgage revenue bond proposals. The Board has approved bond proposals even though feasibility studies submitted to the Board overestimated mortgage demand and contained other flaws. Changes are needed to provide for effective bond proposal review.

RECOMMENDATIONS

1. The Legislature should consider: a) funding the Board's activities so that the Board can hire its own independent housing finance expert to evaluate the demand for mortgages and b) granting the Board rule-making authority for its MRB review activities.

2. The Board should: a) reevaluate its role in reviewing IDA bond proposals and b) set up guidelines to be followed in the development of the general plan and feasibility studies for the Board's bond issues.

FINDING II

BOARD MINUTES DO NOT CONFORM TO OPEN MEETING LAW REQUIREMENTS.

The Housing Finance Review Board is not in compliance with the Open Meeting Law, thus exposing the Board's decisions to legal challenge. Board minutes are not complete, nor are they generally available to the public. Moreover, prior to our audit the Board did not maintain conflict of interest disclosure statements in a separate file as required by law.

Open Meeting Law

The Board has not maintained minutes of all of its meetings as required by the Open Meeting Law. Further, available tape recordings of some meetings do not meet all statutory requirements. Although the Board was advised by private counsel to keep written minutes, it has not done so.*

A.R.S. §38-431.01, Subsection B requires the Housing Finance Review Board to maintain written minutes or a recording of its meetings:

> "All public bodies, except for subcommittees and advisory committees, shall provide for the taking of written minutes or a recording of all their meetings, including executive session. . . ."

The statute further states that minutes must contain certain information:

> ". . . such minutes or recording shall include but not be limited to:
>
> 1. The date, time and place of the meeting.
> 2. The members of the public body recorded as either present or absent.
> 3. A general description of the matters considered.

* The Board does not have an assigned Attorney General representative, although it has, on occasion, requested advice on other matters, such as the use of IDA fees.

4. An accurate description of all legal actions proposed, discussed or taken, and the names of members who propose each motion. The minutes shall also include the names of the persons, as given, making statements or presenting material to the public body and a reference to the legal action about which they made statements or presented material."

No Minutes - The Board has not maintained written minutes or a recording of one-third of its meetings. The Board met 32 times from its inception in 1979 through May 18, 1983.* There are neither written minutes nor tapes available for 11 of these meetings. The recording of its meeting of September 9, 1982, moreover, is useless because it is inaudible. According to the written agenda this meeting should have been an important one because the Board planned to discuss factors critical to its proposed nonmetro bond issue.

Taped Minutes Are Incomplete - Tape recordings which are available do not satisfy all statutory requirements. A review of 14 hours of Board tapes disclosed that the tapes do not include all required information. The date, time and place of the meeting is not always stated. Generally, neither Board members who make motions or discuss issues nor interested parties who address the Board are identified.

Tape recordings of Board meetings, furthermore, are not readily available to the public. A.R.S. §38-431.01, Subsection D states that minutes of regular sessions shall be available for public inspection three working days after the meeting. However, we found that the public may be discouraged from inspecting such tapes because a tape recorder may not be available. The Board does not own its own equipment and must rely on a borrowed recorder. OEPAD staff suggested that a recorder be requested one day in advance of inspecting the tapes.

* There is no evidence that any of these meetings were canceled.

Counsel Advised Board to Keep Written Minutes - Although the Board's legal counsel for the nonmetro mortgage revenue bond issue advised the Board to keep written minutes of its deliberations, it has not taken his advice. Counsel, in a written memorandum dated September 13, 1982, informed Board members of the statutory requirements of the Open Meeting Law. Counsel added the following advice on the keeping of minutes:

> "In view of the harsh penalties for violations of the Open Meeting Law, the precise legal requirements of housing bond issuances and the difficulty in dealing with tape recorded "minutes", it is our recommendation that the Board keep certain written records of its proceedings. . . . The Clerk of the Board should prepare written minutes of each meeting. . . . The minutes of each meeting should be filed with the notice records, chronologically, in a convenient fashion (such as a loose leaf notebook or binder) and available for inspection by the general public. If the Board continues to tape its sessions, the tapes should also be available to the general public for inspection."

However, the Board has not acted on this advice. Lacking full-time staff support, the Board sought to minimize the work load for OEPAD staff.

Noncompliance with Open Meeting Law minute-keeping requirements leaves the Board vulnerable to legal challenge. A.R.S. §38-431.05 provides that legal actions taken in violation of the law are null and void and must be ratified in a subsequent public meeting. In addition, the Board can be sued and civil penalties assessed in accordance with A.R.S. §38-431.07, Subsection A.

Conflict of Interest Law

Prior to our audit the Board was not in compliance with the conflict of interest law because it did not maintain a special file of conflict of interest disclosures. In addition, the Board's use of tape recordings to disclose conflicts of interest may not satisfy legal requirements. To assist in resolving these problems, an Attorney General representative should be assigned to the Board.

A.R.S. §38-509 requires the following disclosure of substantial interest:

> "Every political subdivision and public agency subject to this article shall maintain for public inspection in a special file all documents necessary to memorialize all disclosures of substantial interest made known pursuant to this article."

According to the Attorney General's Office, Arizona conflict of interest statutes are broadly written and substantial civil and criminal penalties are provided for noncompliance.

Prior Conflict Not in Separate File - Although at least one Board member has declared a conflict, it was not in writing and not maintained in a separate file. The Board chairman declared a conflict in the tapes of the May 18, 1983, meeting.

When we brought this matter to the Board's attention on July 25, 1983, a written disclosure of the conflict mentioned above was received by OEPAD and is now maintained in Board records.

Tapes May Not Satisfy Requirements of the Law - Although at least one conflict has been declared in the tapes, and a tape recording may serve as "minutes," the statutes are not clear whether a tape recording of the entire board meeting could substitute for a written disclosure. The

Legislative Council stated in a memorandum dated July 23, 1983:

> "It is less clear whether placing a tape recording in such a special file is a violation of the conflict of interest laws. A.R.S. §38-503, subsection A, paragraph 3 requires disclosure statements to be made by means of a signed paper or contained within a copy of the agency's official minutes which fully describes the conflict. For purposes of Arizona's "open meeting law" (A.R.S. title 41, chapter 3, article 3.1) a tape recording may be substituted for minutes of meetings. Such a recording would be an "official record" of the agency. Arguably, for purposes of the conflict of interest laws, a recording could similarly be substituted for written minutes. The conflict of interest statutes are silent in this regard. You may wish to recommend legislation to clarify this ambiguity."

There appears to be a practical problem in allowing the tapes to serve as both the "minutes" and the disclosure of conflict of interest. Since many of the Board's meetings run for two to three hours, the disclosure would be difficult to find on the tapes.

Assigning an Attorney General representative to the Board would aid in resolving the Board's legal problems. The Housing Finance Review Board does not have the benefit of on-going legal advice as do most other State agencies and boards. Therefore, the Board may not be fully aware of all its statutory requirements.

CONCLUSION

The Housing Finance Review Board is not in compliance with the Open Meeting Law in that 1) neither written nor taped "minutes" are available for many of its meetings, 2) the taped "minutes" are incomplete because persons making motions or testifying before the Board are not adequately identified, and 3) the taped "minutes" are not readily accessible to the public. In addition, the Board did not maintain a separate file of conflict of interest statements prior to our audit. Assignment of an Attorney General representative to the Board would help in resolving these problems.

RECOMMENDATIONS

1. The Board should either keep 1) complete written minutes of all of its meetings in accordance with A.R.S. §38-431.01 or 2) taped minutes in a manner that meets all legal requirements.

2. The Board should request that an Attorney General representative be assigned to review with the Board the procedures it should follow regarding conflict of interest, Open Meeting Law and other legal requirements.

3. The Legislature may wish to clarify whether or not tape recordings may substitute for written conflict of interest disclosures.

OTHER PERTINENT INFORMATION

PROBLEMS INHERENT IN THE FEDERAL MORTGAGE REVENUE BOND PROGRAM.

Several problems inherent in the Mortgage Revenue Bond Program limit its effectiveness as a means of providing affordable housing for low and moderate income families. Recent Federal restrictions make the program less attractive and more difficult to market in comparison to other mortgage programs. At the national level, moreover, the program is being questioned because it is inequitable and costly. The U.S. General Accounting Office suggests that alternative approaches may offer a more cost-effective method of providing low and moderate income housing.

Federal Restrictions

The 1980 Mortgage Subsidy Bond Act and recent Federal regulations imposed restrictions on the Mortgage Revenue Bond Program which have reduced its attractiveness to homebuyers, developers and lenders. For example, strict limits placed on program eligibility and home purchase prices have adversely impacted the program. Other requirements and restrictions imposed on developers and lenders have made the program difficult to market and less competitive with other mortgage finance programs.

Eligibility - Strict Federal provisions limit who may qualify for the Mortgage Revenue Bond Program. A person generally cannot qualify for the program if he has owned a residence within the past three years. Thus, individuals who move to Arizona to retire or to take a new job would not be eligible for an MRB loan, despite their income levels, if they have owned homes elsewhere within the past three years. Yet, much of Arizona's population growth and housing need comes from the in-migration of retirees and new employees.

Proving eligibility for the MRB program, furthermore, can be more difficult than proving eligibility for other mortgage loan programs. The applicant for an MRB loan must furnish a copy of his Federal tax return for the past three years. Other loan programs only require two years' tax returns. According to lenders, low-income applicants frequently do not have copies of all necessary tax returns. The Internal Revenue Service takes about six weeks to send copies of returns which is often too long to wait on a real estate transaction.

Purchase Price Limits - In December 1982, the U.S. Treasury Department announced a reduction in the maximum purchase price of MRB homes which also impacted the nonmetro program adversely. Although the Board took action to attempt to raise the price limits, price limits could not be raised in some counties.

Purchase price limits are developed through a sampling procedure which estimates the average price of homes in a given area. Actual price limits are set at 110 percent of the average prices. In December 1982, the Treasury Department decreased its estimates of the average prices of homes in Arizona. For nonmetro Arizona, new house price limits fell from approximately $84,000 to $54,000 as a result of the Treasury's announcement.

To address this problem, the Board met with members of Arizona's Congressional delegation and hired a consultant to review the average price of homes in the nonmetro counties. The results of the study were helpful in raising the purchase price limits in most of the counties, although the limits were still substantially below 1982 limits at the inception of the program.

A few counties, however, were not helped by the Board's study. One of these was Pinal County, which was to receive 29 percent of the bond funds. The data base for Pinal County supported the U.S. Treasury new home price limit of $54,000. At least one developer has suffered financially from the changes in the price limits. When the limit had been in the $80,000s, the developer paid his commitment fees and planned to sell new houses in the mid $60,000s. Since the change in limits, he has had to lower his price.

Program Not Attractive - Other requirements and restrictions make the MRB program less attractive to developers and lenders compared to other mortgage loan programs. To participate in the program, lenders and developers must pay up front a relatively high commitment fee of 3 percent. Commitment fees are high partly because arbitrage, typically used to cover the expenses of the program, is limited. The program is also unattractive because fees paid for servicing mortgages are relatively low, mortgages are funded only twice monthly and interest rates are determined by the bond rate. In a period of rising interest rates, the issuer would not be able to raise the mortgage rate. Because the program is less attractive to developers and lenders, it has been difficult to market as noted in Finding I, page 15.

Program Under Question Nationally

At the national level, the Mortgage Revenue Bond Program is being questioned. U.S. General Accounting Office studies have found the program's rigid loan structure and requirements are not responsive to differences in income levels.* Thus, higher income program participants receive a greater subsidy than lower income participants. The program is also very costly in comparison to alternatives.

* We reviewed GAO's preliminary report to Congress dated April 18, 1983; a rebuttal to that report by the Council of State Housing Agencies dated May 12, 1983; and the subsequent GAO testimony before Congress on June 15, 1983. In addition, we discussed the Council's rebuttal with GAO officials. After reviewing the Council's rebuttal, GAO retains its position that there are inherent flaws in the Federal MRB program.

Lack Flexibility - The MRB program's rigid loan structure and requirements are not responsive to differences in family circumstances, income levels and changes in income over time. Long-term mortgages are granted based on a person's income at a point in time and the mortgage interest rates are determined by bond rates. Recipients of the subsidy are selected on a first-come, first-serve basis, not upon financial needs. The following hypothetical cases illustrate the lack of flexibility of MRBs.

Case I

Family A with no children has an income of $27,589, the maximum to qualify for a low-interest mortgage.* Family B with 4 children and an income of $27,600 is not eligible for the program. It must go to an alternative loan program such as FHA and probably pay at least one and one-half percent more in interest even though Family B's financial need may be greater than Family A's.

Case II

Family C consists of a recent professional graduate with spouse still in school. They qualify for a subsidized loan with an income of $25,000. In the following year, the young professional receives a $3,000 raise and his spouse has an entry-level position which pays $17,000. Thus in one year's time, the family income has nearly doubled--to $45,000--yet this family will continue to benefit from the subsidized interest rate for the life of the mortgage.

---

* The states, not the Federal government, set income levels for the MRB program. Arizona's upper income limit is determined (by A.R.S. §9-1151) by multiplying the Arizona median income by 115%, which under the MRB program is $27,589. Arizona does not have a sliding scale for size of family, although some states do.

Case III

Family D consists of a family which has never owned a home before but the family has assets in a savings account in the amount of $20,000. Because the family's total income does not exceed $27,589, it is eligible for a subsidized mortgage loan.

Program Is Inequitable - Because all homebuyers receive the same fixed-rate mortgage under the MRB program, higher income participants receive a greater subsidy than lower income participants. Table 3 from the U.S. General Accounting Office (GAO) testimony before Congress illustrates the inequity in the size of the subsidy. The average monthly subsidy or benefit increases as one's income and size of loan increases. For example, a person qualifying for a $29,000 mortgage will receive a subsidy of $33 a month whereas someone who may qualify for a $53,000 mortgage will be subsized at almost twice this level.

TABLE 3

AVERAGE COST AND SUBSIDY PER MRB LOAN BY INCOME GROUP

Income Group ($000)	Distribution of Funds Lent (Percent)	Distribution of Loans Made (Percent)	Average Mortgage Amount	Average Cost Per Loan	Average Monthly MRB Subsidy
0-20	10	17	$29,089	$ 8,935	$33
20-30	40	45	41,865	12,859	48
30-40	28	24	53,401	16,403	61
40-50	15	10	68,046	20,901	78
Over 50	7	4	72,697	22,330	83
Total	100	100			

Source: Results of a U.S. General Accounting Office survey of MRB loan activity (20,000 loans) in 40 jurisdictions in the 6 months between 12/81 and 7/82.

The cost to the U.S. Treasury also increases with the size of the loan. To the extent that people with higher incomes are buying more expensive homes and obtaining larger loans, it will cost the Federal Treasury more to subsidize those loans.

Mortgage Revenue Bond Program Costly - Compared to alternatives such as the proposed tax credit, the MRB program is very costly for Federal taxpayers. Most of the benefits of the MRB program are distributed to people in the upper income brackets. The GAO has constructed a profile of the beneficiaries of mortgage revenue bonds.* The GAO report to Congress** stated:

> "Based upon 1982 statistics, we believe that the largest share . . . of the costs of mortgage revenue bonds went to benefit high-income bond purchasers, bond underwriters, lawyers and other intermediaries rather than to homebuyers. In contrast, providing the same households with the same assistance they received in 1982, but using a more efficient subsidy such as a tax credit, could have reduced the proportion of subsidy lost to delivery expenses to less than 6 percent leaving 94 percent to benefit homebuyers." (emphasis added)

The GAO report concluded that a large share of benefits from the MRB program accrues to bondholders in upper income brackets. To the extent that other Federal taxpayers, including those of low and moderate income, are paying the expenses of running the government, bondholders are benefitting at their expense. Another large group of beneficiaries are the bond underwriters, lawyers and financial consultants.

---

* The beneficiaries include all those who benefit financially from the MRB program. Benefits include income and tax benefits as well as the mortgage interest subsidy.

** The U.S. House Ways and Means Committee requested GAO to perform a cost benefit analysis of the MRB program and alternative programs which could be used to subsidize the mortgage payment for low- and moderate-income families. In a prior study, GAO had measured the benefits of the MRB program on the home building industry.

Alternative Programs May Be More Cost Effective

According to the GAO, alternatives to the mortgage bond program may offer a more cost effective method of providing affordable housing to low and moderate income families. At the Federal level a tax credit program is being considered as an alternative to MRBs. State and local entities are also considering other ways of financing housing programs and attracting mortgage capital.

Tax Credits - SB 1598, introduced in the United States Senate in July 1983, would provide a new option to state and local entities which now issue mortgage revenue bonds. The issuing authority could decide not to issue some or all of the mortgage revenue bonds authorized by the Internal Revenue Code. Instead, the states could elect to issue mortgage credit certificates directly to homebuyers. The certificates would enable homebuyers to "buy down" conventional mortgage interest rates by claiming a tax credit equal to a specified percentage of the interest paid on a home mortgage. The tax credit option would not limit an authority's ability to issue taxable bonds to raise mortgage capital. Mortgage credit certificates could be utilized in conjunction with taxable mortgage bonds for this purpose, and proceeds could then be lent to homebuyers as currently done under the MRB program. This approach, however, would be less costly to the Federal Treasury.

Advantages of Tax Credit Over MRBs - The proposed Federal tax credit program has several advantages over MRBs. The tax credit is more flexible than the Mortgage Revenue Bond Program. Many inequities of the MRB program (and the related Federal tax deductions) can be addressed through the mortgage tax credit. In addition, the tax credit method of buying down the effective interest rate is less costly than the MRB method.

The major advantage of the tax credit is flexibility. It would work whether mortgage interest rates are static or moving up or down. Tax credits would also give the local authority greater flexibility in designating to whom benefits will go and what public purposes shall be served, such as whether to direct benefits to low and moderate income families, to the elderly or to urban revitalization. If capital shortage is a major problem for the area, the tax credit program could be used in conjunction with a taxable bond program; the taxable bonds would attract capital, and the tax credits could be used to distribute the benefits.

Inequities of the MRB program, which are discussed on page 35, could be addressed by the state through use of proposed Federal tax credit certificates. Under the proposal, the state could determine who would receive the tax credits or subsidy and how large a subsidy each person should receive. For example, families with greater financial need could be given tax credits of 15 percent of their mortgage interest payments and families with higher income and less need could be given credits of only 10 percent. Or the state could give a flat percentage buy down or tax credit to all first-time homebuyers regardless of financial need or the size of the mortgage.

According to GAO, the proposed Federal tax credit would be a less costly way of buying down the interest rate than issuing tax-exempt mortgage revenue bonds. Because the cost of a tax credit program is only a fraction of the cost associated with a Mortgage Revenue Bond Program, it would allow an increased level of assistance to homebuyers, while reducing the cost to the Federal Government from 20 to 40 percent.

State Alternatives to MRBs Are Considered

State and local entities are also exploring alternative ways of financing housing programs or attracting capital. However, most of these alternatives are not aimed at the low and moderate income market for homes.

Approximately 20 states are beginning to use their state pension funds to invest in housing. Connecticut, for example, invests a portion of its pension funds in mortgages at market rates, thus its program is not aimed at low- or moderate-income housing. Maryland invests its state insurance fund in housing loans. Taxable bonds are being used to promote availability of capital for mortgages in Alaska. Taxable bonds by themselves, however, will probably not reduce the effective market interest rate.

In 1983, two of these alternatives were recommended by the State Housing Task Force.* Authority to issue taxable bonds was sought in SB 1238 but was not included in the final legislation enacted. The Task Force also had recommended tapping the State's pension fund for housing capital.

---

* The State Housing Task Force was established by the Governor in July 1982 to analyze the need for a State housing and finance entity and to explore ways to reduce housing costs in Arizona. A report of its findings and recommendations was published in January 1983.

THE ARIZONA HOUSING FINANCE REVIEW BOARD

RESPONSE TO THE PERFORMANCE AUDIT BY THE

OFFICE OF THE AUDITOR GENERAL

The Arizona Housing Finance Review Board (HFRB) appreciates the Auditor General's performance audit of the Board. The report has recommended a number of changes to improve the Board's efficiency. Most of these changes would not have been necessary if the Board had a staff and a small operating budget.

Legislative action is required to implement most of the recommendations contained in the report, however the Board is taking the necessary steps to implement those recommendations it can. Some have already been implemented, especially those regarding Open Meeting Law requirements.

The Board thanks the Auditor General's staff for being available to answer questions during the course of the audit and meetings with the Board and for displaying a professional approach concerning their investigation. During meetings with the Auditor's staff, the Board expressed its views to clarify portions of the draft report. The revised draft report still needs clarification regarding Finding I and the chapter on the mortgage revenue bond program.

Before commenting on Finding I, a clarification is necessary regarding the comments on the HUD Section 8 program found on page 2 of the report. While the Section 8 program has not been discontinued, the new construction and substantial rehabilitation programs have not received appropriations from Congress. Since these were the programs with which the Board worked, the HFRB is no longer involved in Section 8.

RESPONSE TO FINDING I THAT THE HOUSING FINANCE REVIEW BOARD HAS NOT PROVIDED EFFECTIVE REVIEW OF MORTGAGE REVENUE BOND PROPOSALS

The report states that the 1982 mortgage revenue bond issues were unsuccessful and that the bonds will have to be recalled early which will disappoint some program participants. It is important to understand that this does not necessarily mean that the Board's review of these issues was inadequate, nor that people could not buy homes because of the outcome of these issues.

As stated in the report, outside factors - - especially because of the fall in interest rates - - limited the success of the bond issues. Even though the 1982 mortgage revenue bond issues were less attractive to home buyers than anticipated, these buyers were able to buy homes through other competitive programs, such as FHA, whose rates were either lower or a little higher than the mortgage revenue bond rates.

The report also states that once the nonmetro bond issue was sold, little effort was made to advertise the program. In its review, the Auditor failed to state the reason for the advertising delay. The U.S. Treasury Department reduced the purchase price limits after the bond issue was sold, forcing the Board to take action and hire a consultant to prepare a study refuting the Treasury Department limits.

The Auditor's report notes that few developers were ready to sell homes until three to four months into the program. It should be realized, however, that small builders participate in the nonmetropolitan bond issue. These builders do not have a standing inventory to draw from, unlike the large builders in the Phoenix and Tucson areas.

The Auditor concentrated on the bond issues of 1982 to prove that the Board did not provide effective review of the mortgage revenue bond proposals. According to the Auditor, this is the year outside factors limited the success of the bond programs. But, little mention is given to the three successful issues of 1979 and 1980. The report states the successful issues preceded the federal amendments to the 1980 Mortgage Subsidy Bond Act. It should be pointed out that these issues had the same type of purchase price and income limit restrictions as the 1982 issues.

Table 2 on page 12 in the report profiles the 1982 bond issues. The same information is not provided in the report for the 1979 and 1980 successful issues. Consequently, it is provided in Table 1 below. This table shows that all three of these issues virtually sold out.

TABLE 1

Success of 1979 - 1980 Bond Issues

Issuer	Date Issued	Size	Total Cost	Bond Proceeds committed to Purchase Mortgages	% Total Issue Used
Pima County	12/79	$40,000,000	$1,245,300	$ 33,865,300	84.6%
Maricopa County	7/80	63,160,000	1,691,000	55,400,000	87.7%
Pinal, Gila, Mohave Counties	11/80	30,000,000	1,099,250	28,600,750	95.3%

The Board can not agree more with the Auditor's comment on page 21 that the Board needs staff to provide effective review. Currently, the Office of Economic Planning and Development provides staff support, but it receives no financial reimbursement . What's more, the Board can assess fees for its review only if the bonds are issued. If bonds are not issued, the Board receives no compensation for its review. Therefore, it cannot pay for an independent analysis of a proposal. The Board believes a small operating budget is crucial in order to provide effective review of all bond proposals - - whether or not they are issued.

RESPONSE TO PROBLEMS IN THE MORTGAGE REVENUE BOND PROGRAM

In addition, the Board questions the appropriateness of examining the federal mortgage revenue bond program in a performance audit of the Housing Finance Review Board. The Auditor's report includes only the negative side of the program. The Board believes that the other side of the issue must also be presented.

It is important to note that the report states federal restrictions, such as eligibility criteria and purchase price limits, create problems for the success of the program. On page 31, the Auditor believes that many people moving to Arizona would not qualify for the mortgage revenue bond program because they have owned a home within the last three years. However, the Auditor fails to consider that many people moving to the state have rented previously and would be priced out of the home ownership market entirely without the mortgage revenue bond program.

Furthermore, although the report infers every bond issue was adversely affected by the purchase price reductions announced by the U.S. Treasury Department, in Arizona the reductions affected only the 1982 monmetropolitan bond issue. The impact on bond programs in other states is hard to assess without a survey.

To support its position that the mortgage revenue bond program is not effective, the report relies on a study by the U.S. General Accounting Office (GAO), only briefly mentioning a rebuttal to that report prepared by the Council of State Housing Agencies (CSHA). However, in its response to the GAO report CSHA provided convincing arguments that the mortgage revenue bond program is in fact successful in helping low and moderate households buy homes.

Listed below are excerpts from the CHSA report entitled, Council of State Housing Agencies Response to the General Accounting Office Study "The Costs and Benefits of Mortgage Revenue Bonds" Preliminary Report" (May, 1983). These points provide a summary of the other side to the mortgage revenue bond program issue that was not presented in the Auditor's report:

1) GAO chose to limit its investigation to bonds issued from December 1981 through July 1982, a period of record high interest rates. This unrepresentative period distorts the analysis for budget purposes and provides a misleading picture of program beneficiaries.

2) The FHA homebuyer has a median income of $10,000 above the State agency buyer and the comparison shows that MRB's have a far greater share of borrowers in the lower income levels.

3) As GAO overstates the cost of revenue bond financing, so does it understate the benefit to home purchasers. It does so by understating the conventional mortgage rates and overstating the tax exempt mortgage rates that existed in 1982.

4) The GAO report focuses on monetary costs and benefits of tax exempt financing. In doing so, it neglects other benefits and advantages which cannot be so easily quantified:

   - Local and state agencies can tailor programs to local needs.
   - Mortgage bond programs provide a source of mortgage funds to rural and urban areas which are tradionally capital short. They also have been particularly helpful as a tool of urban revitalization and neighborhood improvement.
   - Special programs such as home improvement loans are ignored by GAO.
   - There is no mention of the importance of these State and local programs in the face of reduced Federal support for housing and for housing program administration.
   - GAC ignores the role Congress and the Administration designated for MRB's in 1982 as a countercyclical support for the housing industry.

5) What is true for medians is equally true across the board. Fully 50 percent of revenue bond program homebuyers in 1982 had incomes of less than $25,000 compared with only 23 percent of FHA buyers. Only 15 percent of MRB buyers had incomes over $35,000, compared to 41 percent of FHA buyers.

6) GAO states the "typical mortgage revenue bond homebuyer in 1982" had an income "between $20,000 and $40,000." In fact, the typical buyer had income of less than $25,000 and, as GAO own data indicates, 72 percent were below $30,000.

7) GAO also contends that the purchase price ceiling "encourages" participation of "upper income people."GAO in its own sample found the average purchase price to be $48,800 - hardly luxury housing.

The hypothetical cases presented on page 34 again only illustrate the negative aspects of the mortgage revenue bond program. No cases were presented showing how the program allowed a person who is otherwise priced out of the housing market afford a home. The Board asserts that Case II is not relevant, since it is based on future incomes of qualifying people. The young professional in Case II could just as easily have lost his job yet kept his home because of the below market mortgage provided by the mortgage revenue bond program.

In response to the Auditor's comment on page 36 that the mortgage revenue bond program primarily benefits wealthy people, the Board draws your attention to a letter from Martin F. Ryan to Senator Dennis DeConcini. Ryan, who was chairman of the State Housing Task Force, clearly presents the other viewpoint. Mr. Ryan categorically refutes the claims that the wealthy and middlemen are the primary beneficiaries of the program. His letter is attached as an addendum.

Again, the discussion on the proposed tax credit introduced in the U.S. Senate by Senator Dole only presents one side. The report implies the tax credit is available now, which it is not, and that it is superior to the mortgage revenue bond program. Recent publications have questioned the tax credit proposal vis-a-vis mortgage revenue bonds. For example, the National Association of Home Builders believes the tax credit proposal would provide less benefit than mortgage revenue bonds because the proposal makes inaccurate assumptions about mortgage revenue bond subsidy levels.

In conclusion, the Board believes that while the program and the HFRB can benefit from certain changes, both are currently operating in the public interest. Although the Auditor General's report is essentially fair and accurate, the Board believes that the points made in its response to the report are vital to understanding the task of the HFRB. The Board submits that by clarifying these issues, the Auditor General's report can better serve its legislative directive.

LAW OFFICE
MARTIN F. RYAN, LTD.
6425 E. GRANT ROAD
P.O. BOX 30755
TUCSON, ARIZONA 85751
(602) 296-5418

September 16, 1983

The Honorable Dennis DeConcini
United States Senate
4104 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Dennis:

On Wednesday night, September 14th, I returned home after a hard day of fighting with clients about the size of my fees and I picked up that evening's edition of the Tucson Citizen and felt compelled to sit down and get off a letter to you about an article that appeared on the front page. The article concerned an Administration program of tax credits for first time homeowners. I know that you have proposed reforming the entire tax structure and substituting a flat rate tax. My correspondence is not about either subject.

Instead, I am writing to you as a long-time friend about a subject in which I have a very deep interest and I hope some small knowledge. That subject is tax-exempt financing in general and single and multi-family financing of homes in particular. I am enclosing a copy of the article. I do not know how accurate the quotation is, but in that article discussing the use of tax-exempt bonds for single family housing, the General Accounting Office is quoted as saying:

> "Extension" (beyond the December 31st expiration) "is assured even though the General Accounting Office says in a disputed report that up to 87% of the money from the bonds goes to lawyers, wealthy investors and other middle men, leaving only 13% to aid homebuyers."

That information is completely erroneous, false, and misleading, either that or I and many others have been undercharging. I am angered at the depths reached by some governmental officials to support their position. That quotation is nothing more than preposterous propaganda.

I have been involved in the tax-exempt field since 1969, represent many Industrial Development Authorities in the State of Arizona, have served as Chairman of the Governor's State Housing

Task Force, and can tell you that the quotation, if accurate, is so dangerously false as to call into serious question the motivations, integrity and parentage of the authors.

Let me tell you from experience with both single family housing bonds and other tax-exempt financings, that in the State of Arizona typical costs for all so called "middlemen" (Trustee, Lawyers, Printer, Underwriter, and others) are less than the fee charged by a realtor in a typical real estate transaction. In fact, the percentage attributable to issuance costs for single family housing financing with tax-exempt bonds is often lower than other financings because of the economies of scale. None of the bond proceeds go to "wealthy investors," although the bondholder benefits from not having the interest taxed, the homeowner benefits by having lower interest rates, the contractor benefits by building the houses, the employee benefits by having additional jobs, state and local governments benefit from increases in sales, real property and income taxes.

I wouldn't want to mislead you. There have been problems in Arizona with tax-exempt financing of single family housing. However, the problems have not arisen because of the charges of "middle men" or benefits provided to "wealthy investors". Volatile interest rates and Congressional restrictions have been major causes of the difficulties that have been experienced. Demand has been dampened as a result of restrictions limiting single family programs to first time homeowners, resale restrictions, programs geared to low and middle income without adequate federal definitions, and arbitrarily low arbitrage ceilings. Insufficient incentives exist to emphasize marketing in the smaller communities where, proportionally, the need is just as great.

However, even with all the program's problems, the use of tax-exempt financing in the State of Arizona for single family and other purposes is important to the State's growth. Arizona is a capital poor state. Industrial development and bond financing often provide the only affordable means of getting a project done and getting it done with the additional plus of using Eastern capital. Congress should legitimately concern itself with the social purposes forming the supporting framework for the use of Industrial Development Bonds. Congress should not participate in annual hunting expeditions where the foes of Industrial Development Bonds, nourished by the Treasury, seek to change the rules and bring down and bury in stages this important financing vehicle.

Please view with some skepticism, the Treasury argument about lost dollars. As an example, New Jersey's economic development officials recently concluded that there is a seven-to-one cost benefit ratio favoring the use of Industrial Development Bonds. In other words, for every one dollar the Treasury lost, seven additional tax dollars were collected in increased sales, income and real property taxes. Other studies have supported similar conclusions, and yet this side of the argument is seldom publicly presented.

Rhetoric notwithstanding, the complained-about abuses and misuses of tax-exempt financing have simply not occurred in Arizona. Safeguards do exist. Before bonds can issue, both an Industrial Development Authority and its governing body must approve an issue. The mechanism is slightly different for single family housing bonds but they must ultimately be approved by a State agency, the State Housing Finance Review Board. The gauntlet is becoming more difficult to run as issuers are no longer acting as rubber stamps and are demanding stricter proof of both the merit of the proposal and its public purpose. Significantly, no Industrial Development Bond in the State of Arizona has ever gone into default. By statute, we cannot finance massage parlors. By philosophy, disadvantaged area development is favored.

Again, this letter is neither in support of nor in opposition to the Administration's proposed tax-credits. I do believe that the single family housing program has found wide acceptance throughout the country, has served a legitimate purpose and should be continued. There is a need for legislative efforts to help make housing affordable. My concern is with efforts on the part of some to cripple the use of tax-exempt industrial development financing in the name of reform. I would hope that you and your staff would support the extension of use of tax-exempt financing for single family housing and will proceed cautiously before supporting any other changes in existing tax-exempt financing law.

There are many more qualified than I to counsel you. However, I do have strong feelings. My plea is not that you adopt my position, but that you consult with those who are knowledgable in the field before taking a position.

Thanks for listening.

Sincerely,

By: Martin F. Ryan
Martin F. Ryan

MFR:jms

Enclosure

Administration offers tax credit on first-time home buyers' interest

By The Associated Press

WASHINGTON — The Reagan administration, worried about the rising cost of a mortgage-bond subsidy, is supporting a proposed tax credit for up to half the interest charged first-time homebuyers.

It's not that the administration is eager to launch a new tax break at a time of record federal deficits. Rather, the administration is determined to reduce the tax losses caused by the mortgage bonds — a cost that would total another $15 billion if authority to issue the bonds were extended another three years.

The tax-exempt bond program is so popular with state, city and county officials that Congress is certain to renew it when it expires on Dec. 31. Three-quarters of the members of Congress have signed an extension.

Extension is assured even though the General Accounting Office says in a disputed report that up to 87 percent of the money from the bonds goes to lawyers, wealthy investors and other middlemen, leaving only 13 percent to aid homebuyers.

At a hearing before the Senate Finance Committee yesterday, John E. Chapoton, an assistant secretary of the treasury, repeated the administration's adamant opposition to renewal of the bonds program. But if the program is extended, he added, it should be coupled with the proposed tax credit.

The tax-credit bill, sponsored chiefly by Sens. Robert J. Dole, R-Kan., and Russell B. Long, D-La., chairman and senior Democrat, respectively, on the committee, assumes the bonds program will be extended. But it encourages local governments to give up some of the authority they have to issue the bonds and, instead, to issue certificates qualifying homebuyers for the federal tax credit. States generally are limited to about $200 million worth of these bonds a year.

The credit would be set by the local government at between 10 percent and 50 percent of mortgage interest paid.

The credit would be subtracted from any federal tax deduction claimed for mortgage interest. For instance, assume a person paid $3,000 interest in a year and qualified for a 30 percent tax credit. That would result in a $900 credit — which reduces taxes, dollar for dollar — and a $2,100 deduction, which cuts income subject to taxes.

That saving would come from elimination of the middlemen involved in the bond transactions.

Chapoton noted a $50,000 30-year mortgage subsidized with tax-exempt bonds could be obtained today for about 11 percent and a $476 monthly payment. The total after-tax cost during the first year for a person in the 20 percent tax bracket who itemizes deductions would be $4,616.

That same mortgage, without the bond subsidy, would command a 13 percent interest rate and a monthly payment of $572. The first-year after-tax cost, assuming a 14.3 percent mortgage credit, would be $4,594.

Although the annual costs to the homebuyer are fairly close, it would cost the treasury $1,614 the first year to subsidize the mortgage but only $746 to do it with the tax credit, Chapoton said.

That saving would come from elimination of the middlemen involved in the bond transactions.

Under the mortgage-bond program, state and local governments issue tax-exempt bonds to subsidize mortgages, chiefly for lower-income people buying their first home. Because the bonds are exempt from federal income taxes, they are sold at an interest rate that is usually two or three percentage points below market rates.

States, cities and counties have found the bonds so attractive — since the entire cost is borne by the federal government — that extension of the bonds program for three years would cost the federal treasury $15 billion in lost taxes, because the government would be giving up revenues as far as 30 years into the future. The government estimates continued issuance of the bonds would cost $2.8 billion over the next five years; inclusion of the tax-credit plan would cut that loss to $2.2 billion.

GLENN A. WILT, JR., Ph.D.
Financial and Economic Consultant
Box 1010
Tempe, Arizona 85281
Telephones: 602-965-6355
602-965-3131
602-248-0000

August 10, 1983

Office of the Auditor General
State of Arizona
Attention: Ms. Karen C. Holloway
111 West Monroe - Suite 600
Phoenix, Ariozna 85003

Dear Ms. Holloway:

The purpose of this letter report is to provide detail on my examination of the analytic document entitled Report of the Arizona Housing Finance Review Board - Mortgage Revenue Bond Market Study for the Counties of Apache, Cochise, Coconino, Gila, Graham, Greenlee, Mohave, Navajo, Pinal, Santa Cruz, Yavapai and Yuma. The major part of this analysis explores items in this Review Board Report with direction toward a more sound evaluation format; at the end a summary contains recommendations and conclusions on this appraisal.

The methodology utilized here included review of a wide variety of background documents both from my own sources and those provided by your office as supplement to the report as cited above. Some of thes were as follows:

1. A Feasibility Report compiled by the firm of Ernst and Whinney, Tucson, Arionza, dated May 14, 1982, for the proposed single-family Mortgage Revenue Bond program of that period.

2. The Arizona Housing Finance Review Board Annual Report for 1932.

3. The Arizona Housing Finance Review Board Guidelines for issuance of single-family development mortgages.

4. A review of the Program Synopsis for the Bond Market issue for the non-metro areas.

5. The Prospectus for the Arizona Housing Finance Review Board Single-Family Mortgage Revenue Bond Series 1982 of November 8, 1982.

6. The agenda for an information session on the purchase price limit reduction for single-family housing finance using tax-exempt bonds of February 24, 1983.

7. A Ledger Sheet depicting the voluntary commitments from Lenders (and builders through lenders) for the 1982 non-metro issue.

8. Two short letters addressed to Mr. Rich Crystal from representatives of the Office of Economic Planning and Development, State of Arizona and Mr. William C. Davis of the securities firm of Rauscher, Pierce, Refnes, Inc., Phoenix, citing the results of telephone interviews with builders in certain non-metro areas and mortgage bankers, commercial bankers and savings and loan executives here in the Phoenix area.

9. A reprint of statutes describing the role of the Arizona Housing Finance Review Board in evaluating its issues and those from other Industrial Development Authorities that may overlap in territorial availability.

After review of this body of material, certain subjects were addressed for purposes of structuring this analysis. These were as follows:

1. The timeliness of the data base utilized for issuance decision purposes.

2. The appropriateness of the sources of information gathered for the analysis.

3. The necessity for additional areas of investigation which may have modified the conclusions reached.

4. The nature and goodness of the assumption format.

5. The need, if any, to consider other major foundational elements and their potential impact on the issuing conclusions.

These items, coordinated, should express the framework necessary to determine the worthiness or non-desirability of bond issuance procedures as predicted by these types of reports.

THE NATURE OF THE FOUNDATIONAL ASSUMPTIONS AND THE DATA BASE

The Report to the Arizona Housing Finance Review Board - Mortgage Revenue Bond Market Study for the Counties of Apache, Cochise, Coconino, Gila, Graham, Greenlee, Mohave, Navajo, Pinal, Santa Cruz, Yavapai and Yuma (October 1982), referenced here as the non-metro study, consists largely of information gathered from secondary sources of a published nature. The beginning segments relate population characteristics inherent in the twelve counties including age distribution, household size and employment and income levels. The next references cite the importance of certain characteristics needing analysis for background detail including retail sales, bank deposits and mortgage interest rates. An inspection of these items should permit an assessment of the past interrelationships of the ability of the population to earn, live comfortably and have these results, if positive, manifest heartily on the community profile.

The next step was to appraise the nature, value and quantity of the housing stock in the non-metro study. The thought here was to inspect the economic characteristics of the population and the housing stock in each of the 12 counties to determine the level of demand interest in new housing stock and for the refinancing of existing inventory. This means, for example, if the population were financially capable and the housing stock was marginal in value and condition, a "move-up" phenemona may take place and at levels of interest rates for which buyers could qualify, housing and thus mortgage demand would be prevalent.

Finally, in the non-metro report, the projected demand for mortgage funds was addressed through taking population growth, recognizing the formation of new households, imputing a lessening demand from this development because of prevailing unemployment, noting buyer-type restrictions under this program (i.e. purchasers cannot have owned a home within the last three years, etc.) and then considering this information with the average prices for homes in each territory. This format, carried to conclusions, is cited and coordinated in Exhibit XXIV, which represents the summary statement to this analysis.

There is no question that the non-metro report compilers obtained data from appropriate sources, including, among others (a) the Arizona Department of Economic Security for general data, (b) Projections Report 1981 - Population, Employment, and Income Projections for Arizona and 14 Counties (c) the Arizona Department of Revenue and (d) certain University sources. It is to be noted that in some instances it would have been possible to contact representatives of these agencies to provide additional timely statistics (but perhaps preliminary) which would have added some newer information on the tail-end of the data citations. Especially relevant here was the observation that with the changing economic environment it appears appropriate to consider this point. In fact, this thought is well referenced on the third page of the non-metro report as follows:

> ..."the achievement of any estimates of future events may be affected by fluctuating economic conditions and is dependent upon the occurrence of other future events which cannot be assured. Therefore, the actual demand for mortgage funds realized by the proposed program may vary from the estimates included herein, and such variations could be material"...

The general format utilized here is one that could normally be applied to and centered in a geographic area containing certain homogenous elements, including employment base, income sources and age and household distribution. This is not the case in these 12 counties. For example, these counties contain a mixture of agriculture, mining and forestry-related employment. Here it is to be especially noted that these are not known as general growth areas and individuals in occupational categories within these industries, even if now employed, may not wish to make a long-term commitment to a town or job because of the general lack of industry dynamics. This is to say that the desire to own a home in a non-metro political area is subject to different individual influences than in a metropolitan area which may contain strong employment potentials. Exhibit XXV identifies some numeric breakdowns by counties, but there is considerably more work needed here to identify the demand and economic forces at work in each of these specialized locations.

A REVIEW OF THE REPORT CONCLUSIONS

Exhibit XXIV in the final study is worthy of exploration for the underlying foundational items supporting the conclusions reached in this analysis that suggest a demand for mortgage financing in 12 non-metro counties of Arizona more than double the monies available from the bond issue ($59 million versus $26 million).

Starting from the top in Exhibit XXIV, the population growth figures were divided by household size to obtain a gross number of new households subject to housing demand. Noting from the Census statistics cited the percentage of individuals now in single-family housing, this proporation of (rounded) 66 percent was imputed as the new net demand element for this housing type. The unemployment rate was the subtraction percent from this net demand, with the underlying assumption that those families with one or more members in this status would be unable to qualify or disinterested in purchasing but that the rest would apparently be available and ready to buy single-family homes. Next, some of the existing inventory of single-family homes in any market normally sell. At (rounded) 4 percent, this leaves (rounded) 6,600 homes needing financing, making the refinancing of existing homes the largest projected component of new mortgage demand from this capital.

Next, the mortgage program finance limitations indicate first-time buyers as the element served by this program at a figure of 25 percent of the market. Multiplying this we obtain (rounded) 3,600 households as the revised market demand. Citing those in income levels that could qualify (above $10,000 yearly and below $27,589 annually) as 44 percent of the non-metro population, then only about 1,150 households could be interested in this program. At the average sales price of a home of (rounded) $52,000 the conclusion is then reached that about $62 million of funds could be utilized. Lastly, considering that a 5 percent down payment was needed, $59 million would be taken up and this means that the potential exists, as previously stated, for an overscription of more than two times the allocated potential ($59 million versus $26.4 million). Important to this optimistic take-down, there are several in-depth questions which should have also been investigated. These would have moderated, either in a qualitative or quantitative way, the conclusions reached in the non-metro issue feasibility study. It is possible, however, that the development of these accessory points may have called attention to the lack of potential demand as has existed in the bond issue under scrutiny here.

THE POPULATION GROWTH FIGURES AND HOUSEHOLD SIZE CALCULATIONS

Reference was made here to the resource "Projections Report - 1981; Population, Employment and Income Projections for Arizona and 14 Counties-- Population: 1980-2035; Employment and Income: 1980-2007" as prepared by the Arizona Department of Economic Security, Office of Data Administration, Population Statistics Unit, June 1982, the exact document utilized by the bond study compilers for their population growth statistics. Also, a discussion was held with Mr. Mobin Quaheri, the senior study analyst involved in the development of this volume, who is a Unit Director at the Department of Economic Security, State of Arizona offices. The assumptions in this study, largely developed in 1981, were that 1982 would be a banner economic year, and it was not. This general observation made by a reader in the third quarter of 1982, should have flagged moderation in survey results, considering that nore than one-half of the year had passed with little economic optimism.

A more major observation developed from an inspection of some statistics in this volume is that the population projections in the non-metro report takes consideration of births less deaths plus net migration as a demand element. There is no question that the birth of a child may create the need for expanded housing but no income availability normally results from this event and quite often an additional outgo from income is created, thus lessening mortgage qualification abilities. The following statistics are presented, from the above "Projections Report - 1981" for inspection and to compare to those in the original non-metro study:

Table 1

Comparative Population Statistics Forecasted for 1983

12 Arizona Counties

County	Net Births[1]	Net In-Migration[2] Employment Related	Non-employment Related	NET	TOTALS[3] Population	Households
Apache	1,387	1,612	-3	1,609	710	329
Cochise	854	300	632	932	1,800	679
Coconino	1,347	2,346	193	2,539	3,110	1,318
Gila	399	60	-108	-48	255	137
Graham	315	58	76	134	335	113
Greenlee	217	363	-61	302	500	190
Mohave	159	186	1,126	1,312	1,320	680
Navajo	1,575	398	-196	202	1,115	560
Pinal	948	-140	577	437	1,305	439
Santa Cruz	329	490	65	555	900	281
Yavapai	-166	1,716	1,099	2,815	2,590	1,282
Yuma	1,005	442	182	624	1,525	633
		TOTALS:		11,413	15,465	6,642

Footnotes:
1. Births less deaths.
2. Both from employment-based and non-employment-based sources (retirement, student and military).
3. From original non-metro study-See Exhibit XVIII; Indian Reservation residents excluded.

The important items to derive from this table are as follows:

1. Net births may not constitute an element of housing demand because of the lack of income generation associated with these events. The base source of employment-related and perhaps non-employment related (retired, student and military, if the retired and military personnel did not own a home within the past three years, a somewhat unlikely event) varies markedly between counties, but, in any case, adds to 11,413 persons, as forecasted, or 4,898 households versus the 6,642 from the non-metro study.

2. The county-by-county variation in the generation of types of projected household increase demands attention. This factor is addressed in Exhibit XXV by indiviudal county in the non-metro study, but the distinction is still not made there between migration and births less deaths. For example, the observation of the just-preceding table draws attention to the large employment-related increase in Apache County (where the smallest average house price exists - $12,900 from Exhibit XVII) and spells some latent potential for this area (subject to a later moderating comment on the continuing nature of the employment base here) while the largest non-employment related household increase was in Yavapai County, an area long noted for its retirement base. This may mean that Yavapai, with this contingent and lower-wage scales versus Maricopa County and the average housing costs may mean that this area could be a lower-mortgage qualifying setting, at least under the restrictions of this non-metro program. In essence, these items of wage levels, housing prices and retirement segment of the growth of each area, necessitates individual county-by-county economic evaluation in order to get a specific and required focus on the demand for housing. In other words,

each of these counties should be looked at as a "State" subject to the analysis of certain individual factors, each important and perhaps different as they relate to the mortgage and housing demand projected for each region.

SINGLE-FAMILY HOME OCCUPANCY

The existing families in single-family houses (66.2 percent of the total--from Exhibit XII of the non-metro study) are forecasted to be, percentage-wise, also the proportion of new households which will demand single-family residences. This assumption leaves several important questions unanswered including the following:

1. Single-family home occupancy implies dramatic affiliation with an area, capsulizing a long-standing interest in geographic staying power, normally supported by longevity of continuing employment. It is to be noticed that certainly some of the employment in-migration and some of the existing population (who may be leery about the sporatic or temporary nature of their income activities, especially in the economic setting of the past few years) would find renting more cost-effective or flexible in view of short-term needs, rather than purchasing a dwelling unit to which an attachment should be made for a somewhat lengthy period of time. Reference in this former case is also made to Mobile Homes, which are given little analytic attention in this study and are well known as the method of shelter activity for migrating construction workers. Also, Exhibits XIII and XVII show respectively that a more-than-average (namely 14.9 percent, with a 5 percent being denominated as average) vacancy level in single-family housing in the gross 12 county calculations and rental prices at an average of $148 monthly for median contract rent and $162.50 and $167.33 respectively for the average rent per

single-family dwelling both for occupied and vacant units. This "stock" needs consideration as it should affect purchasing decisions for at a (rounded) $50,000 price and a $47,500 mortgage at 11 percent for 30 years, the base principal and interest payment (without mortgage rate buy-downs) is (rounded) $452, with property taxes and insurance premiums on the home yet to be added, making the purchase decision at the <u>base</u> payment price at least a 2.5 times factor of renting ($452 divided by $167). Of course, it must be understood that purchase decisions are not made only on the basis of price and payment charges, but in changing economic times it appears appropriate to consider the "take-up" of any vacant units both (a) county-by-county and (b) within the county and its major centers of population, to make sure the available housing units are located favorably or not within areas of major demand. Reference here is made to the fact that a dwelling unit vacant (say) 40 miles from an employment site sithin a county may not be competitive with a purchase decision closer to the generation point of income.

2. It is somewhat difficult from the statistics presented in the non-metro report to get an extra-clear focus on the number and location within a county of such rentable units existing. However, in a gross 12 county sense, the first page of Exhibit XII is referenced and 168,614 single-family units in total in these areas is given consideration. Multiplying this number by 14.9 percent (the average vacancy rate cited) this results in 25,123 vacant single-family dwellings. When multi-family accommodations are considered, the total rises to 37,832 noted on this same exhibit. This is a startling statistic when compared to rental prices, on the average, and average house purchase prices and payments as noted above. In

summary, this points out that if housing alternatives are roughly equal, why not rent for a smaller monthly outflow versus a higher purchasing price payment which would weld affiliation to an area where employment possibilities might not be as to create interest in buying by all family units qualified?

THE UNEMPLOYMENT RATE

The cited rate centering at 14 percent in the non-metro study is cause for concern. In all cases, on Exhibit VI, this series, for individual counties for June 1982 was notably above that of the figures for 1980 and strikingly so for Apache, Gila, Graham, Greelee, Mohave, Navajo, Pinal and Yuma. Also worthy of mention is that in no cases was the 1980 unemployment rate below that of the base year of 1970, indicating that from the two points of 1970 and 1980 and into June 1982 this figure grew on a percent basis. This statistic combined with other influences, should have resulted in interviews with bankers, mortgage companies, and qualified individuals, especially real estate brokers, to determine the psychological attitudes of potential buyers within these 12 market territories. These surveys would have been most important to evaluate and the information gathered would have certainly showed an impact on general house purchasing decisions. Previous buyer profiles, inquiries from those "shopping" for homes and other data could have been collected by contact and questionnaire, at a minimum expenditure.

It is the opinion of this analyst that this unemployment statistic rate, its variation between counties and finally, its psychological relationship to a purchase of the largest size in the normal family financial life cycle, are necessary and appropriate to consider in an evaluation of prospective mortgage demand. For example, as one's friends and/or relatives have been out of work or are expecting to be furloughed, this affects an individual who still has a job and his appraisal of the staying power of this employment. Taking on higher financial obligations in such an atmosphere seems imprudent. Especially important here,would be the varying county numeric levels of unemployment. Those associated with the mining industry may be the major population segment least interested in a home mortgage commitment, due to the current and recent past lack of demand for certain ores and the general outlook in this industry category.

Lastly, taking the unemployment rate percentage away from the population growth, as was done in the non-metro study, and assessing this as the net housing demand from population growth, assumes that the in-migrants are all demanders for single-family dwellings. As previously noted, more likely, in the short-run, these entrants would be renters and in any case the motivations and needs of those employed in an area would be necessary to investigate for the full understanding of mortgage demand.

TURNOVER OF EXISTING SINGLE-FAMILY HOMES AS AN ELEMENT OF MORTGAGE MARKET DEMAND

A paragraph located on page iv-2 of the non-metro study states information as follows:

> ..."the levels of activity and average sales prices differed widely by county. Sales ranged from 4 in Greenlee County to over 1,000 in Yavapai County, with the average per county at about 515"...

The next paragraph here indicates that unemployment will mean less sales but that lower interest rates will be a positive and encouraging fact for purchases. These, of course, are correct statements but the degree to which they will result in mortgage demand, under a poor economic outlook, is questionable. Here is another area in the report where secondary source data was utilized but no look was made beyond this to account for economic adversity.

To further inspect turnover demand, Exhibit XIX on the non-metro report was evaluated. It is interesting to note that in the counties the past record of the relationship between turnover of existing stock and unemployment percentages was unclear. Some counties with high unemployment had high turnover and others the opposite, namely high unemployment was coordinated with lower turnover. Additionally, it is also unclear from the report whas value of house turned over most during the 1981 year. The implication here is that the "average" priced home will sell; it may be that the "median" would have been a better statistic to use to depict this activity in order to avoid the influence of the larger "cabins", namely high-value second homes in these territories. Finally, it is assumed here that all turnover would be subject to new financing. The question is that if these homes had lower-rate first mortgages already existing, with low cash-to-mortgage balances, there may not be major need for capital in this market segment. However, data on these mortgages were not available from the original study to be able to draw any sharp conclusions along this line.

ADJUSTED HOUSING DEMAND

The percentage of first-time buyers in the market is accepted without question on the basis of surveys cited in the non-metro report and the percentage of qualifying buyers at an average of 44 percent assumes that all within the income standards can be buyers at the average sales price. It is also shown on Exhibit XX that the qualifying buyers are available evenly through the 12 counties (44 percent) as was developed from 1979 statistics. It is appropriate to mention that here is a critical series on income over 22 months old at the time of issuance of the bonds, this preceding span containing the most severe recession nationwide since the late 1920's. In summary, the past, present and anticipated future income of prospective home buyers is a major element in the appraisal of housing demand and considering the past deep recession this series of numbers should have been updated in some way.

THE OVERALL SYNOPSIS OF EXHIBIT XXIV

The mathematics of the computation on this Exhibit was checked and the following chart shows changes necessary. The first column cites the line number from Exhibit XXIV and the next two are self-explanatory. The fourth column here, however, presents another format representing a significant adjustment to this presentation. On page 7 preceding in this report appraisal, data was detailed relative to population statistics citing only in-migration figures, leaving out birth activities less deaths. As it seems more reasonable to expect these employment and non-employment generated family units to have some source of qualifying income, and as these total to 11,413, as forecasted for 1983, it would appear more reasonable and conservative to start with this number if the non-metro study format is adopted. This notation, in no way, invalidates the previously-stated differences in general analytical opinion, rather the activity in Column 4 in this presentation only suggests what would happen if more appropriate beginning numbers had been used in the stated evaluation. As can be seen from this the estimated loan demand would have been reduced by more than 9 1/2 percent ($56,796,990 less $51,357,757 divided by $56,796,990 = 9.57%.

Line (1)	Number Appearing (2)	Correction: Should be (3)	Revised Numerics[a] (4)
1			11,413
3			4,898
5			3,242
7	3,804	3,781	2,788

10	6,659	6,588	6,588
11	10,465	10,469	9,376
13	3,616	2,592	2,344
15	1,151	1,140	1,031
17	$62,249,578	$59,786,306	$54,060,797
19	59,008,329	56,796,990	51,357,757

Footnote a: Unadjusted for Indian population-includes gross population projections.

THE GRAND SUMMARY

There are several major points which result as a sumary to this evaluation. They are as follows:

1. Attached is a copy of a memorandum dated October 7, 1982 that reports the results of a telephone survey regarding the proposed non-metro bond issue. The information contained herein, which could probably easily have been expanded to include a "grass-roots" representative from each county (especially real estate brokers) should have been a major source of important information in that in brief, certain major points are mentioned that, regardless of all the statistical analysis done in the non-metro report, serves to moderate the optimistic conclusions there which cite double the potential for loans as dollars that would be available. As builders reported in this memo found the restrictions undesirable for first time buyers, mentioning also the problem of owning a home within the last three years, compounded by the challenge of building within the purchase price constraints (which have now even been lowered) and considering the poor economic conditions which would keep young households, normally at the base of traditional starting

wanting to transfer from rental locations which may be considerably lower priced in terms of monthly outlay--these items are certainly vastly significant and should have been factored into the analysis. The point here is this: Personal interviews must be done in connection with any later proposed issues of this type in an additional attempt to forecast user-need satisfaction and thus the prospects of take-up of an offering by builders and ultimate borrowers.

2. The nature of the employment growth in an area must be considered as support or not to interested potential buyers who will then create mortgage demand.

3. Lower interest rates than those demonstrated in the general market is only one of a constellation of features necessary to insure bond issue success.

4. The availability of rental accommodations and their quality and price levels must be considered in a major way in any evaluation of this type. The notation of the large amount of structures for housing, especially at the competitive pricing existing, should markedly dampen housing demand, as it has in metropolitan areas of Arizona. Also, this inventory should be computed by area to make sure whether or not spaces exist as they may substitute for purchased housing. Also, the availability of Mobile Homes that would permit changing geographic locations is another influence in a lowering economic environment with an inexpensive rental market that dampens regular single-family housing demand and must be given appropriate attention.

5. It is recommended that further study be done to develop a specific outline for the county-by-county evaluations for bond issue decisions. THE GATHERING OF UNDERLYING STUDIES OF THIS NATURE FROM AGENCIES OUTSIDE OF ARIZONA WOULD INVITE COMPARISON AND NO DOUBT SHOULD BETTER FURTHER IN-STATE EVALUATION MODELS. Additionally, it is suggested that a Financial Analyst be retained by the Housing Review Board to either impartially evaluate draft documents or generate internally such foundation as would give the Board more appropriate directional material for analysis. This, of course, may avoid, as has happened in the case of this non-metro study, the assumption of certain issuing fees and the perhaps subsequent and early bond redemption--such an excerise apparently now serving only a few mortgage needs.

6. Additionally, a recording of alternate scenarios, including comparative market interest rate outlooks, should be presented in any later studies. Also, the impact of any variables that could have movements in varying directions should be quantificed along with these interest rate outlooks. This would give data on <u>several different potential outlook paths</u> with a "most likely-least likely" dimension. This could easily be done with the aid of an appropriate computer program which would permit data input on a timely basis and perhaps, even while the issue is still out, an update as to its potential progress.

7. It is imperative to establish some general guidelines for allocation of any capital raised to certain counties. On page 16 of the "Arizona Housing Finance Review Board Annual Report: 1982" the statement relating to this activity appears as follows:
..."Bond proceeds were earmarked to all participating counties based

on population, and allocated to lenders in such counties on a formula which considered their past servicing and origination history, preferred specified builder sub-allocations, builder sales history and proof of solid builder construction financing...

Appendix D from this report was not supplied in the background material, although it was indicated that county and lender allocation detail was provided there. However, a look at Exhibit XXV shows the figures on line 15 of "Adjusted Housing Demand" but provides little information on the allocation process to satisfy this predicted demand. For example, Apache county had a potential receipt of $170,560 with an estimated loan demand of $725,472; Mohave county with a net demand of $6.3 million was to receive only $671,239 while Navajo county had a net potential demand of $4,554,779, a lesser amount than Mohave county, yet their prospective allocation would satisfy about this projected demand. The question is this: What is the rationale for awarding close to the forecasted need to a certain county and far less than a projected need to another when both (Mohave and Navajo) have about the same amount of potential population growth? More detail is needed here for evaluation.

7. Just as a side-note, attached are some articles from the Sunday, August 14, 1983 issue of the Arizona Republic which validate the interrelationship of interest rates and housing sales. Note in Article #1 the report that as interest rates rise, the effect of a pool of capital to purchase homes at subsidized rates may not be totally effective, for economic activity is dislocated, in general, by an increase of market interest rates, thus undermining the employment and income potentials of the population of a geographic area. This alludes to the point of the desire to not take on large obligations in the face of economic uncertainty as noted previously.

Finally, Article #2 shows that becoming property owners may require much more enthusiasm on the part of prospects than decreases in interest rates. The last paragraph especially points out the appropriate use of programs such as this non-metro issue attempted to foster.

8. Alternative sources of fund availability and their pricing should be explored in any analysis done in the future. A market overhang of past commitments may make a new issue subject to difficult subscription. This item was not addressed in the non-metro issue report.

Please let me hear from you as questionson these matters arise in the future. Thank you for the opportunity of preparing and presenting this evaluation report.

Sincerely,

Glenn A. Wilt, Jr.

GLENN A. WILT, Jr., Ph.D., C.F.A. (Chartered Financial Analyst)

GAW: lk

ABBREVIATED RESUME

Dr. Glenn A. Wilt, Jr.
Associate Professor of Finance
College of Business Administration
Arizona State University
Tempe, Arizona 85281

DEGREES AND DESIGNATIONS

A.B. Occidental College, Los Angeles, California
---major in Economics

M.B.A. Miami University, School of Business Administration, Oxford, Ohio
---major in Finance

Ph.D. The University of Michigan, Graduate School of Business Administration, Ann Arbor, Michigan
---sub-fields of concentration in Finance, Economics and Statistics

C.F.A. Chartered Financial Analyst - The Institute of Chartered Financial Analysts, The University of Virginia, Charlottesville, Va.
---the C.F.A. designation is the leading professional designation in the field of Financial and Investment Analysis and is granted after the completion of a specified study program and the passing of three-eight hour examinations in the fields of (a) Security Analysis, (b) Macro- and Micro-Economic Analysis and (c) Investment Portfolio Management

Registered Investment Counselor
---registered with the Securities and Exchange Commission, Washington, D.C. since 1961

AWARDS AND HONORS

Robert G. Rodkey Fellowship in Banking and Finance - The University of Michigan, Ann Arbor, Michigan

Harold Stonier Fellowship in Banking - The American Bankers Association, Washington, D.C.

TEACHING EXPERIENCE

Instructor in Finance, The University of Michigan, Ann Arbor, Michigan

Assistant Professor of Finance, and currently Associate Professor of Finance, College of Business Administration, Arizona State University, Tempe, Arizona

Teaching Areas:

Securities Investment
Financial Management
Real Estate Finance
Money and Capital Markets
Personal Finance
Business Mathematics

LISTINGS

Who's Who in the West
Who's Who in Consulting
Community Leaders and Noteworthy Americans
American Men and Women of Science

PROFESSIONAL MEMBERSHIPS

The American Economic Association
The American Finance Association
Phoenix Society of Financial Analysts
The Institute of Chartered Financial Analysts

PUBLICATIONS

Publications in : The Journal of Finance
Credit World
Arizona Business Bulletin

CONSULTING SPECIALTIES

--Economics of Wrongful Death and Disability Actions
---legal references available on request
--General Economic Surveys
--Business Valuation Studies